

Physics-Native Subspace Discovery – Qiskit Prototype v0.1b

1. Background and Objective

In this document I document the first concrete prototype implementation of the ideas outlined in my whitepaper on physics-native quantum information units.

The central central question is whether small, low-dimensional subspaces with intrinsic stability can emerge directly from the Hamiltonian, without imposing the qubit abstraction a priori. In particular, I explore whether random, Pauli-structured Hamiltonians already contain nearly degenerate energy subspaces that could serve as 'physics-native' information units.

The goal of this first experiment is not to prove superiority over conventional qubits, but simply to demonstrate that:

1. A small Qiskit-based engine can scan a family of Hamiltonians.
2. It can automatically identify near-degenerate eigenvalue pairs.
3. The corresponding eigenstates show non-trivial structure in the computational basis.

This document describes the code, shows the raw output from one seed scan, and outlines possible next steps.

2. Method: Qiskit Prototype v0.1b

2.1 Hamiltonian Construction

The Hamiltonians used in this prototype are defined on two qubits and expressed as linear combinations of Pauli strings using Qiskit's SparsePauliOp.

Each Hamiltonian H is constructed as:

$$H = \sum c_k P_k$$

where each P_k is a tensor product of single-qubit Pauli operators chosen from $\{I, X, Z\}$, and $c_k \in \mathbb{R}$ are random coefficients drawn from a uniform distribution in $[-1, 1]$.

Identity-only strings (e.g., 'II') are excluded, since they merely shift the overall energy and carry no structural information.

2.2 Eigenvalue Analysis and Near-Degeneracy Criterion

For each Hamiltonian, the full 4×4 matrix representation is obtained via `hamiltonian_op.to_matrix()`.

I then compute its eigenvalues and eigenvectors using `numpy.linalg.eigh`. This yields:

$$H |\psi_i\rangle = E_i |\psi_i\rangle \text{ for } i = 0, 1, 2, 3.$$

To identify potentially 'stable' or structurally interesting subspaces, I define a near-degeneracy criterion:

$$|E_i - E_j| < \varepsilon$$

with $\varepsilon = 0.05$. Any pair (i,j) satisfying this condition is reported as a candidate two-dimensional subspace.

2.3 Implementation Details

The prototype is implemented in Python using Qiskit. The core functions are:

- `build_random_hamiltonian_sparse(...)`
- `find_near_degenerate_pairs(...)`
- `print_statevector(...)`
- and a simple main loop scanning seeds 0–49.

Insert full code here as needed.

3. Experimental Run and Output (Seed Scan 0–49)

For this first documented run, I scanned seeds from 0 to 49 with:

- `n_qubits = 2`
- `num_terms = 4`
- `tolerance = 0.05`

The program reported several seeds with near-degenerate eigenvalue pairs. Insert selected example outputs here (e.g., seeds 0, 23, 31).

4. Interpretation of Results

The seed scan confirms that even in a small, randomised family of 2-qubit Hamiltonians built from $\{I, X, Z\}$, near-degenerate energy levels appear frequently.

In many cases (e.g., seeds 0, 2, 9, 14, 26, 30, 31, 34), the spectrum exhibits exact or near-exact two-fold degeneracies at both the lowest and highest energy levels. The corresponding eigenstates are not arbitrary; they show recognizable structure in the computational basis.

This suggests that certain Hamiltonians naturally carve out two-dimensional subspaces that are energetically isolated and internally structured.

5. Proposed Next Steps

1. Systematic logging: Store all Hamiltonians and their near-degenerate pairs in CSV format.
2. Backend Integration: Use Qiskit Estimator on simulators and real IBM Quantum hardware.
3. Scaling to 3 qubits.
4. Noise and stability tests.

Physics-Native Subspace Discovery – Qiskit Prototype v0.3

1. Background and Objective

This section extends earlier versions using identical structure.

2. Method: Qiskit Prototype v0.3

2.1 Hamiltonian Construction

Same method extended to 8 qubits.

2.2 Eigenvalue Analysis and Near-Degeneracy Criterion

Tolerance unchanged; matrix dimension increased.

2.3 Implementation Details

Structure identical to v0.1b and v0.2.

2.4 Code Listing (v0.3)

```
import numpy as np
from qiskit.quantum_info import SparsePauliOp, Statevector

# -----
# 1. Byg en simpel "legetøjs-Hamiltonian" i Qiskit-format
# -----


def build_random_hamiltonian_sparse(n_qubits=2, num_terms=4, seed=None):
    """
    Returnerer en lille tilfældig Hamiltonian som SparsePauliOp.
    Vi bruger kun I, X, Z for at holde det simpelt.
    """

    rng = np.random.default_rng(seed)

    pauli_letters = ["I", "X", "Z"]
    pauli_terms = []

    for _ in range(num_terms):
        # Byg fx "ZX", "IZ", "XI" osv.
        label = "".join(rng.choice(pauli_letters) for _ in range(n_qubits))

        # Undgå ren identitet "II"
        if set(label) == {"I"}:
            continue

        coeff = rng.uniform(-1.0, 1.0)
        pauli_terms.append((label, coeff))
```

```

# Hvis alt blev filteret væk:
if not pauli_terms:
    pauli_terms = [("Z" + "I"*(n_qubits-1), 1.0)]

labels = [p for p, c in pauli_terms]
coeffs = [c for p, c in pauli_terms]
H = SparsePauliOp.from_list(list(zip(labels, coeffs)))
return H

# -----
# 2. Find eigenvalues/eigenvectors + near-degenerate pairs
# -----

def find_near_degenerate_pairs(hamiltonian_op, tolerance=0.05):
    """
    Finder par af egenværdier, der ligger tæt på hinanden ( $|E_i - E_j| < \text{tolerance}$ ).
    Returnerer (evals, evecs, pairs) hvor pairs er liste af (i, j, Ei, Ej).
    """
    H_mat = hamiltonian_op.to_matrix()
    evals, evecs = np.linalg.eigh(H_mat)

    pairs = []
    for i in range(len(evals)):
        for j in range(i + 1, len(evals)):
            if abs(evals[i] - evals[j]) < tolerance:
                pairs.append((i, j, evals[i], evals[j]))

    return evals, evecs, pairs

# -----
# 3. Helper: vis eigenstates i basis  $|00\rangle, |01\rangle, \dots$ 
# -----


def print_statevector(evec, n_qubits=2, max_terms=4):
    """
    Viser de største amplituder i en eigenvektor.
    """
    sv = Statevector(evec).data # numpy-array

    idx_sorted = np.argsort(-np.abs(sv))

```

```

print(" Dominant basis-states:")
shown = 0
for idx in idx_sorted:
    amp = sv[idx]
    if np.abs(amp) < 1e-3:
        continue

    bitstring = format(idx, f"0{n_qubits}b")
    print(f" |{bitstring}> : amplitude {amp:.3f}")
    shown += 1
    if shown >= max_terms:
        break

# -----
# 4. MAIN - seed-scan
# -----


if __name__ == "__main__":
    n_qubits = 2
    num_terms = 4
    tolerance = 0.05
    max_seed = 50 # prøv seeds 0..49

    print(f"Scanner {max_seed} tilfældige Hamiltonians for near-degenerate par...")
    found_any = False

    for seed in range(max_seed):
        H = build_random_hamiltonian_sparse(
            n_qubits=n_qubits,
            num_terms=num_terms,
            seed=seed
        )
        evals, evecs, pairs = find_near_degenerate_pairs(H, tolerance=tolerance)

        if pairs:
            found_any = True
            print("\n=====")
            print(f"Seed {seed} gav near-degenerate par")
            print("Hamiltonian:")
            print(H)
            print("Eigenvalues:")


```

```

for i, ev in enumerate(evals):
    print(f" {i}: {ev:.4f}")

print("\nCandidate near-degenerate pairs:")
for (i, j, ei, ej) in pairs:
    print(f" Pair ({i}, {j}) with energies {ei:.4f}, {ej:.4f}")
    print(" State", i)
    print_statevector(evecs[:, i], n_qubits=n_qubits)
    print(" State", j)
    print_statevector(evecs[:, j], n_qubits=n_qubits)
    print()

if not found_any:
    print("\nIngen near-degenerate par fundet for nogen seeds "
          f"med tolerance = {tolerance}. "
          "Du kan prøve at øge tolerance lidt (fx 0.1).")

```

3. Experimental Run and Output (v0.3)

3.1 Raw Output (Part 1)

amplitude 0.249+0.000j
 $|00010101\rangle$: amplitude -0.249+0.000j
 State 123
 Dominant basis-states:
 $|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (100, 124) with energies -0.7149, -0.7149

State 100
 Dominant basis-states:
 $|00000111\rangle$: amplitude -0.249+0.000j
 $|11000001\rangle$: amplitude -0.249+0.000j
 $|11010011\rangle$: amplitude 0.249+0.000j
 $|00010101\rangle$: amplitude -0.249+0.000j
 State 124
 Dominant basis-states:
 $|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (100, 125) with energies -0.7149, -0.7149

State 100

Dominant basis-states:

$|00000111\rangle$: amplitude -0.249+0.000j
 $|11000001\rangle$: amplitude -0.249+0.000j
 $|11010011\rangle$: amplitude 0.249+0.000j
 $|00010101\rangle$: amplitude -0.249+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (100, 126) with energies -0.7149, -0.7149

State 100

Dominant basis-states:

$|00000111\rangle$: amplitude -0.249+0.000j
 $|11000001\rangle$: amplitude -0.249+0.000j
 $|11010011\rangle$: amplitude 0.249+0.000j
 $|00010101\rangle$: amplitude -0.249+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (100, 127) with energies -0.7149, -0.7149

State 100

Dominant basis-states:

$|00000111\rangle$: amplitude -0.249+0.000j
 $|11000001\rangle$: amplitude -0.249+0.000j
 $|11010011\rangle$: amplitude 0.249+0.000j
 $|00010101\rangle$: amplitude -0.249+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (101, 102) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

Pair (101, 103) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude -0.181+0.000j
 $|10011110\rangle$: amplitude 0.181+0.000j
 $|10001100\rangle$: amplitude 0.181+0.000j
 $|01001010\rangle$: amplitude 0.181+0.000j

Pair (101, 104) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

Pair (101, 105) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 105

Dominant basis-states:

$|10011000\rangle$: amplitude 0.144+0.000j
 $|01011110\rangle$: amplitude -0.144+0.000j
 $|10001010\rangle$: amplitude 0.144+0.000j
 $|01001100\rangle$: amplitude 0.144+0.000j

Pair (101, 106) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

Pair (101, 107) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

Pair (101, 108) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

Pair (101, 109) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

Pair (101, 110) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

Pair (101, 111) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j

$|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

Pair (101, 112) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (101, 113) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (101, 114) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j

|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

Pair (101, 115) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

Pair (101, 116) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

Pair (101, 117) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j

|00100010> : amplitude -0.250+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j

|01001110> : amplitude 0.201+0.000j

|10011010> : amplitude -0.201+0.000j

|01011100> : amplitude 0.201+0.000j

Pair (101, 118) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j

|11110110> : amplitude 0.250+0.000j

|11100100> : amplitude 0.250+0.000j

|00100010> : amplitude -0.250+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j

|10101110> : amplitude 0.219+0.000j

|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

Pair (101, 119) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j

|11110110> : amplitude 0.250+0.000j

|11100100> : amplitude 0.250+0.000j

|00100010> : amplitude -0.250+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

Pair (101, 120) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j

|11110110> : amplitude 0.250+0.000j

|11100100> : amplitude 0.250+0.000j

|00100010> : amplitude -0.250+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (101, 121) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (101, 122) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (101, 123) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (101, 124) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (101, 125) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (101, 126) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

$|00110000\rangle$: amplitude 0.250+0.000j
 $|11110110\rangle$: amplitude 0.250+0.000j
 $|11100100\rangle$: amplitude 0.250+0.000j
 $|00100010\rangle$: amplitude -0.250+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (101, 127) with energies -0.7149, -0.7149

State 101

Dominant basis-states:

|00110000> : amplitude 0.250+0.000j
|11110110> : amplitude 0.250+0.000j
|11100100> : amplitude 0.250+0.000j
|00100010> : amplitude -0.250+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (102, 103) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

Pair (102, 104) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j

|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

Pair (102, 105) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

Pair (102, 106) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

Pair (102, 107) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j

|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

Pair (102, 108) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

Pair (102, 109) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00110111> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

Pair (102, 110) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j

$|11110111\rangle$: amplitude 0.163+0.000j

Pair (102, 111) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

Pair (102, 112) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (102, 113) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (102, 114) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10111011\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

Pair (102, 115) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (102, 116) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (102, 117) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (102, 118) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (102, 119) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (102, 120) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (102, 121) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (102, 122) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

$|01011111\rangle$: amplitude -0.193+0.000j
 $|10001011\rangle$: amplitude 0.193+0.000j
 $|01001101\rangle$: amplitude -0.193+0.000j
 $|10011001\rangle$: amplitude -0.193+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (102, 123) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (102, 124) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (102, 125) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (102, 126) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (102, 127) with energies -0.7149, -0.7149

State 102

Dominant basis-states:

|01011111> : amplitude -0.193+0.000j
|10001011> : amplitude 0.193+0.000j
|01001101> : amplitude -0.193+0.000j
|10011001> : amplitude -0.193+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (103, 104) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

Pair (103, 105) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j

|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

Pair (103, 106) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

Pair (103, 107) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

Pair (103, 108) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j

|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

Pair (103, 109) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

Pair (103, 110) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

Pair (103, 111) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j

|01001010> : amplitude 0.181+0.000j

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

Pair (103, 112) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j

|10011110> : amplitude 0.181+0.000j

|10001100> : amplitude 0.181+0.000j

|01001010> : amplitude 0.181+0.000j

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j

|10001010> : amplitude -0.140+0.000j

|01001100> : amplitude -0.140+0.000j

Pair (103, 113) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j

|10011110> : amplitude 0.181+0.000j

|10001100> : amplitude 0.181+0.000j

|01001010> : amplitude 0.181+0.000j

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j

|11000110> : amplitude -0.353+0.000j

|00010010> : amplitude -0.353+0.000j

|11010100> : amplitude -0.353+0.000j

Pair (103, 114) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j

|10011110> : amplitude 0.181+0.000j

|10001100> : amplitude 0.181+0.000j

|01001010> : amplitude 0.181+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude $0.179+0.000j$
 $|01101111\rangle$: amplitude $-0.179+0.000j$
 $|10111011\rangle$: amplitude $-0.179+0.000j$
 $|01111101\rangle$: amplitude $-0.179+0.000j$

Pair (103, 115) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude $-0.181+0.000j$
 $|10011110\rangle$: amplitude $0.181+0.000j$
 $|10001100\rangle$: amplitude $0.181+0.000j$
 $|01001010\rangle$: amplitude $0.181+0.000j$

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude $-0.216+0.000j$
 $|10011101\rangle$: amplitude $-0.216+0.000j$
 $|10001111\rangle$: amplitude $-0.216+0.000j$
 $|01001001\rangle$: amplitude $0.216+0.000j$

Pair (103, 116) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude $-0.181+0.000j$
 $|10011110\rangle$: amplitude $0.181+0.000j$
 $|10001100\rangle$: amplitude $0.181+0.000j$
 $|01001010\rangle$: amplitude $0.181+0.000j$

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude $0.149+0.000j$
 $|10111111\rangle$: amplitude $0.149+0.000j$
 $|10101101\rangle$: amplitude $0.149+0.000j$
 $|01101011\rangle$: amplitude $-0.149+0.000j$

Pair (103, 117) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude $-0.181+0.000j$
 $|10011110\rangle$: amplitude $0.181+0.000j$
 $|10001100\rangle$: amplitude $0.181+0.000j$
 $|01001010\rangle$: amplitude $0.181+0.000j$

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (103, 118) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude -0.181+0.000j
 $|10011110\rangle$: amplitude 0.181+0.000j
 $|10001100\rangle$: amplitude 0.181+0.000j
 $|01001010\rangle$: amplitude 0.181+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (103, 119) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude -0.181+0.000j
 $|10011110\rangle$: amplitude 0.181+0.000j
 $|10001100\rangle$: amplitude 0.181+0.000j
 $|01001010\rangle$: amplitude 0.181+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (103, 120) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

$|01011000\rangle$: amplitude -0.181+0.000j
 $|10011110\rangle$: amplitude 0.181+0.000j
 $|10001100\rangle$: amplitude 0.181+0.000j
 $|01001010\rangle$: amplitude 0.181+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (103, 121) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (103, 122) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (103, 123) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j

|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (103, 124) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (103, 125) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (103, 126) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j

|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (103, 127) with energies -0.7149, -0.7149

State 103

Dominant basis-states:

|01011000> : amplitude -0.181+0.000j
|10011110> : amplitude 0.181+0.000j
|10001100> : amplitude 0.181+0.000j
|01001010> : amplitude 0.181+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (104, 105) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

Pair (104, 106) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j

$|01011110\rangle$: amplitude -0.159+0.000j

Pair (104, 107) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

Pair (104, 108) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

Pair (104, 109) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

Pair (104, 110) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j
 $|11110111\rangle$: amplitude 0.163+0.000j

Pair (104, 111) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

Pair (104, 112) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (104, 113) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (104, 114) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10111011\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

Pair (104, 115) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (104, 116) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (104, 117) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (104, 118) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

$|10000101\rangle$: amplitude 0.145+0.000j
 $|01000011\rangle$: amplitude 0.145+0.000j
 $|01010001\rangle$: amplitude 0.145+0.000j
 $|10010111\rangle$: amplitude -0.145+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (104, 119) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (104, 120) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (104, 121) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (104, 122) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (104, 123) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (104, 124) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (104, 125) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j

|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (104, 126) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (104, 127) with energies -0.7149, -0.7149

State 104

Dominant basis-states:

|10000101> : amplitude 0.145+0.000j
|01000011> : amplitude 0.145+0.000j
|01010001> : amplitude 0.145+0.000j
|10010111> : amplitude -0.145+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (105, 106) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j

|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

Pair (105, 107) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

Pair (105, 108) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

Pair (105, 109) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j

|01001100> : amplitude 0.144+0.000j

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j

|00111011> : amplitude 0.167+0.000j

|11111101> : amplitude 0.167+0.000j

|11101111> : amplitude 0.167+0.000j

Pair (105, 110) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j

|01011110> : amplitude -0.144+0.000j

|10001010> : amplitude 0.144+0.000j

|01001100> : amplitude 0.144+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j

|00100011> : amplitude -0.163+0.000j

|00110001> : amplitude -0.163+0.000j

|11110111> : amplitude 0.163+0.000j

Pair (105, 111) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j

|01011110> : amplitude -0.144+0.000j

|10001010> : amplitude 0.144+0.000j

|01001100> : amplitude 0.144+0.000j

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

Pair (105, 112) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j

|01011110> : amplitude -0.144+0.000j

|10001010> : amplitude 0.144+0.000j

|01001100> : amplitude 0.144+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude $-0.140+0.000j$
 $|01011110\rangle$: amplitude $0.140+0.000j$
 $|10001010\rangle$: amplitude $-0.140+0.000j$
 $|01001100\rangle$: amplitude $-0.140+0.000j$

Pair (105, 113) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

$|10011000\rangle$: amplitude $0.144+0.000j$
 $|01011110\rangle$: amplitude $-0.144+0.000j$
 $|10001010\rangle$: amplitude $0.144+0.000j$
 $|01001100\rangle$: amplitude $0.144+0.000j$

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude $0.353+0.000j$
 $|11000110\rangle$: amplitude $-0.353+0.000j$
 $|00010010\rangle$: amplitude $-0.353+0.000j$
 $|11010100\rangle$: amplitude $-0.353+0.000j$

Pair (105, 114) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

$|10011000\rangle$: amplitude $0.144+0.000j$
 $|01011110\rangle$: amplitude $-0.144+0.000j$
 $|10001010\rangle$: amplitude $0.144+0.000j$
 $|01001100\rangle$: amplitude $0.144+0.000j$

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude $0.179+0.000j$
 $|01101111\rangle$: amplitude $-0.179+0.000j$
 $|10111011\rangle$: amplitude $-0.179+0.000j$
 $|01111101\rangle$: amplitude $-0.179+0.000j$

Pair (105, 115) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

$|10011000\rangle$: amplitude $0.144+0.000j$
 $|01011110\rangle$: amplitude $-0.144+0.000j$
 $|10001010\rangle$: amplitude $0.144+0.000j$
 $|01001100\rangle$: amplitude $0.144+0.000j$

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

Pair (105, 116) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

Pair (105, 117) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j
|01001110> : amplitude 0.201+0.000j
|10011010> : amplitude -0.201+0.000j
|01011100> : amplitude 0.201+0.000j

Pair (105, 118) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (105, 119) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (105, 120) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (105, 121) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j

|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (105, 122) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (105, 123) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (105, 124) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j

|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (105, 125) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (105, 126) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (105, 127) with energies -0.7149, -0.7149

State 105

Dominant basis-states:

|10011000> : amplitude 0.144+0.000j
|01011110> : amplitude -0.144+0.000j
|10001010> : amplitude 0.144+0.000j
|01001100> : amplitude 0.144+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j

$|01000101\rangle$: amplitude 0.163+0.000j

Pair (106, 107) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

Pair (106, 108) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

Pair (106, 109) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

Pair (106, 110) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j
 $|11110111\rangle$: amplitude 0.163+0.000j

Pair (106, 111) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

Pair (106, 112) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (106, 113) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (106, 114) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10111011\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

Pair (106, 115) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (106, 116) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (106, 117) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (106, 118) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (106, 119) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (106, 120) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (106, 121) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

$|10001010\rangle$: amplitude 0.159+0.000j
 $|01001100\rangle$: amplitude 0.159+0.000j
 $|10011000\rangle$: amplitude 0.159+0.000j
 $|01011110\rangle$: amplitude -0.159+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (106, 122) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (106, 123) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (106, 124) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (106, 125) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j

|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (106, 126) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (106, 127) with energies -0.7149, -0.7149

State 106

Dominant basis-states:

|10001010> : amplitude 0.159+0.000j
|01001100> : amplitude 0.159+0.000j
|10011000> : amplitude 0.159+0.000j
|01011110> : amplitude -0.159+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (107, 108) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j

|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

Pair (107, 109) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

Pair (107, 110) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

Pair (107, 111) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j

|01000000> : amplitude -0.173+0.000j

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

Pair (107, 112) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j

|10010100> : amplitude -0.173+0.000j

|10000110> : amplitude 0.173+0.000j

|01000000> : amplitude -0.173+0.000j

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j

|10001010> : amplitude -0.140+0.000j

|01001100> : amplitude -0.140+0.000j

Pair (107, 113) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j

|10010100> : amplitude -0.173+0.000j

|10000110> : amplitude 0.173+0.000j

|01000000> : amplitude -0.173+0.000j

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j

|11000110> : amplitude -0.353+0.000j

|00010010> : amplitude -0.353+0.000j

|11010100> : amplitude -0.353+0.000j

Pair (107, 114) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j

|10010100> : amplitude -0.173+0.000j

|10000110> : amplitude 0.173+0.000j

|01000000> : amplitude -0.173+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10111011\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

Pair (107, 115) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (107, 116) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (107, 117) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (107, 118) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (107, 119) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (107, 120) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (107, 121) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (107, 122) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (107, 123) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j

|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (107, 124) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (107, 125) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (107, 126) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

|01010010> : amplitude -0.173+0.000j
|10010100> : amplitude -0.173+0.000j
|10000110> : amplitude 0.173+0.000j
|01000000> : amplitude -0.173+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j

$|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (107, 127) with energies -0.7149, -0.7149

State 107

Dominant basis-states:

$|01010010\rangle$: amplitude -0.173+0.000j
 $|10010100\rangle$: amplitude -0.173+0.000j
 $|10000110\rangle$: amplitude 0.173+0.000j
 $|01000000\rangle$: amplitude -0.173+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (108, 109) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

Pair (108, 110) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j

$|11110111\rangle$: amplitude 0.163+0.000j

Pair (108, 111) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

Pair (108, 112) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (108, 113) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (108, 114) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

Pair (108, 115) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

Pair (108, 116) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

Pair (108, 117) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j
|01001110> : amplitude 0.201+0.000j
|10011010> : amplitude -0.201+0.000j
|01011100> : amplitude 0.201+0.000j

Pair (108, 118) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (108, 119) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (108, 120) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (108, 121) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (108, 122) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

$|00010011\rangle$: amplitude -0.150+0.000j
 $|00000001\rangle$: amplitude -0.150+0.000j
 $|11010101\rangle$: amplitude 0.150+0.000j
 $|11000111\rangle$: amplitude -0.150+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (108, 123) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (108, 124) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (108, 125) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (108, 126) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (108, 127) with energies -0.7149, -0.7149

State 108

Dominant basis-states:

|00010011> : amplitude -0.150+0.000j
|00000001> : amplitude -0.150+0.000j
|11010101> : amplitude 0.150+0.000j
|11000111> : amplitude -0.150+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (109, 110) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

Pair (109, 111) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j

|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

Pair (109, 112) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

Pair (109, 113) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude -0.353+0.000j
|11010100> : amplitude -0.353+0.000j

Pair (109, 114) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j

$|11111101\rangle$: amplitude 0.167+0.000j

$|11101111\rangle$: amplitude 0.167+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j

$|01101111\rangle$: amplitude -0.179+0.000j

$|10111011\rangle$: amplitude -0.179+0.000j

$|01111101\rangle$: amplitude -0.179+0.000j

Pair (109, 115) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j

$|00111011\rangle$: amplitude 0.167+0.000j

$|11111101\rangle$: amplitude 0.167+0.000j

$|11101111\rangle$: amplitude 0.167+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j

$|10011101\rangle$: amplitude -0.216+0.000j

$|10001111\rangle$: amplitude -0.216+0.000j

$|01001001\rangle$: amplitude 0.216+0.000j

Pair (109, 116) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j

$|00111011\rangle$: amplitude 0.167+0.000j

$|11111101\rangle$: amplitude 0.167+0.000j

$|11101111\rangle$: amplitude 0.167+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j

$|10111111\rangle$: amplitude 0.149+0.000j

$|10101101\rangle$: amplitude 0.149+0.000j

$|01101011\rangle$: amplitude -0.149+0.000j

Pair (109, 117) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j

$|00111011\rangle$: amplitude 0.167+0.000j

$|11111101\rangle$: amplitude 0.167+0.000j

|11101111> : amplitude 0.167+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j

|01001110> : amplitude 0.201+0.000j

|10011010> : amplitude -0.201+0.000j

|01011100> : amplitude 0.201+0.000j

Pair (109, 118) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j

|00111011> : amplitude 0.167+0.000j

|11111101> : amplitude 0.167+0.000j

|11101111> : amplitude 0.167+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j

|10101110> : amplitude 0.219+0.000j

|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

Pair (109, 119) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j

|00111011> : amplitude 0.167+0.000j

|11111101> : amplitude 0.167+0.000j

|11101111> : amplitude 0.167+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

Pair (109, 120) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j

|00111011> : amplitude 0.167+0.000j

|11111101> : amplitude 0.167+0.000j

|11101111> : amplitude 0.167+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (109, 121) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (109, 122) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (109, 123) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (109, 124) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (109, 125) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (109, 126) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

$|00101001\rangle$: amplitude -0.167+0.000j
 $|00111011\rangle$: amplitude 0.167+0.000j
 $|11111101\rangle$: amplitude 0.167+0.000j
 $|11101111\rangle$: amplitude 0.167+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (109, 127) with energies -0.7149, -0.7149

State 109

Dominant basis-states:

|00101001> : amplitude -0.167+0.000j
|00111011> : amplitude 0.167+0.000j
|11111101> : amplitude 0.167+0.000j
|11101111> : amplitude 0.167+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (110, 111) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

Pair (110, 112) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

Pair (110, 113) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude -0.353+0.000j
|11010100> : amplitude -0.353+0.000j

Pair (110, 114) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

Pair (110, 115) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j

|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

Pair (110, 116) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

Pair (110, 117) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j
|01001110> : amplitude 0.201+0.000j
|10011010> : amplitude -0.201+0.000j
|01011100> : amplitude 0.201+0.000j

Pair (110, 118) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

Pair (110, 119) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (110, 120) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (110, 121) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (110, 122) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j
 $|11110111\rangle$: amplitude 0.163+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (110, 123) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j
 $|11110111\rangle$: amplitude 0.163+0.000j

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (110, 124) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

$|11100101\rangle$: amplitude -0.163+0.000j
 $|00100011\rangle$: amplitude -0.163+0.000j
 $|00110001\rangle$: amplitude -0.163+0.000j
 $|11110111\rangle$: amplitude 0.163+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (110, 125) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (110, 126) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (110, 127) with energies -0.7149, -0.7149

State 110

Dominant basis-states:

|11100101> : amplitude -0.163+0.000j
|00100011> : amplitude -0.163+0.000j
|00110001> : amplitude -0.163+0.000j
|11110111> : amplitude 0.163+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (111, 112) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

Pair (111, 113) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (111, 114) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10111011\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

Pair (111, 115) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (111, 116) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (111, 117) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

$|11001001\rangle$: amplitude -0.139+0.000j
 $|00001111\rangle$: amplitude 0.139+0.000j
 $|00011101\rangle$: amplitude 0.139+0.000j
 $|11011011\rangle$: amplitude 0.139+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (111, 118) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (111, 119) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (111, 120) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (111, 121) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (111, 122) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (111, 123) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j
|00011101> : amplitude 0.139+0.000j
|11011011> : amplitude 0.139+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (111, 124) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j
|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j

|00110010> : amplitude 0.147+0.000j

|11100110> : amplitude -0.147+0.000j

|00100000> : amplitude 0.147+0.000j

Pair (111, 125) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j

|01101010> : amplitude 0.168+0.000j

|01111000> : amplitude 0.168+0.000j

|10111110> : amplitude -0.168+0.000j

Pair (111, 126) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j

|00000110> : amplitude -0.283+0.000j

|11010010> : amplitude 0.283+0.000j

|00010100> : amplitude 0.283+0.000j

Pair (111, 127) with energies -0.7149, -0.7149

State 111

Dominant basis-states:

|11001001> : amplitude -0.139+0.000j

|00001111> : amplitude 0.139+0.000j

|00011101> : amplitude 0.139+0.000j

|11011011> : amplitude 0.139+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j

|10010001> : amplitude -0.163+0.000j

|01010111> : amplitude 0.163+0.000j

|01000101> : amplitude 0.163+0.000j

Pair (112, 113) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j

|10001010> : amplitude -0.140+0.000j

|01001100> : amplitude -0.140+0.000j

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j

|11000110> : amplitude -0.353+0.000j

|00010010> : amplitude -0.353+0.000j

|11010100> : amplitude -0.353+0.000j

Pair (112, 114) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j

|10001010> : amplitude -0.140+0.000j

|01001100> : amplitude -0.140+0.000j

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j

|01101111> : amplitude -0.179+0.000j

|10111011> : amplitude -0.179+0.000j

|01111101> : amplitude -0.179+0.000j

Pair (112, 115) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j

|01011110> : amplitude 0.140+0.000j

|10001010> : amplitude -0.140+0.000j

|01001100> : amplitude -0.140+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (112, 116) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

Pair (112, 117) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (112, 118) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

$|10011000\rangle$: amplitude -0.140+0.000j
 $|01011110\rangle$: amplitude 0.140+0.000j
 $|10001010\rangle$: amplitude -0.140+0.000j
 $|01001100\rangle$: amplitude -0.140+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (112, 119) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (112, 120) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (112, 121) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (112, 122) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (112, 123) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (112, 124) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j

|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (112, 125) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (112, 126) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (112, 127) with energies -0.7149, -0.7149

State 112

Dominant basis-states:

|10011000> : amplitude -0.140+0.000j
|01011110> : amplitude 0.140+0.000j
|10001010> : amplitude -0.140+0.000j
|01001100> : amplitude -0.140+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j

|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (113, 114) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude -0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

Pair (113, 115) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude -0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

Pair (113, 116) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

|00000000> : amplitude 0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude -0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j

$|01101011\rangle$: amplitude -0.149+0.000j

Pair (113, 117) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

Pair (113, 118) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (113, 119) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (113, 120) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (113, 121) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (113, 122) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (113, 123) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (113, 124) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (113, 125) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (113, 126) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (113, 127) with energies -0.7149, -0.7149

State 113

Dominant basis-states:

$|00000000\rangle$: amplitude 0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude -0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (114, 115) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

$|10101001\rangle$: amplitude 0.179+0.000j
 $|01101111\rangle$: amplitude -0.179+0.000j
 $|10110111\rangle$: amplitude -0.179+0.000j
 $|01111101\rangle$: amplitude -0.179+0.000j

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude -0.216+0.000j
 $|10011101\rangle$: amplitude -0.216+0.000j
 $|10001111\rangle$: amplitude -0.216+0.000j
 $|01001001\rangle$: amplitude 0.216+0.000j

Pair (114, 116) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

Pair (114, 117) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j
|01001110> : amplitude 0.201+0.000j
|10011010> : amplitude -0.201+0.000j
|01011100> : amplitude 0.201+0.000j

Pair (114, 118) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (114, 119) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (114, 120) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (114, 121) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (114, 122) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j

|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (114, 123) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (114, 124) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j
|10111011> : amplitude -0.179+0.000j
|01111101> : amplitude -0.179+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (114, 125) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j
|01101111> : amplitude -0.179+0.000j

|10111011> : amplitude -0.179+0.000j

|01111101> : amplitude -0.179+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j

|01101010> : amplitude 0.168+0.000j

|01111000> : amplitude 0.168+0.000j

|10111110> : amplitude -0.168+0.000j

Pair (114, 126) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j

|01101111> : amplitude -0.179+0.000j

|10111011> : amplitude -0.179+0.000j

|01111101> : amplitude -0.179+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j

|00000110> : amplitude -0.283+0.000j

|11010010> : amplitude 0.283+0.000j

|00010100> : amplitude 0.283+0.000j

Pair (114, 127) with energies -0.7149, -0.7149

State 114

Dominant basis-states:

|10101001> : amplitude 0.179+0.000j

|01101111> : amplitude -0.179+0.000j

|10111011> : amplitude -0.179+0.000j

|01111101> : amplitude -0.179+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j

|10010001> : amplitude -0.163+0.000j

|01010111> : amplitude 0.163+0.000j

|01000101> : amplitude 0.163+0.000j

Pair (115, 116) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j

|10011101> : amplitude -0.216+0.000j

|10001111> : amplitude -0.216+0.000j

|01001001> : amplitude 0.216+0.000j

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j

|10111111> : amplitude 0.149+0.000j

|10101101> : amplitude 0.149+0.000j

|01101011> : amplitude -0.149+0.000j

Pair (115, 117) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j

|10011101> : amplitude -0.216+0.000j

|10001111> : amplitude -0.216+0.000j

|01001001> : amplitude 0.216+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j

|01001110> : amplitude 0.201+0.000j

|10011010> : amplitude -0.201+0.000j

|01011100> : amplitude 0.201+0.000j

Pair (115, 118) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j

|10011101> : amplitude -0.216+0.000j

|10001111> : amplitude -0.216+0.000j

|01001001> : amplitude 0.216+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j

|10101110> : amplitude 0.219+0.000j

|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

Pair (115, 119) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j

|10011101> : amplitude -0.216+0.000j

|10001111> : amplitude -0.216+0.000j

|01001001> : amplitude 0.216+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude $0.160+0.000j$
 $|10000111\rangle$: amplitude $0.160+0.000j$
 $|01010011\rangle$: amplitude $-0.160+0.000j$
 $|10010101\rangle$: amplitude $0.160+0.000j$

Pair (115, 120) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude $-0.216+0.000j$
 $|10011101\rangle$: amplitude $-0.216+0.000j$
 $|10001111\rangle$: amplitude $-0.216+0.000j$
 $|01001001\rangle$: amplitude $0.216+0.000j$

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude $0.157+0.000j$
 $|10011100\rangle$: amplitude $-0.157+0.000j$
 $|01001000\rangle$: amplitude $0.157+0.000j$
 $|10001110\rangle$: amplitude $0.157+0.000j$

Pair (115, 121) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude $-0.216+0.000j$
 $|10011101\rangle$: amplitude $-0.216+0.000j$
 $|10001111\rangle$: amplitude $-0.216+0.000j$
 $|01001001\rangle$: amplitude $0.216+0.000j$

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude $-0.208+0.000j$
 $|01011101\rangle$: amplitude $-0.208+0.000j$
 $|10001001\rangle$: amplitude $-0.208+0.000j$
 $|01001111\rangle$: amplitude $0.208+0.000j$

Pair (115, 122) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

$|01011011\rangle$: amplitude $-0.216+0.000j$
 $|10011101\rangle$: amplitude $-0.216+0.000j$
 $|10001111\rangle$: amplitude $-0.216+0.000j$
 $|01001001\rangle$: amplitude $0.216+0.000j$

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (115, 123) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (115, 124) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (115, 125) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (115, 126) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (115, 127) with energies -0.7149, -0.7149

State 115

Dominant basis-states:

|01011011> : amplitude -0.216+0.000j
|10011101> : amplitude -0.216+0.000j
|10001111> : amplitude -0.216+0.000j
|01001001> : amplitude 0.216+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (116, 117) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 117

Dominant basis-states:

|10001000> : amplitude 0.201+0.000j

|01001110> : amplitude 0.201+0.000j
|10011010> : amplitude -0.201+0.000j
|01011100> : amplitude 0.201+0.000j

Pair (116, 118) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

Pair (116, 119) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j
|10000111> : amplitude 0.160+0.000j
|01010011> : amplitude -0.160+0.000j
|10010101> : amplitude 0.160+0.000j

Pair (116, 120) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j

|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (116, 121) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (116, 122) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (116, 123) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

|01111001> : amplitude 0.149+0.000j
|10111111> : amplitude 0.149+0.000j
|10101101> : amplitude 0.149+0.000j
|01101011> : amplitude -0.149+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j

$|01101101\rangle$: amplitude -0.190+0.000j

Pair (116, 124) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (116, 125) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (116, 126) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (116, 127) with energies -0.7149, -0.7149

State 116

Dominant basis-states:

$|01111001\rangle$: amplitude 0.149+0.000j
 $|10111111\rangle$: amplitude 0.149+0.000j
 $|10101101\rangle$: amplitude 0.149+0.000j
 $|01101011\rangle$: amplitude -0.149+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (117, 118) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

Pair (117, 119) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (117, 120) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

Pair (117, 121) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (117, 122) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (117, 123) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude $0.201+0.000j$
 $|01001110\rangle$: amplitude $0.201+0.000j$
 $|10011010\rangle$: amplitude $-0.201+0.000j$
 $|01011100\rangle$: amplitude $0.201+0.000j$

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude $0.190+0.000j$
 $|01111111\rangle$: amplitude $0.190+0.000j$
 $|10111001\rangle$: amplitude $0.190+0.000j$
 $|01101101\rangle$: amplitude $-0.190+0.000j$

Pair (117, 124) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude $0.201+0.000j$
 $|01001110\rangle$: amplitude $0.201+0.000j$
 $|10011010\rangle$: amplitude $-0.201+0.000j$
 $|01011100\rangle$: amplitude $0.201+0.000j$

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude $0.147+0.000j$
 $|00110010\rangle$: amplitude $0.147+0.000j$
 $|11100110\rangle$: amplitude $-0.147+0.000j$
 $|00100000\rangle$: amplitude $0.147+0.000j$

Pair (117, 125) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude $0.201+0.000j$
 $|01001110\rangle$: amplitude $0.201+0.000j$
 $|10011010\rangle$: amplitude $-0.201+0.000j$
 $|01011100\rangle$: amplitude $0.201+0.000j$

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude $0.168+0.000j$
 $|01101010\rangle$: amplitude $0.168+0.000j$
 $|01111000\rangle$: amplitude $0.168+0.000j$
 $|10111110\rangle$: amplitude $-0.168+0.000j$

Pair (117, 126) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (117, 127) with energies -0.7149, -0.7149

State 117

Dominant basis-states:

$|10001000\rangle$: amplitude 0.201+0.000j
 $|01001110\rangle$: amplitude 0.201+0.000j
 $|10011010\rangle$: amplitude -0.201+0.000j
 $|01011100\rangle$: amplitude 0.201+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (118, 119) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

$|01101000\rangle$: amplitude 0.219+0.000j
 $|10101110\rangle$: amplitude 0.219+0.000j
 $|01111010\rangle$: amplitude -0.219+0.000j
 $|10111100\rangle$: amplitude 0.219+0.000j

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

Pair (118, 120) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

Pair (118, 121) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

Pair (118, 122) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (118, 123) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j

|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (118, 124) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (118, 125) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j
|01111010> : amplitude -0.219+0.000j
|10111100> : amplitude 0.219+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (118, 126) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j
|10101110> : amplitude 0.219+0.000j

|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j

|00000110> : amplitude -0.283+0.000j

|11010010> : amplitude 0.283+0.000j

|00010100> : amplitude 0.283+0.000j

Pair (118, 127) with energies -0.7149, -0.7149

State 118

Dominant basis-states:

|01101000> : amplitude 0.219+0.000j

|10101110> : amplitude 0.219+0.000j

|01111010> : amplitude -0.219+0.000j

|10111100> : amplitude 0.219+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j

|10010001> : amplitude -0.163+0.000j

|01010111> : amplitude 0.163+0.000j

|01000101> : amplitude 0.163+0.000j

Pair (119, 120) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j

|10011100> : amplitude -0.157+0.000j

|01001000> : amplitude 0.157+0.000j

|10001110> : amplitude 0.157+0.000j

Pair (119, 121) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j

|01011101> : amplitude -0.208+0.000j

|10001001> : amplitude -0.208+0.000j

|01001111> : amplitude 0.208+0.000j

Pair (119, 122) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j

|11001101> : amplitude -0.191+0.000j

|00011001> : amplitude -0.191+0.000j

|11011111> : amplitude -0.191+0.000j

Pair (119, 123) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j

|01111111> : amplitude 0.190+0.000j

|10111001> : amplitude 0.190+0.000j

|01101101> : amplitude -0.190+0.000j

Pair (119, 124) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

|01000001> : amplitude 0.160+0.000j

|10000111> : amplitude 0.160+0.000j

|01010011> : amplitude -0.160+0.000j

|10010101> : amplitude 0.160+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (119, 125) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (119, 126) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (119, 127) with energies -0.7149, -0.7149

State 119

Dominant basis-states:

$|01000001\rangle$: amplitude 0.160+0.000j
 $|10000111\rangle$: amplitude 0.160+0.000j
 $|01010011\rangle$: amplitude -0.160+0.000j
 $|10010101\rangle$: amplitude 0.160+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (120, 121) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

Pair (120, 122) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

Pair (120, 123) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

$|01011010\rangle$: amplitude 0.157+0.000j
 $|10011100\rangle$: amplitude -0.157+0.000j
 $|01001000\rangle$: amplitude 0.157+0.000j
 $|10001110\rangle$: amplitude 0.157+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j
|10111001> : amplitude 0.190+0.000j
|01101101> : amplitude -0.190+0.000j

Pair (120, 124) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

Pair (120, 125) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (120, 126) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j

|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (120, 127) with energies -0.7149, -0.7149

State 120

Dominant basis-states:

|01011010> : amplitude 0.157+0.000j
|10011100> : amplitude -0.157+0.000j
|01001000> : amplitude 0.157+0.000j
|10001110> : amplitude 0.157+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (121, 122) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

Pair (121, 123) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

|10011011> : amplitude -0.208+0.000j
|01011101> : amplitude -0.208+0.000j
|10001001> : amplitude -0.208+0.000j
|01001111> : amplitude 0.208+0.000j

State 123

Dominant basis-states:

|10101011> : amplitude 0.190+0.000j
|01111111> : amplitude 0.190+0.000j

$|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (121, 124) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (121, 125) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (121, 126) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j

$|00010100\rangle$: amplitude 0.283+0.000j

Pair (121, 127) with energies -0.7149, -0.7149

State 121

Dominant basis-states:

$|10011011\rangle$: amplitude -0.208+0.000j
 $|01011101\rangle$: amplitude -0.208+0.000j
 $|10001001\rangle$: amplitude -0.208+0.000j
 $|01001111\rangle$: amplitude 0.208+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (122, 123) with energies -0.7149, -0.7149

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

Pair (122, 124) with energies -0.7149, -0.7149

State 122

Dominant basis-states:

$|00001011\rangle$: amplitude 0.191+0.000j
 $|11001101\rangle$: amplitude -0.191+0.000j
 $|00011001\rangle$: amplitude -0.191+0.000j
 $|11011111\rangle$: amplitude -0.191+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (122, 125) with energies -0.7149, -0.7149

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

Pair (122, 126) with energies -0.7149, -0.7149

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (122, 127) with energies -0.7149, -0.7149

State 122

Dominant basis-states:

|00001011> : amplitude 0.191+0.000j
|11001101> : amplitude -0.191+0.000j
|00011001> : amplitude -0.191+0.000j
|11011111> : amplitude -0.191+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (123, 124) with energies -0.7149, -0.7149

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

Pair (123, 125) with energies -0.7149, -0.7149

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (123, 126) with energies -0.7149, -0.7149

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (123, 127) with energies -0.7149, -0.7149

State 123

Dominant basis-states:

$|10101011\rangle$: amplitude 0.190+0.000j
 $|01111111\rangle$: amplitude 0.190+0.000j
 $|10111001\rangle$: amplitude 0.190+0.000j
 $|01101101\rangle$: amplitude -0.190+0.000j

State 127

Dominant basis-states:

$|10000011\rangle$: amplitude 0.163+0.000j
 $|10010001\rangle$: amplitude -0.163+0.000j
 $|01010111\rangle$: amplitude 0.163+0.000j
 $|01000101\rangle$: amplitude 0.163+0.000j

Pair (124, 125) with energies -0.7149, -0.7149

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

State 125

Dominant basis-states:

$|10101100\rangle$: amplitude 0.168+0.000j
 $|01101010\rangle$: amplitude 0.168+0.000j
 $|01111000\rangle$: amplitude 0.168+0.000j
 $|10111110\rangle$: amplitude -0.168+0.000j

Pair (124, 126) with energies -0.7149, -0.7149

State 124

Dominant basis-states:

$|11110100\rangle$: amplitude 0.147+0.000j
 $|00110010\rangle$: amplitude 0.147+0.000j
 $|11100110\rangle$: amplitude -0.147+0.000j
 $|00100000\rangle$: amplitude 0.147+0.000j

State 126

Dominant basis-states:

$|11000000\rangle$: amplitude 0.283+0.000j
 $|00000110\rangle$: amplitude -0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|00010100\rangle$: amplitude 0.283+0.000j

Pair (124, 127) with energies -0.7149, -0.7149

State 124

Dominant basis-states:

|11110100> : amplitude 0.147+0.000j
|00110010> : amplitude 0.147+0.000j
|11100110> : amplitude -0.147+0.000j
|00100000> : amplitude 0.147+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (125, 126) with energies -0.7149, -0.7149

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

Pair (125, 127) with energies -0.7149, -0.7149

State 125

Dominant basis-states:

|10101100> : amplitude 0.168+0.000j
|01101010> : amplitude 0.168+0.000j
|01111000> : amplitude 0.168+0.000j
|10111110> : amplitude -0.168+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (126, 127) with energies -0.7149, -0.7149

State 126

Dominant basis-states:

|11000000> : amplitude 0.283+0.000j
|00000110> : amplitude -0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|00010100> : amplitude 0.283+0.000j

State 127

Dominant basis-states:

|10000011> : amplitude 0.163+0.000j
|10010001> : amplitude -0.163+0.000j
|01010111> : amplitude 0.163+0.000j
|01000101> : amplitude 0.163+0.000j

Pair (128, 129) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

Pair (128, 130) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

Pair (128, 131) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

Pair (128, 132) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

Pair (128, 133) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

Pair (128, 134) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j

|00101000> : amplitude -0.211+0.000j

|11111100> : amplitude -0.211+0.000j

|00111010> : amplitude -0.211+0.000j

Pair (128, 135) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j

|11101000> : amplitude -0.156+0.000j

|00111100> : amplitude 0.156+0.000j

|11111010> : amplitude 0.156+0.000j

Pair (128, 136) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j

|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

Pair (128, 137) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j

|00001011> : amplitude 0.186+0.000j

|11011111> : amplitude 0.186+0.000j

|00011001> : amplitude -0.186+0.000j

Pair (128, 138) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

|01010011> : amplitude -0.132+0.000j

Pair (128, 139) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j

|01111011> : amplitude -0.174+0.000j

|01101001> : amplitude -0.174+0.000j

|10101111> : amplitude -0.174+0.000j

Pair (128, 140) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j

|01101110> : amplitude 0.170+0.000j

|10101000> : amplitude -0.170+0.000j

|10111010> : amplitude -0.170+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (128, 141) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (128, 142) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (128, 143) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

Pair (128, 144) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (128, 145) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (128, 146) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (128, 147) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (128, 148) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (128, 149) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j

|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (128, 150) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (128, 151) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (128, 152) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j

|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (128, 153) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (128, 154) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (128, 155) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

|01111100> : amplitude -0.170+0.000j
|01101110> : amplitude 0.170+0.000j
|10101000> : amplitude -0.170+0.000j
|10111010> : amplitude -0.170+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j

$|10100110\rangle$: amplitude -0.127+0.000j

Pair (128, 156) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (128, 157) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (128, 158) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (128, 159) with energies 0.7149, 0.7149

State 128

Dominant basis-states:

$|01111100\rangle$: amplitude -0.170+0.000j
 $|01101110\rangle$: amplitude 0.170+0.000j
 $|10101000\rangle$: amplitude -0.170+0.000j
 $|10111010\rangle$: amplitude -0.170+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (129, 130) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

Pair (129, 131) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

Pair (129, 132) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

Pair (129, 133) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (129, 134) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 134

Dominant basis-states:

$|11101110\rangle$: amplitude 0.211+0.000j
 $|00101000\rangle$: amplitude -0.211+0.000j
 $|11111100\rangle$: amplitude -0.211+0.000j
 $|00111010\rangle$: amplitude -0.211+0.000j

Pair (129, 135) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude $0.156+0.000j$
 $|11101000\rangle$: amplitude $-0.156+0.000j$
 $|00111100\rangle$: amplitude $0.156+0.000j$
 $|11111010\rangle$: amplitude $0.156+0.000j$

Pair (129, 136) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

Pair (129, 137) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude $0.186+0.000j$
 $|00001011\rangle$: amplitude $0.186+0.000j$
 $|11011111\rangle$: amplitude $0.186+0.000j$
 $|00011001\rangle$: amplitude $-0.186+0.000j$

Pair (129, 138) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j
 $|10000111\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude -0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j

Pair (129, 139) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

Pair (129, 140) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (129, 141) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

Pair (129, 142) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (129, 143) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (129, 144) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j

|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

Pair (129, 145) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11000111> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

Pair (129, 146) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j
|11011001> : amplitude 0.140+0.000j
|00011111> : amplitude -0.140+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (129, 147) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j
|00001101> : amplitude 0.140+0.000j

$|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude $0.174+0.000j$
 $|11110111\rangle$: amplitude $0.174+0.000j$
 $|00100011\rangle$: amplitude $0.174+0.000j$
 $|11100101\rangle$: amplitude $-0.174+0.000j$

Pair (129, 148) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude $0.127+0.000j$
 $|01011101\rangle$: amplitude $-0.127+0.000j$
 $|10001001\rangle$: amplitude $0.127+0.000j$
 $|01001111\rangle$: amplitude $0.127+0.000j$

Pair (129, 149) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$
 $|01001100\rangle$: amplitude $-0.188+0.000j$
 $|10011000\rangle$: amplitude $0.188+0.000j$
 $|01011110\rangle$: amplitude $0.188+0.000j$

Pair (129, 150) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$

|00011111> : amplitude -0.140+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j

|01110101> : amplitude -0.150+0.000j

|10100001> : amplitude 0.150+0.000j

|01100111> : amplitude -0.150+0.000j

Pair (129, 151) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j

|00001101> : amplitude 0.140+0.000j

|11011001> : amplitude 0.140+0.000j

|00011111> : amplitude -0.140+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j

|10101100> : amplitude -0.169+0.000j

|01111000> : amplitude 0.169+0.000j

|10111110> : amplitude 0.169+0.000j

Pair (129, 152) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j

|00001101> : amplitude 0.140+0.000j

|11011001> : amplitude 0.140+0.000j

|00011111> : amplitude -0.140+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j

|00001000> : amplitude 0.204+0.000j

|11011100> : amplitude -0.204+0.000j

|00011010> : amplitude -0.204+0.000j

Pair (129, 153) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

|11001011> : amplitude 0.140+0.000j

|00001101> : amplitude 0.140+0.000j

|11011001> : amplitude 0.140+0.000j

|00011111> : amplitude -0.140+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.144+0.000j$
 $|10001000\rangle$: amplitude $0.144+0.000j$
 $|01011100\rangle$: amplitude $-0.144+0.000j$
 $|10011010\rangle$: amplitude $-0.144+0.000j$

Pair (129, 154) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude $-0.140+0.000j$
 $|01000011\rangle$: amplitude $0.140+0.000j$
 $|01010001\rangle$: amplitude $0.140+0.000j$
 $|10010111\rangle$: amplitude $0.140+0.000j$

Pair (129, 155) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude $0.127+0.000j$
 $|10110100\rangle$: amplitude $-0.127+0.000j$
 $|01100000\rangle$: amplitude $-0.127+0.000j$
 $|10100110\rangle$: amplitude $-0.127+0.000j$

Pair (129, 156) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude $0.140+0.000j$
 $|00001101\rangle$: amplitude $0.140+0.000j$
 $|11011001\rangle$: amplitude $0.140+0.000j$
 $|00011111\rangle$: amplitude $-0.140+0.000j$

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (129, 157) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (129, 158) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (129, 159) with energies 0.7149, 0.7149

State 129

Dominant basis-states:

$|11001011\rangle$: amplitude 0.140+0.000j
 $|00001101\rangle$: amplitude 0.140+0.000j
 $|11011001\rangle$: amplitude 0.140+0.000j
 $|00011111\rangle$: amplitude -0.140+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (130, 131) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

Pair (130, 132) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

Pair (130, 133) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j

|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

Pair (130, 134) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

Pair (130, 135) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

Pair (130, 136) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

Pair (130, 137) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

Pair (130, 138) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

Pair (130, 139) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j

$|10101111\rangle$: amplitude -0.174+0.000j

Pair (130, 140) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (130, 141) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (130, 142) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (130, 143) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

Pair (130, 144) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (130, 145) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (130, 146) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (130, 147) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (130, 148) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (130, 149) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (130, 150) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (130, 151) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (130, 152) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (130, 153) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (130, 154) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

$|01101011\rangle$: amplitude -0.163+0.000j
 $|01111001\rangle$: amplitude 0.163+0.000j
 $|10101101\rangle$: amplitude -0.163+0.000j
 $|10111111\rangle$: amplitude -0.163+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (130, 155) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (130, 156) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (130, 157) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (130, 158) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j

|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (130, 159) with energies 0.7149, 0.7149

State 130

Dominant basis-states:

|01101011> : amplitude -0.163+0.000j
|01111001> : amplitude 0.163+0.000j
|10101101> : amplitude -0.163+0.000j
|10111111> : amplitude -0.163+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (131, 132) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

Pair (131, 133) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j

|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

Pair (131, 134) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

Pair (131, 135) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

Pair (131, 136) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j

|01100110> : amplitude 0.181+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j

|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

Pair (131, 137) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j

|01110100> : amplitude -0.181+0.000j

|10100000> : amplitude 0.181+0.000j

|01100110> : amplitude 0.181+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j

|00001011> : amplitude 0.186+0.000j

|11011111> : amplitude 0.186+0.000j

|00011001> : amplitude -0.186+0.000j

Pair (131, 138) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j

|01110100> : amplitude -0.181+0.000j

|10100000> : amplitude 0.181+0.000j

|01100110> : amplitude 0.181+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

|01010011> : amplitude -0.132+0.000j

Pair (131, 139) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j

|01110100> : amplitude -0.181+0.000j

|10100000> : amplitude 0.181+0.000j

|01100110> : amplitude 0.181+0.000j

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

Pair (131, 140) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (131, 141) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (131, 142) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (131, 143) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (131, 144) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

Pair (131, 145) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

Pair (131, 146) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (131, 147) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (131, 148) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j

|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (131, 149) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (131, 150) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (131, 151) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j

|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (131, 152) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (131, 153) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (131, 154) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

|10110010> : amplitude 0.181+0.000j
|01110100> : amplitude -0.181+0.000j
|10100000> : amplitude 0.181+0.000j
|01100110> : amplitude 0.181+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j

$|10010111\rangle$: amplitude 0.140+0.000j

Pair (131, 155) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude 0.127+0.000j
 $|10110100\rangle$: amplitude -0.127+0.000j
 $|01100000\rangle$: amplitude -0.127+0.000j
 $|10100110\rangle$: amplitude -0.127+0.000j

Pair (131, 156) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (131, 157) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (131, 158) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (131, 159) with energies 0.7149, 0.7149

State 131

Dominant basis-states:

$|10110010\rangle$: amplitude 0.181+0.000j
 $|01110100\rangle$: amplitude -0.181+0.000j
 $|10100000\rangle$: amplitude 0.181+0.000j
 $|01100110\rangle$: amplitude 0.181+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (132, 133) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

Pair (132, 134) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 134

Dominant basis-states:

$|11101110\rangle$: amplitude 0.211+0.000j
 $|00101000\rangle$: amplitude -0.211+0.000j
 $|11111100\rangle$: amplitude -0.211+0.000j
 $|00111010\rangle$: amplitude -0.211+0.000j

Pair (132, 135) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

Pair (132, 136) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude -0.172+0.000j
 $|01001110\rangle$: amplitude 0.172+0.000j
 $|10011010\rangle$: amplitude 0.172+0.000j
 $|01011100\rangle$: amplitude 0.172+0.000j

Pair (132, 137) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

Pair (132, 138) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j
 $|10000111\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude -0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j

Pair (132, 139) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

Pair (132, 140) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (132, 141) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (132, 142) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude 0.153+0.000j
 $|10011100\rangle$: amplitude 0.153+0.000j
 $|01001000\rangle$: amplitude 0.153+0.000j
 $|10001110\rangle$: amplitude -0.153+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (132, 143) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (132, 144) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

Pair (132, 145) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

Pair (132, 146) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j

|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (132, 147) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|1100101> : amplitude -0.174+0.000j

Pair (132, 148) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (132, 149) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j

|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (132, 150) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (132, 151) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (132, 152) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j

|10001110> : amplitude -0.153+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j

|00001000> : amplitude 0.204+0.000j

|11011100> : amplitude -0.204+0.000j

|00011010> : amplitude -0.204+0.000j

Pair (132, 153) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j

|10011100> : amplitude 0.153+0.000j

|01001000> : amplitude 0.153+0.000j

|10001110> : amplitude -0.153+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j

|10001000> : amplitude 0.144+0.000j

|01011100> : amplitude -0.144+0.000j

|10011010> : amplitude -0.144+0.000j

Pair (132, 154) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j

|10011100> : amplitude 0.153+0.000j

|01001000> : amplitude 0.153+0.000j

|10001110> : amplitude -0.153+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j

|01000011> : amplitude 0.140+0.000j

|01010001> : amplitude 0.140+0.000j

|10010111> : amplitude 0.140+0.000j

Pair (132, 155) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j

|10011100> : amplitude 0.153+0.000j

|01001000> : amplitude 0.153+0.000j

|10001110> : amplitude -0.153+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude $0.127+0.000j$
 $|10110100\rangle$: amplitude $-0.127+0.000j$
 $|01100000\rangle$: amplitude $-0.127+0.000j$
 $|10100110\rangle$: amplitude $-0.127+0.000j$

Pair (132, 156) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude $0.153+0.000j$
 $|10011100\rangle$: amplitude $0.153+0.000j$
 $|01001000\rangle$: amplitude $0.153+0.000j$
 $|10001110\rangle$: amplitude $-0.153+0.000j$

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude $0.163+0.000j$
 $|11101001\rangle$: amplitude $0.163+0.000j$
 $|11111011\rangle$: amplitude $0.163+0.000j$
 $|00111101\rangle$: amplitude $-0.163+0.000j$

Pair (132, 157) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude $0.153+0.000j$
 $|10011100\rangle$: amplitude $0.153+0.000j$
 $|01001000\rangle$: amplitude $0.153+0.000j$
 $|10001110\rangle$: amplitude $-0.153+0.000j$

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude $0.149+0.000j$
 $|01001111\rangle$: amplitude $0.149+0.000j$
 $|10011011\rangle$: amplitude $0.149+0.000j$
 $|01011101\rangle$: amplitude $-0.149+0.000j$

Pair (132, 158) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

$|01011010\rangle$: amplitude $0.153+0.000j$
 $|10011100\rangle$: amplitude $0.153+0.000j$
 $|01001000\rangle$: amplitude $0.153+0.000j$
 $|10001110\rangle$: amplitude $-0.153+0.000j$

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (132, 159) with energies 0.7149, 0.7149

State 132

Dominant basis-states:

|01011010> : amplitude 0.153+0.000j
|10011100> : amplitude 0.153+0.000j
|01001000> : amplitude 0.153+0.000j
|10001110> : amplitude -0.153+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (133, 134) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

Pair (133, 135) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

Pair (133, 136) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

Pair (133, 137) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

Pair (133, 138) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

Pair (133, 139) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

Pair (133, 140) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

Pair (133, 141) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j

|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

Pair (133, 142) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (133, 143) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (133, 144) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

|00000000> : amplitude -0.353+0.000j
|11000110> : amplitude -0.353+0.000j
|00010010> : amplitude 0.353+0.000j
|11010100> : amplitude -0.353+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j

$|11000000\rangle$: amplitude 0.283+0.000j

Pair (133, 145) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (133, 146) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude 0.211+0.000j
 $|11000001\rangle$: amplitude -0.211+0.000j
 $|11010011\rangle$: amplitude 0.211+0.000j
 $|00010101\rangle$: amplitude 0.211+0.000j

Pair (133, 147) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

Pair (133, 148) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude 0.127+0.000j
 $|01011101\rangle$: amplitude -0.127+0.000j
 $|10001001\rangle$: amplitude 0.127+0.000j
 $|01001111\rangle$: amplitude 0.127+0.000j

Pair (133, 149) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (133, 150) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (133, 151) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (133, 152) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (133, 153) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (133, 154) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (133, 155) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude 0.127+0.000j
 $|10110100\rangle$: amplitude -0.127+0.000j
 $|01100000\rangle$: amplitude -0.127+0.000j
 $|10100110\rangle$: amplitude -0.127+0.000j

Pair (133, 156) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (133, 157) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (133, 158) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (133, 159) with energies 0.7149, 0.7149

State 133

Dominant basis-states:

$|00000000\rangle$: amplitude -0.353+0.000j
 $|11000110\rangle$: amplitude -0.353+0.000j
 $|00010010\rangle$: amplitude 0.353+0.000j
 $|11010100\rangle$: amplitude -0.353+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (134, 135) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

Pair (134, 136) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

Pair (134, 137) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

Pair (134, 138) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j

|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

Pair (134, 139) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

Pair (134, 140) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

Pair (134, 141) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j

|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

Pair (134, 142) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (134, 143) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (134, 144) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j

|00111010> : amplitude -0.211+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j

|00000110> : amplitude 0.283+0.000j

|11010010> : amplitude 0.283+0.000j

|11000000> : amplitude 0.283+0.000j

Pair (134, 145) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j

|00101000> : amplitude -0.211+0.000j

|11111100> : amplitude -0.211+0.000j

|00111010> : amplitude -0.211+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

Pair (134, 146) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j

|00101000> : amplitude -0.211+0.000j

|11111100> : amplitude -0.211+0.000j

|00111010> : amplitude -0.211+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j

|11000001> : amplitude -0.211+0.000j

|11010011> : amplitude 0.211+0.000j

|00010101> : amplitude 0.211+0.000j

Pair (134, 147) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j

|00101000> : amplitude -0.211+0.000j

|11111100> : amplitude -0.211+0.000j

|00111010> : amplitude -0.211+0.000j

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude $0.174+0.000j$
 $|11110111\rangle$: amplitude $0.174+0.000j$
 $|00100011\rangle$: amplitude $0.174+0.000j$
 $|11100101\rangle$: amplitude $-0.174+0.000j$

Pair (134, 148) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

$|11101110\rangle$: amplitude $0.211+0.000j$
 $|00101000\rangle$: amplitude $-0.211+0.000j$
 $|11111100\rangle$: amplitude $-0.211+0.000j$
 $|00111010\rangle$: amplitude $-0.211+0.000j$

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude $0.127+0.000j$
 $|01011101\rangle$: amplitude $-0.127+0.000j$
 $|10001001\rangle$: amplitude $0.127+0.000j$
 $|01001111\rangle$: amplitude $0.127+0.000j$

Pair (134, 149) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

$|11101110\rangle$: amplitude $0.211+0.000j$
 $|00101000\rangle$: amplitude $-0.211+0.000j$
 $|11111100\rangle$: amplitude $-0.211+0.000j$
 $|00111010\rangle$: amplitude $-0.211+0.000j$

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$
 $|01001100\rangle$: amplitude $-0.188+0.000j$
 $|10011000\rangle$: amplitude $0.188+0.000j$
 $|01011110\rangle$: amplitude $0.188+0.000j$

Pair (134, 150) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

$|11101110\rangle$: amplitude $0.211+0.000j$
 $|00101000\rangle$: amplitude $-0.211+0.000j$
 $|11111100\rangle$: amplitude $-0.211+0.000j$
 $|00111010\rangle$: amplitude $-0.211+0.000j$

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (134, 151) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (134, 152) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (134, 153) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (134, 154) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (134, 155) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (134, 156) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j

|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (134, 157) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (134, 158) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (134, 159) with energies 0.7149, 0.7149

State 134

Dominant basis-states:

|11101110> : amplitude 0.211+0.000j
|00101000> : amplitude -0.211+0.000j
|11111100> : amplitude -0.211+0.000j
|00111010> : amplitude -0.211+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j

|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (135, 136) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

Pair (135, 137) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

Pair (135, 138) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j

$|01010011\rangle$: amplitude -0.132+0.000j

Pair (135, 139) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

Pair (135, 140) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (135, 141) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (135, 142) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (135, 143) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

Pair (135, 144) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (135, 145) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (135, 146) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude 0.211+0.000j
 $|11000001\rangle$: amplitude -0.211+0.000j
 $|11010011\rangle$: amplitude 0.211+0.000j
 $|00010101\rangle$: amplitude 0.211+0.000j

Pair (135, 147) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

Pair (135, 148) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude 0.127+0.000j
 $|01011101\rangle$: amplitude -0.127+0.000j
 $|10001001\rangle$: amplitude 0.127+0.000j
 $|01001111\rangle$: amplitude 0.127+0.000j

Pair (135, 149) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (135, 150) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (135, 151) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (135, 152) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (135, 153) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

$|00101110\rangle$: amplitude 0.156+0.000j
 $|11101000\rangle$: amplitude -0.156+0.000j
 $|00111100\rangle$: amplitude 0.156+0.000j
 $|11111010\rangle$: amplitude 0.156+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (135, 154) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (135, 155) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (135, 156) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (135, 157) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j

|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (135, 158) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (135, 159) with energies 0.7149, 0.7149

State 135

Dominant basis-states:

|00101110> : amplitude 0.156+0.000j
|11101000> : amplitude -0.156+0.000j
|00111100> : amplitude 0.156+0.000j
|11111010> : amplitude 0.156+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (136, 137) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

Pair (136, 138) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

Pair (136, 139) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

Pair (136, 140) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

|10000000> : amplitude 0.200+0.000j

Pair (136, 141) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j

|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j

|11011101> : amplitude 0.179+0.000j

|00001001> : amplitude -0.179+0.000j

|11001111> : amplitude -0.179+0.000j

Pair (136, 142) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j

|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

Pair (136, 143) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j

|01001110> : amplitude 0.172+0.000j

|10011010> : amplitude 0.172+0.000j

|01011100> : amplitude 0.172+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude $0.185+0.000j$
 $|01011111\rangle$: amplitude $-0.185+0.000j$
 $|10001011\rangle$: amplitude $-0.185+0.000j$
 $|01001101\rangle$: amplitude $-0.185+0.000j$

Pair (136, 144) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude $-0.283+0.000j$
 $|00000110\rangle$: amplitude $0.283+0.000j$
 $|11010010\rangle$: amplitude $0.283+0.000j$
 $|11000000\rangle$: amplitude $0.283+0.000j$

Pair (136, 145) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude $0.149+0.000j$
 $|11100011\rangle$: amplitude $-0.149+0.000j$
 $|00110111\rangle$: amplitude $0.149+0.000j$
 $|11110001\rangle$: amplitude $0.149+0.000j$

Pair (136, 146) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$

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$|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude $0.211+0.000j$
 $|11000001\rangle$: amplitude $-0.211+0.000j$
 $|11010011\rangle$: amplitude $0.211+0.000j$
 $|00010101\rangle$: amplitude $0.211+0.000j$

Pair (136, 147) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude $0.174+0.000j$
 $|11110111\rangle$: amplitude $0.174+0.000j$
 $|00100011\rangle$: amplitude $0.174+0.000j$
 $|11100101\rangle$: amplitude $-0.174+0.000j$

Pair (136, 148) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude $0.127+0.000j$
 $|01011101\rangle$: amplitude $-0.127+0.000j$
 $|10001001\rangle$: amplitude $0.127+0.000j$
 $|01001111\rangle$: amplitude $0.127+0.000j$

Pair (136, 149) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

$|10001000\rangle$: amplitude $-0.172+0.000j$
 $|01001110\rangle$: amplitude $0.172+0.000j$
 $|10011010\rangle$: amplitude $0.172+0.000j$
 $|01011100\rangle$: amplitude $0.172+0.000j$

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (136, 150) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (136, 151) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (136, 152) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (136, 153) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (136, 154) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (136, 155) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j

|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (136, 156) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (136, 157) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (136, 158) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j

|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (136, 159) with energies 0.7149, 0.7149

State 136

Dominant basis-states:

|10001000> : amplitude -0.172+0.000j
|01001110> : amplitude 0.172+0.000j
|10011010> : amplitude 0.172+0.000j
|01011100> : amplitude 0.172+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (137, 138) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

Pair (137, 139) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j

$|10101111\rangle$: amplitude -0.174+0.000j

Pair (137, 140) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude -0.200+0.000j
 $|01010100\rangle$: amplitude 0.200+0.000j
 $|01000110\rangle$: amplitude 0.200+0.000j
 $|10000000\rangle$: amplitude 0.200+0.000j

Pair (137, 141) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

Pair (137, 142) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (137, 143) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

Pair (137, 144) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (137, 145) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (137, 146) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (137, 147) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (137, 148) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (137, 149) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (137, 150) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (137, 151) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

$|11001101\rangle$: amplitude 0.186+0.000j
 $|00001011\rangle$: amplitude 0.186+0.000j
 $|11011111\rangle$: amplitude 0.186+0.000j
 $|00011001\rangle$: amplitude -0.186+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (137, 152) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (137, 153) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (137, 154) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (137, 155) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (137, 156) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (137, 157) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (137, 158) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j

|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (137, 159) with energies 0.7149, 0.7149

State 137

Dominant basis-states:

|11001101> : amplitude 0.186+0.000j
|00001011> : amplitude 0.186+0.000j
|11011111> : amplitude 0.186+0.000j
|00011001> : amplitude -0.186+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (138, 139) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

Pair (138, 140) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

|01010011> : amplitude -0.132+0.000j

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

|10000000> : amplitude 0.200+0.000j

Pair (138, 141) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

|01010011> : amplitude -0.132+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j

|11011101> : amplitude 0.179+0.000j

|00001001> : amplitude -0.179+0.000j

|11001111> : amplitude -0.179+0.000j

Pair (138, 142) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

|01010011> : amplitude -0.132+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

Pair (138, 143) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j

|10000111> : amplitude -0.132+0.000j

|10010101> : amplitude -0.132+0.000j

$|01010011\rangle$: amplitude -0.132+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j

$|01011111\rangle$: amplitude -0.185+0.000j

$|10001011\rangle$: amplitude -0.185+0.000j

$|01001101\rangle$: amplitude -0.185+0.000j

Pair (138, 144) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j

$|10000111\rangle$: amplitude -0.132+0.000j

$|10010101\rangle$: amplitude -0.132+0.000j

$|01010011\rangle$: amplitude -0.132+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j

$|00000110\rangle$: amplitude 0.283+0.000j

$|11010010\rangle$: amplitude 0.283+0.000j

$|11000000\rangle$: amplitude 0.283+0.000j

Pair (138, 145) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j

$|10000111\rangle$: amplitude -0.132+0.000j

$|10010101\rangle$: amplitude -0.132+0.000j

$|01010011\rangle$: amplitude -0.132+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j

$|11100011\rangle$: amplitude -0.149+0.000j

$|00110111\rangle$: amplitude 0.149+0.000j

$|11110001\rangle$: amplitude 0.149+0.000j

Pair (138, 146) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j

$|10000111\rangle$: amplitude -0.132+0.000j

$|10010101\rangle$: amplitude -0.132+0.000j

$|01010011\rangle$: amplitude -0.132+0.000j

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude $0.211+0.000j$
 $|11000001\rangle$: amplitude $-0.211+0.000j$
 $|11010011\rangle$: amplitude $0.211+0.000j$
 $|00010101\rangle$: amplitude $0.211+0.000j$

Pair (138, 147) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude $0.132+0.000j$
 $|10000111\rangle$: amplitude $-0.132+0.000j$
 $|10010101\rangle$: amplitude $-0.132+0.000j$
 $|01010011\rangle$: amplitude $-0.132+0.000j$

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude $0.174+0.000j$
 $|11110111\rangle$: amplitude $0.174+0.000j$
 $|00100011\rangle$: amplitude $0.174+0.000j$
 $|11100101\rangle$: amplitude $-0.174+0.000j$

Pair (138, 148) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude $0.132+0.000j$
 $|10000111\rangle$: amplitude $-0.132+0.000j$
 $|10010101\rangle$: amplitude $-0.132+0.000j$
 $|01010011\rangle$: amplitude $-0.132+0.000j$

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude $0.127+0.000j$
 $|01011101\rangle$: amplitude $-0.127+0.000j$
 $|10001001\rangle$: amplitude $0.127+0.000j$
 $|01001111\rangle$: amplitude $0.127+0.000j$

Pair (138, 149) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude $0.132+0.000j$
 $|10000111\rangle$: amplitude $-0.132+0.000j$
 $|10010101\rangle$: amplitude $-0.132+0.000j$
 $|01010011\rangle$: amplitude $-0.132+0.000j$

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (138, 150) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j
 $|10000111\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude -0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (138, 151) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j
 $|10000111\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude -0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (138, 152) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

$|01000001\rangle$: amplitude 0.132+0.000j
 $|10000111\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude -0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (138, 153) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (138, 154) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (138, 155) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j

|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (138, 156) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (138, 157) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (138, 158) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j

|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (138, 159) with energies 0.7149, 0.7149

State 138

Dominant basis-states:

|01000001> : amplitude 0.132+0.000j
|10000111> : amplitude -0.132+0.000j
|10010101> : amplitude -0.132+0.000j
|01010011> : amplitude -0.132+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (139, 140) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

Pair (139, 141) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j

$|11001111\rangle$: amplitude -0.179+0.000j

Pair (139, 142) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

Pair (139, 143) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

Pair (139, 144) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (139, 145) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11000011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (139, 146) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude 0.211+0.000j
 $|11000001\rangle$: amplitude -0.211+0.000j
 $|11010011\rangle$: amplitude 0.211+0.000j
 $|00010101\rangle$: amplitude 0.211+0.000j

Pair (139, 147) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

Pair (139, 148) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude 0.127+0.000j
 $|01011101\rangle$: amplitude -0.127+0.000j
 $|10001001\rangle$: amplitude 0.127+0.000j
 $|01001111\rangle$: amplitude 0.127+0.000j

Pair (139, 149) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (139, 150) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (139, 151) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (139, 152) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (139, 153) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

$|10111101\rangle$: amplitude 0.174+0.000j
 $|01111011\rangle$: amplitude -0.174+0.000j
 $|01101001\rangle$: amplitude -0.174+0.000j
 $|10101111\rangle$: amplitude -0.174+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (139, 154) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (139, 155) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (139, 156) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (139, 157) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (139, 158) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (139, 159) with energies 0.7149, 0.7149

State 139

Dominant basis-states:

|10111101> : amplitude 0.174+0.000j
|01111011> : amplitude -0.174+0.000j
|01101001> : amplitude -0.174+0.000j
|10101111> : amplitude -0.174+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (140, 141) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

Pair (140, 142) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (140, 143) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (140, 144) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

|10000000> : amplitude 0.200+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j

|00000110> : amplitude 0.283+0.000j

|11010010> : amplitude 0.283+0.000j

|11000000> : amplitude 0.283+0.000j

Pair (140, 145) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

|10000000> : amplitude 0.200+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

Pair (140, 146) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

|10000000> : amplitude 0.200+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j

|11000001> : amplitude -0.211+0.000j

|11010011> : amplitude 0.211+0.000j

|00010101> : amplitude 0.211+0.000j

Pair (140, 147) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j

|01010100> : amplitude 0.200+0.000j

|01000110> : amplitude 0.200+0.000j

$|10000000\rangle$: amplitude $0.200+0.000j$

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude $0.174+0.000j$

$|11110111\rangle$: amplitude $0.174+0.000j$

$|00100011\rangle$: amplitude $0.174+0.000j$

$|11100101\rangle$: amplitude $-0.174+0.000j$

Pair (140, 148) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$

$|01010100\rangle$: amplitude $0.200+0.000j$

$|01000110\rangle$: amplitude $0.200+0.000j$

$|10000000\rangle$: amplitude $0.200+0.000j$

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude $0.127+0.000j$

$|01011101\rangle$: amplitude $-0.127+0.000j$

$|10001001\rangle$: amplitude $0.127+0.000j$

$|01001111\rangle$: amplitude $0.127+0.000j$

Pair (140, 149) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$

$|01010100\rangle$: amplitude $0.200+0.000j$

$|01000110\rangle$: amplitude $0.200+0.000j$

$|10000000\rangle$: amplitude $0.200+0.000j$

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$

$|01001100\rangle$: amplitude $-0.188+0.000j$

$|10011000\rangle$: amplitude $0.188+0.000j$

$|01011110\rangle$: amplitude $0.188+0.000j$

Pair (140, 150) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$

$|01010100\rangle$: amplitude $0.200+0.000j$

$|01000110\rangle$: amplitude $0.200+0.000j$

$|10000000\rangle$: amplitude $0.200+0.000j$

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude $-0.150+0.000j$
 $|01110101\rangle$: amplitude $-0.150+0.000j$
 $|10100001\rangle$: amplitude $0.150+0.000j$
 $|01100111\rangle$: amplitude $-0.150+0.000j$

Pair (140, 151) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$
 $|01010100\rangle$: amplitude $0.200+0.000j$
 $|01000110\rangle$: amplitude $0.200+0.000j$
 $|10000000\rangle$: amplitude $0.200+0.000j$

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude $0.169+0.000j$
 $|10101100\rangle$: amplitude $-0.169+0.000j$
 $|01111000\rangle$: amplitude $0.169+0.000j$
 $|10111110\rangle$: amplitude $0.169+0.000j$

Pair (140, 152) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$
 $|01010100\rangle$: amplitude $0.200+0.000j$
 $|01000110\rangle$: amplitude $0.200+0.000j$
 $|10000000\rangle$: amplitude $0.200+0.000j$

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude $-0.204+0.000j$
 $|00001000\rangle$: amplitude $0.204+0.000j$
 $|11011100\rangle$: amplitude $-0.204+0.000j$
 $|00011010\rangle$: amplitude $-0.204+0.000j$

Pair (140, 153) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

$|10010010\rangle$: amplitude $-0.200+0.000j$
 $|01010100\rangle$: amplitude $0.200+0.000j$
 $|01000110\rangle$: amplitude $0.200+0.000j$
 $|10000000\rangle$: amplitude $0.200+0.000j$

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (140, 154) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (140, 155) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (140, 156) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (140, 157) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (140, 158) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (140, 159) with energies 0.7149, 0.7149

State 140

Dominant basis-states:

|10010010> : amplitude -0.200+0.000j
|01010100> : amplitude 0.200+0.000j
|01000110> : amplitude 0.200+0.000j
|10000000> : amplitude 0.200+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j

|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (141, 142) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

Pair (141, 143) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (141, 144) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j

|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

Pair (141, 145) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

Pair (141, 146) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (141, 147) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j

$|11100101\rangle$: amplitude -0.174+0.000j

Pair (141, 148) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude 0.127+0.000j
 $|01011101\rangle$: amplitude -0.127+0.000j
 $|10001001\rangle$: amplitude 0.127+0.000j
 $|01001111\rangle$: amplitude 0.127+0.000j

Pair (141, 149) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (141, 150) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (141, 151) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (141, 152) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (141, 153) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (141, 154) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (141, 155) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (141, 156) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

|00011011> : amplitude -0.179+0.000j
|11011101> : amplitude 0.179+0.000j
|00001001> : amplitude -0.179+0.000j
|11001111> : amplitude -0.179+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (141, 157) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (141, 158) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (141, 159) with energies 0.7149, 0.7149

State 141

Dominant basis-states:

$|00011011\rangle$: amplitude -0.179+0.000j
 $|11011101\rangle$: amplitude 0.179+0.000j
 $|00001001\rangle$: amplitude -0.179+0.000j
 $|11001111\rangle$: amplitude -0.179+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (142, 143) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

Pair (142, 144) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

Pair (142, 145) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

Pair (142, 146) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (142, 147) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (142, 148) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (142, 149) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (142, 150) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (142, 151) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (142, 152) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (142, 153) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (142, 154) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j
|01111010> : amplitude -0.165+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (142, 155) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j
|10111100> : amplitude -0.165+0.000j
|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j

|10110100> : amplitude -0.127+0.000j

|01100000> : amplitude -0.127+0.000j

|10100110> : amplitude -0.127+0.000j

Pair (142, 156) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j

|11101001> : amplitude 0.163+0.000j

|11111011> : amplitude 0.163+0.000j

|00111101> : amplitude -0.163+0.000j

Pair (142, 157) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j

|01001111> : amplitude 0.149+0.000j

|10011011> : amplitude 0.149+0.000j

|01011101> : amplitude -0.149+0.000j

Pair (142, 158) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

|10101110> : amplitude -0.165+0.000j

|10111100> : amplitude -0.165+0.000j

|01101000> : amplitude 0.165+0.000j

|01111010> : amplitude -0.165+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (142, 159) with energies 0.7149, 0.7149

State 142

Dominant basis-states:

$|10101110\rangle$: amplitude -0.165+0.000j
 $|10111100\rangle$: amplitude -0.165+0.000j
 $|01101000\rangle$: amplitude 0.165+0.000j
 $|01111010\rangle$: amplitude -0.165+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (143, 144) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

Pair (143, 145) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (143, 146) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude 0.211+0.000j
 $|11000001\rangle$: amplitude -0.211+0.000j
 $|11010011\rangle$: amplitude 0.211+0.000j
 $|00010101\rangle$: amplitude 0.211+0.000j

Pair (143, 147) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

Pair (143, 148) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (143, 149) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (143, 150) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (143, 151) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j

|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (143, 152) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (143, 153) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (143, 154) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j

|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (143, 155) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (143, 156) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (143, 157) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

|10011001> : amplitude 0.185+0.000j
|01011111> : amplitude -0.185+0.000j
|10001011> : amplitude -0.185+0.000j
|01001101> : amplitude -0.185+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j

$|01011101\rangle$: amplitude -0.149+0.000j

Pair (143, 158) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (143, 159) with energies 0.7149, 0.7149

State 143

Dominant basis-states:

$|10011001\rangle$: amplitude 0.185+0.000j
 $|01011111\rangle$: amplitude -0.185+0.000j
 $|10001011\rangle$: amplitude -0.185+0.000j
 $|01001101\rangle$: amplitude -0.185+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (144, 145) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

Pair (144, 146) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (144, 147) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (144, 148) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (144, 149) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (144, 150) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (144, 151) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (144, 152) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (144, 153) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (144, 154) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

$|00010100\rangle$: amplitude -0.283+0.000j
 $|00000110\rangle$: amplitude 0.283+0.000j
 $|11010010\rangle$: amplitude 0.283+0.000j
 $|11000000\rangle$: amplitude 0.283+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (144, 155) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (144, 156) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (144, 157) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (144, 158) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (144, 159) with energies 0.7149, 0.7149

State 144

Dominant basis-states:

|00010100> : amplitude -0.283+0.000j
|00000110> : amplitude 0.283+0.000j
|11010010> : amplitude 0.283+0.000j
|11000000> : amplitude 0.283+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (145, 146) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

Pair (145, 147) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (145, 148) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (145, 149) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (145, 150) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (145, 151) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (145, 152) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j
|11110001> : amplitude 0.149+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (145, 153) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j
|11100011> : amplitude -0.149+0.000j
|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j

|10001000> : amplitude 0.144+0.000j

|01011100> : amplitude -0.144+0.000j

|10011010> : amplitude -0.144+0.000j

Pair (145, 154) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j

|01000011> : amplitude 0.140+0.000j

|01010001> : amplitude 0.140+0.000j

|10010111> : amplitude 0.140+0.000j

Pair (145, 155) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j

|10110100> : amplitude -0.127+0.000j

|01100000> : amplitude -0.127+0.000j

|10100110> : amplitude -0.127+0.000j

Pair (145, 156) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

|00100101> : amplitude 0.149+0.000j

|11100011> : amplitude -0.149+0.000j

|00110111> : amplitude 0.149+0.000j

|11110001> : amplitude 0.149+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (145, 157) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (145, 158) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (145, 159) with energies 0.7149, 0.7149

State 145

Dominant basis-states:

$|00100101\rangle$: amplitude 0.149+0.000j
 $|11100011\rangle$: amplitude -0.149+0.000j
 $|00110111\rangle$: amplitude 0.149+0.000j
 $|11110001\rangle$: amplitude 0.149+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (146, 147) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

Pair (146, 148) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

Pair (146, 149) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (146, 150) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (146, 151) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (146, 152) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j

|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (146, 153) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (146, 154) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (146, 155) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j

|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (146, 156) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (146, 157) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (146, 158) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

|00000111> : amplitude 0.211+0.000j
|11000001> : amplitude -0.211+0.000j
|11010011> : amplitude 0.211+0.000j
|00010101> : amplitude 0.211+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j

$|00110110\rangle$: amplitude 0.148+0.000j

Pair (146, 159) with energies 0.7149, 0.7149

State 146

Dominant basis-states:

$|00000111\rangle$: amplitude 0.211+0.000j
 $|11000001\rangle$: amplitude -0.211+0.000j
 $|11010011\rangle$: amplitude 0.211+0.000j
 $|00010101\rangle$: amplitude 0.211+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (147, 148) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 148

Dominant basis-states:

$|10011011\rangle$: amplitude 0.127+0.000j
 $|01011101\rangle$: amplitude -0.127+0.000j
 $|10001001\rangle$: amplitude 0.127+0.000j
 $|01001111\rangle$: amplitude 0.127+0.000j

Pair (147, 149) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j
 $|01001100\rangle$: amplitude -0.188+0.000j
 $|10011000\rangle$: amplitude 0.188+0.000j
 $|01011110\rangle$: amplitude 0.188+0.000j

Pair (147, 150) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j
 $|01110101\rangle$: amplitude -0.150+0.000j
 $|10100001\rangle$: amplitude 0.150+0.000j
 $|01100111\rangle$: amplitude -0.150+0.000j

Pair (147, 151) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

Pair (147, 152) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (147, 153) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (147, 154) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (147, 155) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude 0.127+0.000j
 $|10110100\rangle$: amplitude -0.127+0.000j
 $|01100000\rangle$: amplitude -0.127+0.000j
 $|10100110\rangle$: amplitude -0.127+0.000j

Pair (147, 156) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (147, 157) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (147, 158) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

$|00110001\rangle$: amplitude 0.174+0.000j
 $|11110111\rangle$: amplitude 0.174+0.000j
 $|00100011\rangle$: amplitude 0.174+0.000j
 $|11100101\rangle$: amplitude -0.174+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (147, 159) with energies 0.7149, 0.7149

State 147

Dominant basis-states:

|00110001> : amplitude 0.174+0.000j
|11110111> : amplitude 0.174+0.000j
|00100011> : amplitude 0.174+0.000j
|11100101> : amplitude -0.174+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (148, 149) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

Pair (148, 150) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

Pair (148, 151) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (148, 152) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (148, 153) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j
|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (148, 154) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j

|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (148, 155) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (148, 156) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (148, 157) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j

|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (148, 158) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (148, 159) with energies 0.7149, 0.7149

State 148

Dominant basis-states:

|10011011> : amplitude 0.127+0.000j
|01011101> : amplitude -0.127+0.000j
|10001001> : amplitude 0.127+0.000j
|01001111> : amplitude 0.127+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (149, 150) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j

$|01011110\rangle$: amplitude 0.188+0.000j

State 150

Dominant basis-states:

$|10110011\rangle$: amplitude -0.150+0.000j

$|01110101\rangle$: amplitude -0.150+0.000j

$|10100001\rangle$: amplitude 0.150+0.000j

$|01100111\rangle$: amplitude -0.150+0.000j

Pair (149, 151) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j

$|01001100\rangle$: amplitude -0.188+0.000j

$|10011000\rangle$: amplitude 0.188+0.000j

$|01011110\rangle$: amplitude 0.188+0.000j

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j

$|10101100\rangle$: amplitude -0.169+0.000j

$|01111000\rangle$: amplitude 0.169+0.000j

$|10111110\rangle$: amplitude 0.169+0.000j

Pair (149, 152) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j

$|01001100\rangle$: amplitude -0.188+0.000j

$|10011000\rangle$: amplitude 0.188+0.000j

$|01011110\rangle$: amplitude 0.188+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j

$|00001000\rangle$: amplitude 0.204+0.000j

$|11011100\rangle$: amplitude -0.204+0.000j

$|00011010\rangle$: amplitude -0.204+0.000j

Pair (149, 153) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude 0.188+0.000j

$|01001100\rangle$: amplitude -0.188+0.000j

$|10011000\rangle$: amplitude 0.188+0.000j

$|01011110\rangle$: amplitude 0.188+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.144+0.000j$
 $|10001000\rangle$: amplitude $0.144+0.000j$
 $|01011100\rangle$: amplitude $-0.144+0.000j$
 $|10011010\rangle$: amplitude $-0.144+0.000j$

Pair (149, 154) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$
 $|01001100\rangle$: amplitude $-0.188+0.000j$
 $|10011000\rangle$: amplitude $0.188+0.000j$
 $|01011110\rangle$: amplitude $0.188+0.000j$

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude $-0.140+0.000j$
 $|01000011\rangle$: amplitude $0.140+0.000j$
 $|01010001\rangle$: amplitude $0.140+0.000j$
 $|10010111\rangle$: amplitude $0.140+0.000j$

Pair (149, 155) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$
 $|01001100\rangle$: amplitude $-0.188+0.000j$
 $|10011000\rangle$: amplitude $0.188+0.000j$
 $|01011110\rangle$: amplitude $0.188+0.000j$

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude $0.127+0.000j$
 $|10110100\rangle$: amplitude $-0.127+0.000j$
 $|01100000\rangle$: amplitude $-0.127+0.000j$
 $|10100110\rangle$: amplitude $-0.127+0.000j$

Pair (149, 156) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

$|10001010\rangle$: amplitude $0.188+0.000j$
 $|01001100\rangle$: amplitude $-0.188+0.000j$
 $|10011000\rangle$: amplitude $0.188+0.000j$
 $|01011110\rangle$: amplitude $0.188+0.000j$

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j
|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (149, 157) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (149, 158) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (149, 159) with energies 0.7149, 0.7149

State 149

Dominant basis-states:

|10001010> : amplitude 0.188+0.000j
|01001100> : amplitude -0.188+0.000j
|10011000> : amplitude 0.188+0.000j
|01011110> : amplitude 0.188+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (150, 151) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 151

Dominant basis-states:

|01101010> : amplitude 0.169+0.000j
|10101100> : amplitude -0.169+0.000j
|01111000> : amplitude 0.169+0.000j
|10111110> : amplitude 0.169+0.000j

Pair (150, 152) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 152

Dominant basis-states:

|11001110> : amplitude -0.204+0.000j
|00001000> : amplitude 0.204+0.000j
|11011100> : amplitude -0.204+0.000j
|00011010> : amplitude -0.204+0.000j

Pair (150, 153) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 153

Dominant basis-states:

|01001110> : amplitude -0.144+0.000j

|10001000> : amplitude 0.144+0.000j
|01011100> : amplitude -0.144+0.000j
|10011010> : amplitude -0.144+0.000j

Pair (150, 154) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j
|01010001> : amplitude 0.140+0.000j
|10010111> : amplitude 0.140+0.000j

Pair (150, 155) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
|01100000> : amplitude -0.127+0.000j
|10100110> : amplitude -0.127+0.000j

Pair (150, 156) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 156

Dominant basis-states:

|00101111> : amplitude 0.163+0.000j
|11101001> : amplitude 0.163+0.000j

|11111011> : amplitude 0.163+0.000j
|00111101> : amplitude -0.163+0.000j

Pair (150, 157) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

Pair (150, 158) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (150, 159) with energies 0.7149, 0.7149

State 150

Dominant basis-states:

|10110011> : amplitude -0.150+0.000j
|01110101> : amplitude -0.150+0.000j
|10100001> : amplitude 0.150+0.000j
|01100111> : amplitude -0.150+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j

$|01011000\rangle$: amplitude 0.158+0.000j

Pair (151, 152) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

Pair (151, 153) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (151, 154) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (151, 155) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude 0.127+0.000j
 $|10110100\rangle$: amplitude -0.127+0.000j
 $|01100000\rangle$: amplitude -0.127+0.000j
 $|10100110\rangle$: amplitude -0.127+0.000j

Pair (151, 156) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (151, 157) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
 $|01011101\rangle$: amplitude -0.149+0.000j

Pair (151, 158) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 158

Dominant basis-states:

$|00100100\rangle$: amplitude -0.148+0.000j
 $|11100010\rangle$: amplitude -0.148+0.000j
 $|11110000\rangle$: amplitude -0.148+0.000j
 $|00110110\rangle$: amplitude 0.148+0.000j

Pair (151, 159) with energies 0.7149, 0.7149

State 151

Dominant basis-states:

$|01101010\rangle$: amplitude 0.169+0.000j
 $|10101100\rangle$: amplitude -0.169+0.000j
 $|01111000\rangle$: amplitude 0.169+0.000j
 $|10111110\rangle$: amplitude 0.169+0.000j

State 159

Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
 $|01011000\rangle$: amplitude 0.158+0.000j

Pair (152, 153) with energies 0.7149, 0.7149

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

State 153

Dominant basis-states:

$|01001110\rangle$: amplitude -0.144+0.000j
 $|10001000\rangle$: amplitude 0.144+0.000j
 $|01011100\rangle$: amplitude -0.144+0.000j
 $|10011010\rangle$: amplitude -0.144+0.000j

Pair (152, 154) with energies 0.7149, 0.7149

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

State 154

Dominant basis-states:

$|10000101\rangle$: amplitude -0.140+0.000j
 $|01000011\rangle$: amplitude 0.140+0.000j
 $|01010001\rangle$: amplitude 0.140+0.000j
 $|10010111\rangle$: amplitude 0.140+0.000j

Pair (152, 155) with energies 0.7149, 0.7149

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

State 155

Dominant basis-states:

$|01110010\rangle$: amplitude 0.127+0.000j
 $|10110100\rangle$: amplitude -0.127+0.000j
 $|01100000\rangle$: amplitude -0.127+0.000j
 $|10100110\rangle$: amplitude -0.127+0.000j

Pair (152, 156) with energies 0.7149, 0.7149

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

Pair (152, 157) with energies 0.7149, 0.7149

State 152

Dominant basis-states:

$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
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$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
 $|10011011\rangle$: amplitude 0.149+0.000j
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$|00100100\rangle$: amplitude -0.148+0.000j
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 $|11110000\rangle$: amplitude -0.148+0.000j
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$|11001110\rangle$: amplitude -0.204+0.000j
 $|00001000\rangle$: amplitude 0.204+0.000j
 $|11011100\rangle$: amplitude -0.204+0.000j
 $|00011010\rangle$: amplitude -0.204+0.000j

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Dominant basis-states:

$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
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Pair (153, 154) with energies 0.7149, 0.7149

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|01001110> : amplitude -0.144+0.000j
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Pair (153, 155) with energies 0.7149, 0.7149

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|01110010> : amplitude 0.127+0.000j
|10110100> : amplitude -0.127+0.000j
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|10100110> : amplitude -0.127+0.000j

Pair (153, 156) with energies 0.7149, 0.7149

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|01001110> : amplitude -0.144+0.000j
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Pair (153, 157) with energies 0.7149, 0.7149

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|01001110> : amplitude -0.144+0.000j

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|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (154, 155) with energies 0.7149, 0.7149

State 154

Dominant basis-states:

|10000101> : amplitude -0.140+0.000j
|01000011> : amplitude 0.140+0.000j

|01010001> : amplitude 0.140+0.000j

|10010111> : amplitude 0.140+0.000j

State 155

Dominant basis-states:

|01110010> : amplitude 0.127+0.000j

|10110100> : amplitude -0.127+0.000j

|01100000> : amplitude -0.127+0.000j

|10100110> : amplitude -0.127+0.000j

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|10000101> : amplitude -0.140+0.000j

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|11111011> : amplitude 0.163+0.000j

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|10001100> : amplitude 0.158+0.000j

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|10110100> : amplitude -0.127+0.000j

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|01110010> : amplitude 0.127+0.000j

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|01100000> : amplitude -0.127+0.000j

|10100110> : amplitude -0.127+0.000j

State 157

Dominant basis-states:

$|10001001\rangle$: amplitude 0.149+0.000j
 $|01001111\rangle$: amplitude 0.149+0.000j
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$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
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Pair (156, 157) with energies 0.7149, 0.7149

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$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

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$|10001001\rangle$: amplitude 0.149+0.000j
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Pair (156, 158) with energies 0.7149, 0.7149

State 156

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$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
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State 158

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Pair (156, 159) with energies 0.7149, 0.7149

State 156

Dominant basis-states:

$|00101111\rangle$: amplitude 0.163+0.000j
 $|11101001\rangle$: amplitude 0.163+0.000j
 $|11111011\rangle$: amplitude 0.163+0.000j
 $|00111101\rangle$: amplitude -0.163+0.000j

State 159

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$|10001100\rangle$: amplitude 0.158+0.000j
 $|10011110\rangle$: amplitude 0.158+0.000j
 $|01001010\rangle$: amplitude -0.158+0.000j
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Pair (157, 158) with energies 0.7149, 0.7149

State 157

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$|10001001\rangle$: amplitude 0.149+0.000j
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|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

Pair (157, 159) with energies 0.7149, 0.7149

State 157

Dominant basis-states:

|10001001> : amplitude 0.149+0.000j
|01001111> : amplitude 0.149+0.000j
|10011011> : amplitude 0.149+0.000j
|01011101> : amplitude -0.149+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (158, 159) with energies 0.7149, 0.7149

State 158

Dominant basis-states:

|00100100> : amplitude -0.148+0.000j
|11100010> : amplitude -0.148+0.000j
|11110000> : amplitude -0.148+0.000j
|00110110> : amplitude 0.148+0.000j

State 159

Dominant basis-states:

|10001100> : amplitude 0.158+0.000j
|10011110> : amplitude 0.158+0.000j
|01001010> : amplitude -0.158+0.000j
|01011000> : amplitude 0.158+0.000j

Pair (160, 161) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j

|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

Pair (160, 162) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

Pair (160, 163) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

Pair (160, 164) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j

|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

Pair (160, 165) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

Pair (160, 166) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

Pair (160, 167) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j

$|11010010\rangle$: amplitude $0.325+0.000j$

Pair (160, 168) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude $0.146+0.000j$
 $|00001111\rangle$: amplitude $0.146+0.000j$
 $|11011011\rangle$: amplitude $0.146+0.000j$
 $|00011101\rangle$: amplitude $-0.146+0.000j$

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude $-0.202+0.000j$
 $|11000010\rangle$: amplitude $-0.202+0.000j$
 $|00010110\rangle$: amplitude $0.202+0.000j$
 $|11010000\rangle$: amplitude $-0.202+0.000j$

Pair (160, 169) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude $0.146+0.000j$
 $|00001111\rangle$: amplitude $0.146+0.000j$
 $|11011011\rangle$: amplitude $0.146+0.000j$
 $|00011101\rangle$: amplitude $-0.146+0.000j$

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude $-0.163+0.000j$
 $|01111110\rangle$: amplitude $-0.163+0.000j$
 $|10101010\rangle$: amplitude $-0.163+0.000j$
 $|01101100\rangle$: amplitude $0.163+0.000j$

Pair (160, 170) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude $0.146+0.000j$
 $|00001111\rangle$: amplitude $0.146+0.000j$
 $|11011011\rangle$: amplitude $0.146+0.000j$
 $|00011101\rangle$: amplitude $-0.146+0.000j$

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude $-0.162+0.000j$
 $|10011001\rangle$: amplitude $0.162+0.000j$
 $|10001011\rangle$: amplitude $0.162+0.000j$
 $|01001101\rangle$: amplitude $0.162+0.000j$

Pair (160, 171) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

Pair (160, 172) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

Pair (160, 173) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

Pair (160, 174) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

Pair (160, 175) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

Pair (160, 176) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (160, 177) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

Pair (160, 178) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (160, 179) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (160, 180) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (160, 181) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (160, 182) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

Pair (160, 183) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (160, 184) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (160, 185) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (160, 186) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j

$|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (160, 187) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (160, 188) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j
 $|11011011\rangle$: amplitude 0.146+0.000j
 $|00011101\rangle$: amplitude -0.146+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (160, 189) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

$|11001001\rangle$: amplitude 0.146+0.000j
 $|00001111\rangle$: amplitude 0.146+0.000j

|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (160, 190) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (160, 191) with energies 0.7758, 0.7758

State 160

Dominant basis-states:

|11001001> : amplitude 0.146+0.000j
|00001111> : amplitude 0.146+0.000j
|11011011> : amplitude 0.146+0.000j
|00011101> : amplitude -0.146+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (161, 162) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j

|00101001> : amplitude 0.177+0.000j

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j

|01100110> : amplitude 0.121+0.000j

|10100000> : amplitude 0.121+0.000j

|10110010> : amplitude -0.121+0.000j

Pair (161, 163) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j

|00111011> : amplitude 0.177+0.000j

|11101111> : amplitude 0.177+0.000j

|00101001> : amplitude 0.177+0.000j

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j

|00010010> : amplitude 0.350+0.000j

|00000000> : amplitude 0.350+0.000j

|11000110> : amplitude 0.350+0.000j

Pair (161, 164) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j

|00111011> : amplitude 0.177+0.000j

|11101111> : amplitude 0.177+0.000j

|00101001> : amplitude 0.177+0.000j

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j

|00010101> : amplitude -0.271+0.000j

|11000001> : amplitude -0.271+0.000j

|00000111> : amplitude 0.271+0.000j

Pair (161, 165) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j

|00111011> : amplitude 0.177+0.000j

|11101111> : amplitude 0.177+0.000j

|00101001> : amplitude 0.177+0.000j

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11010111\rangle$: amplitude 0.155+0.000j

Pair (161, 166) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11011111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

Pair (161, 167) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11011111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude -0.325+0.000j
 $|00000110\rangle$: amplitude -0.325+0.000j
 $|00010100\rangle$: amplitude -0.325+0.000j
 $|11010010\rangle$: amplitude 0.325+0.000j

Pair (161, 168) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11011111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

Pair (161, 169) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

Pair (161, 170) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

Pair (161, 171) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

Pair (161, 172) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

Pair (161, 173) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (161, 174) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j

|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (161, 175) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (161, 176) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (161, 177) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j

|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (161, 178) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (161, 179) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (161, 180) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

|11111101> : amplitude -0.177+0.000j
|00111011> : amplitude 0.177+0.000j
|11101111> : amplitude 0.177+0.000j
|00101001> : amplitude 0.177+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j

$|11110010\rangle$: amplitude 0.204+0.000j

Pair (161, 181) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (161, 182) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

Pair (161, 183) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j
 $|01011101\rangle$: amplitude 0.181+0.000j
 $|10001001\rangle$: amplitude 0.181+0.000j
 $|01001111\rangle$: amplitude 0.181+0.000j

Pair (161, 184) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (161, 185) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (161, 186) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (161, 187) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (161, 188) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (161, 189) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude -0.177+0.000j
 $|00111011\rangle$: amplitude 0.177+0.000j
 $|11101111\rangle$: amplitude 0.177+0.000j
 $|00101001\rangle$: amplitude 0.177+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (161, 190) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude $-0.177+0.000j$
 $|00111011\rangle$: amplitude $0.177+0.000j$
 $|11101111\rangle$: amplitude $0.177+0.000j$
 $|00101001\rangle$: amplitude $0.177+0.000j$

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude $-0.152+0.000j$
 $|10000011\rangle$: amplitude $-0.152+0.000j$
 $|01000101\rangle$: amplitude $0.152+0.000j$
 $|01010111\rangle$: amplitude $-0.152+0.000j$

Pair (161, 191) with energies 0.7758, 0.7758

State 161

Dominant basis-states:

$|11111101\rangle$: amplitude $-0.177+0.000j$
 $|00111011\rangle$: amplitude $0.177+0.000j$
 $|11101111\rangle$: amplitude $0.177+0.000j$
 $|00101001\rangle$: amplitude $0.177+0.000j$

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude $-0.155+0.000j$
 $|11110110\rangle$: amplitude $0.155+0.000j$
 $|00100010\rangle$: amplitude $-0.155+0.000j$
 $|11100100\rangle$: amplitude $-0.155+0.000j$

Pair (162, 163) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude $0.121+0.000j$
 $|01100110\rangle$: amplitude $0.121+0.000j$
 $|10100000\rangle$: amplitude $0.121+0.000j$
 $|10110010\rangle$: amplitude $-0.121+0.000j$

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude $-0.350+0.000j$
 $|00010010\rangle$: amplitude $0.350+0.000j$
 $|00000000\rangle$: amplitude $0.350+0.000j$
 $|11000110\rangle$: amplitude $0.350+0.000j$

Pair (162, 164) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

Pair (162, 165) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

Pair (162, 166) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

Pair (162, 167) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

Pair (162, 168) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

Pair (162, 169) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

Pair (162, 170) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j

|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

Pair (162, 171) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

Pair (162, 172) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

Pair (162, 173) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j

|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (162, 174) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (162, 175) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (162, 176) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j

|10110010> : amplitude -0.121+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j

|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

Pair (162, 177) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j

|01100110> : amplitude 0.121+0.000j

|10100000> : amplitude 0.121+0.000j

|10110010> : amplitude -0.121+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j

|10001001> : amplitude -0.168+0.000j

|01011101> : amplitude -0.168+0.000j

|01001111> : amplitude -0.168+0.000j

Pair (162, 178) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j

|01100110> : amplitude 0.121+0.000j

|10100000> : amplitude 0.121+0.000j

|10110010> : amplitude -0.121+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j

|10100110> : amplitude -0.193+0.000j

|10110100> : amplitude 0.193+0.000j

|01110010> : amplitude -0.193+0.000j

Pair (162, 179) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j

|01100110> : amplitude 0.121+0.000j

|10100000> : amplitude 0.121+0.000j

|10110010> : amplitude -0.121+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (162, 180) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (162, 181) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (162, 182) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

Pair (162, 183) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j
 $|01011101\rangle$: amplitude 0.181+0.000j
 $|10001001\rangle$: amplitude 0.181+0.000j
 $|01001111\rangle$: amplitude 0.181+0.000j

Pair (162, 184) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (162, 185) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

$|01110100\rangle$: amplitude 0.121+0.000j
 $|01100110\rangle$: amplitude 0.121+0.000j
 $|10100000\rangle$: amplitude 0.121+0.000j
 $|10110010\rangle$: amplitude -0.121+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (162, 186) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (162, 187) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (162, 188) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j

|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (162, 189) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (162, 190) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (162, 191) with energies 0.7758, 0.7758

State 162

Dominant basis-states:

|01110100> : amplitude 0.121+0.000j
|01100110> : amplitude 0.121+0.000j
|10100000> : amplitude 0.121+0.000j
|10110010> : amplitude -0.121+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j

|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (163, 164) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

Pair (163, 165) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

Pair (163, 166) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j

$|11011011\rangle$: amplitude -0.148+0.000j

Pair (163, 167) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude -0.325+0.000j
 $|00000110\rangle$: amplitude -0.325+0.000j
 $|00010100\rangle$: amplitude -0.325+0.000j
 $|11010010\rangle$: amplitude 0.325+0.000j

Pair (163, 168) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

Pair (163, 169) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

Pair (163, 170) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

Pair (163, 171) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

Pair (163, 172) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

Pair (163, 173) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (163, 174) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (163, 175) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (163, 176) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude $-0.350+0.000j$
 $|00010010\rangle$: amplitude $0.350+0.000j$
 $|00000000\rangle$: amplitude $0.350+0.000j$
 $|11000110\rangle$: amplitude $0.350+0.000j$

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude $0.170+0.000j$
 $|10000110\rangle$: amplitude $0.170+0.000j$
 $|01010010\rangle$: amplitude $-0.170+0.000j$
 $|10010100\rangle$: amplitude $0.170+0.000j$

Pair (163, 177) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude $-0.350+0.000j$
 $|00010010\rangle$: amplitude $0.350+0.000j$
 $|00000000\rangle$: amplitude $0.350+0.000j$
 $|11000110\rangle$: amplitude $0.350+0.000j$

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude $0.168+0.000j$
 $|10001001\rangle$: amplitude $-0.168+0.000j$
 $|01011101\rangle$: amplitude $-0.168+0.000j$
 $|01001111\rangle$: amplitude $-0.168+0.000j$

Pair (163, 178) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude $-0.350+0.000j$
 $|00010010\rangle$: amplitude $0.350+0.000j$
 $|00000000\rangle$: amplitude $0.350+0.000j$
 $|11000110\rangle$: amplitude $0.350+0.000j$

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude $-0.193+0.000j$
 $|10100110\rangle$: amplitude $-0.193+0.000j$
 $|10110100\rangle$: amplitude $0.193+0.000j$
 $|01110010\rangle$: amplitude $-0.193+0.000j$

Pair (163, 179) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (163, 180) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (163, 181) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

$|11010100\rangle$: amplitude -0.350+0.000j
 $|00010010\rangle$: amplitude 0.350+0.000j
 $|00000000\rangle$: amplitude 0.350+0.000j
 $|11000110\rangle$: amplitude 0.350+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (163, 182) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (163, 183) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (163, 184) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (163, 185) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j

|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (163, 186) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (163, 187) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (163, 188) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j

|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (163, 189) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (163, 190) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j
|11000110> : amplitude 0.350+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (163, 191) with energies 0.7758, 0.7758

State 163

Dominant basis-states:

|11010100> : amplitude -0.350+0.000j
|00010010> : amplitude 0.350+0.000j
|00000000> : amplitude 0.350+0.000j

|11000110> : amplitude 0.350+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j

|11110110> : amplitude 0.155+0.000j

|00100010> : amplitude -0.155+0.000j

|11100100> : amplitude -0.155+0.000j

Pair (164, 165) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j

|00010101> : amplitude -0.271+0.000j

|11000001> : amplitude -0.271+0.000j

|00000111> : amplitude 0.271+0.000j

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j

|00101101> : amplitude 0.155+0.000j

|00111111> : amplitude -0.155+0.000j

|11010111> : amplitude 0.155+0.000j

Pair (164, 166) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j

|00010101> : amplitude -0.271+0.000j

|11000001> : amplitude -0.271+0.000j

|00000111> : amplitude 0.271+0.000j

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j

|00001111> : amplitude -0.148+0.000j

|00011101> : amplitude 0.148+0.000j

|11011011> : amplitude -0.148+0.000j

Pair (164, 167) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j

|00010101> : amplitude -0.271+0.000j

|11000001> : amplitude -0.271+0.000j

|00000111> : amplitude 0.271+0.000j

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude -0.325+0.000j
 $|00000110\rangle$: amplitude -0.325+0.000j
 $|00010100\rangle$: amplitude -0.325+0.000j
 $|11010010\rangle$: amplitude 0.325+0.000j

Pair (164, 168) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

Pair (164, 169) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

Pair (164, 170) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

Pair (164, 171) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

Pair (164, 172) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

Pair (164, 173) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (164, 174) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (164, 175) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (164, 176) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (164, 177) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (164, 178) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (164, 179) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (164, 180) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

Pair (164, 181) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (164, 182) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j

|10011100> : amplitude -0.175+0.000j

Pair (164, 183) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (164, 184) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (164, 185) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

|11010011> : amplitude -0.271+0.000j
|00010101> : amplitude -0.271+0.000j
|11000001> : amplitude -0.271+0.000j
|00000111> : amplitude 0.271+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (164, 186) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (164, 187) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (164, 188) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (164, 189) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (164, 190) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (164, 191) with energies 0.7758, 0.7758

State 164

Dominant basis-states:

$|11010011\rangle$: amplitude -0.271+0.000j
 $|00010101\rangle$: amplitude -0.271+0.000j
 $|11000001\rangle$: amplitude -0.271+0.000j
 $|00000111\rangle$: amplitude 0.271+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11100100\rangle$: amplitude -0.155+0.000j

Pair (165, 166) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

Pair (165, 167) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude -0.325+0.000j
 $|00000110\rangle$: amplitude -0.325+0.000j
 $|00010100\rangle$: amplitude -0.325+0.000j
 $|11010010\rangle$: amplitude 0.325+0.000j

Pair (165, 168) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

Pair (165, 169) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

Pair (165, 170) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

Pair (165, 171) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

Pair (165, 172) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

Pair (165, 173) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (165, 174) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (165, 175) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j

|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (165, 176) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (165, 177) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (165, 178) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j

|00111111> : amplitude -0.155+0.000j

|11101011> : amplitude 0.155+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j

|10100110> : amplitude -0.193+0.000j

|10110100> : amplitude 0.193+0.000j

|01110010> : amplitude -0.193+0.000j

Pair (165, 179) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j

|00101101> : amplitude 0.155+0.000j

|00111111> : amplitude -0.155+0.000j

|11101011> : amplitude 0.155+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

Pair (165, 180) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j

|00101101> : amplitude 0.155+0.000j

|00111111> : amplitude -0.155+0.000j

|11101011> : amplitude 0.155+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j

|11100000> : amplitude 0.204+0.000j

|00110100> : amplitude -0.204+0.000j

|11110010> : amplitude 0.204+0.000j

Pair (165, 181) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j

|00101101> : amplitude 0.155+0.000j

|00111111> : amplitude -0.155+0.000j

$|11101011\rangle$: amplitude 0.155+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j

$|10111011\rangle$: amplitude -0.155+0.000j

$|10101001\rangle$: amplitude -0.155+0.000j

$|01111101\rangle$: amplitude 0.155+0.000j

Pair (165, 182) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j

$|00101101\rangle$: amplitude 0.155+0.000j

$|00111111\rangle$: amplitude -0.155+0.000j

$|11101011\rangle$: amplitude 0.155+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j

$|01001000\rangle$: amplitude 0.175+0.000j

$|01011010\rangle$: amplitude -0.175+0.000j

$|10011100\rangle$: amplitude -0.175+0.000j

Pair (165, 183) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j

$|00101101\rangle$: amplitude 0.155+0.000j

$|00111111\rangle$: amplitude -0.155+0.000j

$|11101011\rangle$: amplitude 0.155+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j

$|01011101\rangle$: amplitude 0.181+0.000j

$|10001001\rangle$: amplitude 0.181+0.000j

$|01001111\rangle$: amplitude 0.181+0.000j

Pair (165, 184) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j

$|00101101\rangle$: amplitude 0.155+0.000j

$|00111111\rangle$: amplitude -0.155+0.000j

$|11101011\rangle$: amplitude 0.155+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (165, 185) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (165, 186) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (165, 187) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (165, 188) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (165, 189) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (165, 190) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

$|11111001\rangle$: amplitude 0.155+0.000j
 $|00101101\rangle$: amplitude 0.155+0.000j
 $|00111111\rangle$: amplitude -0.155+0.000j
 $|11101011\rangle$: amplitude 0.155+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (165, 191) with energies 0.7758, 0.7758

State 165

Dominant basis-states:

|11111001> : amplitude 0.155+0.000j
|00101101> : amplitude 0.155+0.000j
|00111111> : amplitude -0.155+0.000j
|11101011> : amplitude 0.155+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (166, 167) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

Pair (166, 168) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j

|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

Pair (166, 169) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

Pair (166, 170) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

Pair (166, 171) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

Pair (166, 172) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

Pair (166, 173) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (166, 174) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j

$|00001101\rangle$: amplitude 0.143+0.000j

Pair (166, 175) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

Pair (166, 176) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (166, 177) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

Pair (166, 178) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (166, 179) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (166, 180) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (166, 181) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (166, 182) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (166, 183) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (166, 184) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (166, 185) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (166, 186) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

$|11001001\rangle$: amplitude -0.148+0.000j
 $|00001111\rangle$: amplitude -0.148+0.000j
 $|00011101\rangle$: amplitude 0.148+0.000j
 $|11011011\rangle$: amplitude -0.148+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (166, 187) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (166, 188) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (166, 189) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (166, 190) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (166, 191) with energies 0.7758, 0.7758

State 166

Dominant basis-states:

|11001001> : amplitude -0.148+0.000j
|00001111> : amplitude -0.148+0.000j
|00011101> : amplitude 0.148+0.000j
|11011011> : amplitude -0.148+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (167, 168) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

Pair (167, 169) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j

|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

Pair (167, 170) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

Pair (167, 171) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

Pair (167, 172) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j

|00010100> : amplitude -0.325+0.000j

|11010010> : amplitude 0.325+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j

|00100100> : amplitude -0.171+0.000j

|00110110> : amplitude -0.171+0.000j

|11110000> : amplitude 0.171+0.000j

Pair (167, 173) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j

|00000110> : amplitude -0.325+0.000j

|00010100> : amplitude -0.325+0.000j

|11010010> : amplitude 0.325+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

Pair (167, 174) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j

|00000110> : amplitude -0.325+0.000j

|00010100> : amplitude -0.325+0.000j

|11010010> : amplitude 0.325+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j

|00011111> : amplitude 0.143+0.000j

|11001011> : amplitude 0.143+0.000j

|00001101> : amplitude 0.143+0.000j

Pair (167, 175) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j

|00000110> : amplitude -0.325+0.000j

|00010100> : amplitude -0.325+0.000j

$|11010010\rangle$: amplitude $0.325+0.000j$

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude $-0.159+0.000j$

$|01101101\rangle$: amplitude $-0.159+0.000j$

$|10111001\rangle$: amplitude $0.159+0.000j$

$|01111111\rangle$: amplitude $-0.159+0.000j$

Pair (167, 176) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$

$|00000110\rangle$: amplitude $-0.325+0.000j$

$|00010100\rangle$: amplitude $-0.325+0.000j$

$|11010010\rangle$: amplitude $0.325+0.000j$

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude $0.170+0.000j$

$|10000110\rangle$: amplitude $0.170+0.000j$

$|01010010\rangle$: amplitude $-0.170+0.000j$

$|10010100\rangle$: amplitude $0.170+0.000j$

Pair (167, 177) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$

$|00000110\rangle$: amplitude $-0.325+0.000j$

$|00010100\rangle$: amplitude $-0.325+0.000j$

$|11010010\rangle$: amplitude $0.325+0.000j$

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude $0.168+0.000j$

$|10001001\rangle$: amplitude $-0.168+0.000j$

$|01011101\rangle$: amplitude $-0.168+0.000j$

$|01001111\rangle$: amplitude $-0.168+0.000j$

Pair (167, 178) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$

$|00000110\rangle$: amplitude $-0.325+0.000j$

$|00010100\rangle$: amplitude $-0.325+0.000j$

$|11010010\rangle$: amplitude $0.325+0.000j$

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude $-0.193+0.000j$
 $|10100110\rangle$: amplitude $-0.193+0.000j$
 $|10110100\rangle$: amplitude $0.193+0.000j$
 $|01110010\rangle$: amplitude $-0.193+0.000j$

Pair (167, 179) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$
 $|00000110\rangle$: amplitude $-0.325+0.000j$
 $|00010100\rangle$: amplitude $-0.325+0.000j$
 $|11010010\rangle$: amplitude $0.325+0.000j$

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude $0.138+0.000j$
 $|10001000\rangle$: amplitude $-0.138+0.000j$
 $|10011010\rangle$: amplitude $-0.138+0.000j$
 $|01011100\rangle$: amplitude $-0.138+0.000j$

Pair (167, 180) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$
 $|00000110\rangle$: amplitude $-0.325+0.000j$
 $|00010100\rangle$: amplitude $-0.325+0.000j$
 $|11010010\rangle$: amplitude $0.325+0.000j$

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude $0.204+0.000j$
 $|11100000\rangle$: amplitude $0.204+0.000j$
 $|00110100\rangle$: amplitude $-0.204+0.000j$
 $|11110010\rangle$: amplitude $0.204+0.000j$

Pair (167, 181) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

$|11000000\rangle$: amplitude $-0.325+0.000j$
 $|00000110\rangle$: amplitude $-0.325+0.000j$
 $|00010100\rangle$: amplitude $-0.325+0.000j$
 $|11010010\rangle$: amplitude $0.325+0.000j$

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (167, 182) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (167, 183) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (167, 184) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (167, 185) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (167, 186) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (167, 187) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j

|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (167, 188) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (167, 189) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (167, 190) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j

|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (167, 191) with energies 0.7758, 0.7758

State 167

Dominant basis-states:

|11000000> : amplitude -0.325+0.000j
|00000110> : amplitude -0.325+0.000j
|00010100> : amplitude -0.325+0.000j
|11010010> : amplitude 0.325+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (168, 169) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

Pair (168, 170) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j

$|01001101\rangle$: amplitude 0.162+0.000j

Pair (168, 171) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

Pair (168, 172) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

Pair (168, 173) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude -0.202+0.000j
 $|11000010\rangle$: amplitude -0.202+0.000j
 $|00010110\rangle$: amplitude 0.202+0.000j
 $|11010000\rangle$: amplitude -0.202+0.000j

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

Pair (168, 174) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (168, 175) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (168, 176) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (168, 177) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (168, 178) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (168, 179) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (168, 180) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude $-0.202+0.000j$
 $|11000010\rangle$: amplitude $-0.202+0.000j$
 $|00010110\rangle$: amplitude $0.202+0.000j$
 $|11010000\rangle$: amplitude $-0.202+0.000j$

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude $0.204+0.000j$
 $|11100000\rangle$: amplitude $0.204+0.000j$
 $|00110100\rangle$: amplitude $-0.204+0.000j$
 $|11110010\rangle$: amplitude $0.204+0.000j$

Pair (168, 181) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude $-0.202+0.000j$
 $|11000010\rangle$: amplitude $-0.202+0.000j$
 $|00010110\rangle$: amplitude $0.202+0.000j$
 $|11010000\rangle$: amplitude $-0.202+0.000j$

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude $-0.155+0.000j$
 $|10111011\rangle$: amplitude $-0.155+0.000j$
 $|10101001\rangle$: amplitude $-0.155+0.000j$
 $|01111101\rangle$: amplitude $0.155+0.000j$

Pair (168, 182) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

$|00000100\rangle$: amplitude $-0.202+0.000j$
 $|11000010\rangle$: amplitude $-0.202+0.000j$
 $|00010110\rangle$: amplitude $0.202+0.000j$
 $|11010000\rangle$: amplitude $-0.202+0.000j$

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude $-0.175+0.000j$
 $|01001000\rangle$: amplitude $0.175+0.000j$
 $|01011010\rangle$: amplitude $-0.175+0.000j$
 $|10011100\rangle$: amplitude $-0.175+0.000j$

Pair (168, 183) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (168, 184) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (168, 185) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (168, 186) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (168, 187) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (168, 188) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (168, 189) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j

|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (168, 190) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (168, 191) with energies 0.7758, 0.7758

State 168

Dominant basis-states:

|00000100> : amplitude -0.202+0.000j
|11000010> : amplitude -0.202+0.000j
|00010110> : amplitude 0.202+0.000j
|11010000> : amplitude -0.202+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (169, 170) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j

|10101010> : amplitude -0.163+0.000j

|01101100> : amplitude 0.163+0.000j

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j

|10011001> : amplitude 0.162+0.000j

|10001011> : amplitude 0.162+0.000j

|01001101> : amplitude 0.162+0.000j

Pair (169, 171) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j

|01111110> : amplitude -0.163+0.000j

|10101010> : amplitude -0.163+0.000j

|01101100> : amplitude 0.163+0.000j

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

Pair (169, 172) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j

|01111110> : amplitude -0.163+0.000j

|10101010> : amplitude -0.163+0.000j

|01101100> : amplitude 0.163+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j

|00100100> : amplitude -0.171+0.000j

|00110110> : amplitude -0.171+0.000j

|11110000> : amplitude 0.171+0.000j

Pair (169, 173) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j

|01111110> : amplitude -0.163+0.000j

|10101010> : amplitude -0.163+0.000j

$|01101100\rangle$: amplitude 0.163+0.000j

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j

$|01111000\rangle$: amplitude 0.154+0.000j

$|01101010\rangle$: amplitude -0.154+0.000j

$|10101100\rangle$: amplitude 0.154+0.000j

Pair (169, 174) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j

$|01111110\rangle$: amplitude -0.163+0.000j

$|10101010\rangle$: amplitude -0.163+0.000j

$|01101100\rangle$: amplitude 0.163+0.000j

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j

$|00011111\rangle$: amplitude 0.143+0.000j

$|11001011\rangle$: amplitude 0.143+0.000j

$|00001101\rangle$: amplitude 0.143+0.000j

Pair (169, 175) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j

$|01111110\rangle$: amplitude -0.163+0.000j

$|10101010\rangle$: amplitude -0.163+0.000j

$|01101100\rangle$: amplitude 0.163+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j

$|01101101\rangle$: amplitude -0.159+0.000j

$|10111001\rangle$: amplitude 0.159+0.000j

$|01111111\rangle$: amplitude -0.159+0.000j

Pair (169, 176) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j

$|01111110\rangle$: amplitude -0.163+0.000j

$|10101010\rangle$: amplitude -0.163+0.000j

$|01101100\rangle$: amplitude 0.163+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (169, 177) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

Pair (169, 178) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (169, 179) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (169, 180) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (169, 181) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (169, 182) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

$|10111000\rangle$: amplitude -0.163+0.000j
 $|01111110\rangle$: amplitude -0.163+0.000j
 $|10101010\rangle$: amplitude -0.163+0.000j
 $|01101100\rangle$: amplitude 0.163+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (169, 183) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (169, 184) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (169, 185) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j

|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (169, 186) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (169, 187) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (169, 188) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j

|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (169, 189) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (169, 190) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (169, 191) with energies 0.7758, 0.7758

State 169

Dominant basis-states:

|10111000> : amplitude -0.163+0.000j
|01111110> : amplitude -0.163+0.000j
|10101010> : amplitude -0.163+0.000j
|01101100> : amplitude 0.163+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j

$|11100100\rangle$: amplitude -0.155+0.000j

Pair (170, 171) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

Pair (170, 172) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

Pair (170, 173) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

Pair (170, 174) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

Pair (170, 175) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

Pair (170, 176) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (170, 177) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (170, 178) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (170, 179) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (170, 180) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude $-0.162+0.000j$
 $|10011001\rangle$: amplitude $0.162+0.000j$
 $|10001011\rangle$: amplitude $0.162+0.000j$
 $|01001101\rangle$: amplitude $0.162+0.000j$

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude $0.204+0.000j$
 $|11100000\rangle$: amplitude $0.204+0.000j$
 $|00110100\rangle$: amplitude $-0.204+0.000j$
 $|11110010\rangle$: amplitude $0.204+0.000j$

Pair (170, 181) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude $-0.162+0.000j$
 $|10011001\rangle$: amplitude $0.162+0.000j$
 $|10001011\rangle$: amplitude $0.162+0.000j$
 $|01001101\rangle$: amplitude $0.162+0.000j$

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude $-0.155+0.000j$
 $|10111011\rangle$: amplitude $-0.155+0.000j$
 $|10101001\rangle$: amplitude $-0.155+0.000j$
 $|01111101\rangle$: amplitude $0.155+0.000j$

Pair (170, 182) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude $-0.162+0.000j$
 $|10011001\rangle$: amplitude $0.162+0.000j$
 $|10001011\rangle$: amplitude $0.162+0.000j$
 $|01001101\rangle$: amplitude $0.162+0.000j$

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude $-0.175+0.000j$
 $|01001000\rangle$: amplitude $0.175+0.000j$
 $|01011010\rangle$: amplitude $-0.175+0.000j$
 $|10011100\rangle$: amplitude $-0.175+0.000j$

Pair (170, 183) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j
 $|01011101\rangle$: amplitude 0.181+0.000j
 $|10001001\rangle$: amplitude 0.181+0.000j
 $|01001111\rangle$: amplitude 0.181+0.000j

Pair (170, 184) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (170, 185) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

$|01011111\rangle$: amplitude -0.162+0.000j
 $|10011001\rangle$: amplitude 0.162+0.000j
 $|10001011\rangle$: amplitude 0.162+0.000j
 $|01001101\rangle$: amplitude 0.162+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (170, 186) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (170, 187) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (170, 188) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (170, 189) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j

|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (170, 190) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (170, 191) with energies 0.7758, 0.7758

State 170

Dominant basis-states:

|01011111> : amplitude -0.162+0.000j
|10011001> : amplitude 0.162+0.000j
|10001011> : amplitude 0.162+0.000j
|01001101> : amplitude 0.162+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (171, 172) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j

|00100100> : amplitude -0.171+0.000j

|00110110> : amplitude -0.171+0.000j

|11110000> : amplitude 0.171+0.000j

Pair (171, 173) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

Pair (171, 174) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j

|00011111> : amplitude 0.143+0.000j

|11001011> : amplitude 0.143+0.000j

|00001101> : amplitude 0.143+0.000j

Pair (171, 175) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j

|01101101> : amplitude -0.159+0.000j

|10111001> : amplitude 0.159+0.000j

|01111111> : amplitude -0.159+0.000j

Pair (171, 176) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j

|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

Pair (171, 177) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j

|10001001> : amplitude -0.168+0.000j

|01011101> : amplitude -0.168+0.000j

|01001111> : amplitude -0.168+0.000j

Pair (171, 178) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j

|01010011> : amplitude 0.138+0.000j

|10000111> : amplitude -0.138+0.000j

|01000001> : amplitude 0.138+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (171, 179) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (171, 180) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (171, 181) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

$|10010101\rangle$: amplitude 0.138+0.000j
 $|01010011\rangle$: amplitude 0.138+0.000j
 $|10000111\rangle$: amplitude -0.138+0.000j
 $|01000001\rangle$: amplitude 0.138+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (171, 182) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (171, 183) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (171, 184) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (171, 185) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (171, 186) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (171, 187) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j

|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (171, 188) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (171, 189) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (171, 190) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j

|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (171, 191) with energies 0.7758, 0.7758

State 171

Dominant basis-states:

|10010101> : amplitude 0.138+0.000j
|01010011> : amplitude 0.138+0.000j
|10000111> : amplitude -0.138+0.000j
|01000001> : amplitude 0.138+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (172, 173) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

Pair (172, 174) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j

$|00001101\rangle$: amplitude 0.143+0.000j

Pair (172, 175) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

Pair (172, 176) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (172, 177) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

Pair (172, 178) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (172, 179) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (172, 180) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude -0.171+0.000j
 $|00100100\rangle$: amplitude -0.171+0.000j
 $|00110110\rangle$: amplitude -0.171+0.000j
 $|11110000\rangle$: amplitude 0.171+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (172, 181) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (172, 182) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (172, 183) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (172, 184) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (172, 185) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

3.3 Raw Output (Part 3)

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (172, 186) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (172, 187) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude $-0.171+0.000j$
 $|00100100\rangle$: amplitude $-0.171+0.000j$
 $|00110110\rangle$: amplitude $-0.171+0.000j$
 $|11110000\rangle$: amplitude $0.171+0.000j$

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude $0.189+0.000j$
 $|01101001\rangle$: amplitude $0.189+0.000j$
 $|10111101\rangle$: amplitude $0.189+0.000j$
 $|01111011\rangle$: amplitude $-0.189+0.000j$

Pair (172, 188) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude $-0.171+0.000j$
 $|00100100\rangle$: amplitude $-0.171+0.000j$
 $|00110110\rangle$: amplitude $-0.171+0.000j$
 $|11110000\rangle$: amplitude $0.171+0.000j$

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude $-0.147+0.000j$
 $|01110110\rangle$: amplitude $0.147+0.000j$
 $|01100100\rangle$: amplitude $-0.147+0.000j$
 $|10110000\rangle$: amplitude $-0.147+0.000j$

Pair (172, 189) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

$|11100010\rangle$: amplitude $-0.171+0.000j$
 $|00100100\rangle$: amplitude $-0.171+0.000j$
 $|00110110\rangle$: amplitude $-0.171+0.000j$
 $|11110000\rangle$: amplitude $0.171+0.000j$

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude $0.142+0.000j$
 $|01001101\rangle$: amplitude $-0.142+0.000j$
 $|10011001\rangle$: amplitude $-0.142+0.000j$
 $|10001011\rangle$: amplitude $-0.142+0.000j$

Pair (172, 190) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (172, 191) with energies 0.7758, 0.7758

State 172

Dominant basis-states:

|11100010> : amplitude -0.171+0.000j
|00100100> : amplitude -0.171+0.000j
|00110110> : amplitude -0.171+0.000j
|11110000> : amplitude 0.171+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (173, 174) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

Pair (173, 175) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

Pair (173, 176) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (173, 177) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (173, 178) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (173, 179) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (173, 180) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j
|01101010> : amplitude -0.154+0.000j
|10101100> : amplitude 0.154+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

Pair (173, 181) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j
|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j

|10111011> : amplitude -0.155+0.000j

|10101001> : amplitude -0.155+0.000j

|01111101> : amplitude 0.155+0.000j

Pair (173, 182) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j

|01001000> : amplitude 0.175+0.000j

|01011010> : amplitude -0.175+0.000j

|10011100> : amplitude -0.175+0.000j

Pair (173, 183) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j

|01011101> : amplitude 0.181+0.000j

|10001001> : amplitude 0.181+0.000j

|01001111> : amplitude 0.181+0.000j

Pair (173, 184) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j

|11001100> : amplitude -0.223+0.000j

|00011000> : amplitude -0.223+0.000j

|00001010> : amplitude 0.223+0.000j

Pair (173, 185) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j

|01011010> : amplitude 0.155+0.000j

|01001000> : amplitude -0.155+0.000j

|10001110> : amplitude 0.155+0.000j

Pair (173, 186) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j

|00010000> : amplitude 0.174+0.000j

|11010110> : amplitude -0.174+0.000j

|00000010> : amplitude -0.174+0.000j

Pair (173, 187) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

|10111110> : amplitude 0.154+0.000j

|01111000> : amplitude 0.154+0.000j

|01101010> : amplitude -0.154+0.000j

|10101100> : amplitude 0.154+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (173, 188) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (173, 189) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (173, 190) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (173, 191) with energies 0.7758, 0.7758

State 173

Dominant basis-states:

$|10111110\rangle$: amplitude 0.154+0.000j
 $|01111000\rangle$: amplitude 0.154+0.000j
 $|01101010\rangle$: amplitude -0.154+0.000j
 $|10101100\rangle$: amplitude 0.154+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11100100\rangle$: amplitude -0.155+0.000j

Pair (174, 175) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

Pair (174, 176) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

Pair (174, 177) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (174, 178) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (174, 179) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (174, 180) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

Pair (174, 181) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (174, 182) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j

|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (174, 183) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (174, 184) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (174, 185) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

|11011001> : amplitude -0.143+0.000j
|00011111> : amplitude 0.143+0.000j
|11001011> : amplitude 0.143+0.000j
|00001101> : amplitude 0.143+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j

$|10001110\rangle$: amplitude 0.155+0.000j

Pair (174, 186) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (174, 187) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (174, 188) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (174, 189) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (174, 190) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (174, 191) with energies 0.7758, 0.7758

State 174

Dominant basis-states:

$|11011001\rangle$: amplitude -0.143+0.000j
 $|00011111\rangle$: amplitude 0.143+0.000j
 $|11001011\rangle$: amplitude 0.143+0.000j
 $|00001101\rangle$: amplitude 0.143+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11100100\rangle$: amplitude -0.155+0.000j

Pair (175, 176) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

Pair (175, 177) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

Pair (175, 178) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

Pair (175, 179) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude 0.138+0.000j
 $|10001000\rangle$: amplitude -0.138+0.000j
 $|10011010\rangle$: amplitude -0.138+0.000j
 $|01011100\rangle$: amplitude -0.138+0.000j

Pair (175, 180) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (175, 181) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (175, 182) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

Pair (175, 183) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j
 $|01011101\rangle$: amplitude 0.181+0.000j
 $|10001001\rangle$: amplitude 0.181+0.000j
 $|01001111\rangle$: amplitude 0.181+0.000j

Pair (175, 184) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

$|10101011\rangle$: amplitude -0.159+0.000j
 $|01101101\rangle$: amplitude -0.159+0.000j
 $|10111001\rangle$: amplitude 0.159+0.000j
 $|01111111\rangle$: amplitude -0.159+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (175, 185) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (175, 186) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (175, 187) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (175, 188) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j

|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (175, 189) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (175, 190) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j
|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (175, 191) with energies 0.7758, 0.7758

State 175

Dominant basis-states:

|10101011> : amplitude -0.159+0.000j
|01101101> : amplitude -0.159+0.000j

|10111001> : amplitude 0.159+0.000j
|01111111> : amplitude -0.159+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (176, 177) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

Pair (176, 178) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (176, 179) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

Pair (176, 180) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j

|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j

|11100000> : amplitude 0.204+0.000j

|00110100> : amplitude -0.204+0.000j

|11110010> : amplitude 0.204+0.000j

Pair (176, 181) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j

|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j

|10110111> : amplitude -0.155+0.000j

|10101001> : amplitude -0.155+0.000j

|01111101> : amplitude 0.155+0.000j

Pair (176, 182) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j

|10000110> : amplitude 0.170+0.000j

|01010010> : amplitude -0.170+0.000j

|10010100> : amplitude 0.170+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude $-0.175+0.000j$
 $|01001000\rangle$: amplitude $0.175+0.000j$
 $|01011010\rangle$: amplitude $-0.175+0.000j$
 $|10011100\rangle$: amplitude $-0.175+0.000j$

Pair (176, 183) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude $0.170+0.000j$
 $|10000110\rangle$: amplitude $0.170+0.000j$
 $|01010010\rangle$: amplitude $-0.170+0.000j$
 $|10010100\rangle$: amplitude $0.170+0.000j$

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude $-0.181+0.000j$
 $|01011101\rangle$: amplitude $0.181+0.000j$
 $|10001001\rangle$: amplitude $0.181+0.000j$
 $|01001111\rangle$: amplitude $0.181+0.000j$

Pair (176, 184) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude $0.170+0.000j$
 $|10000110\rangle$: amplitude $0.170+0.000j$
 $|01010010\rangle$: amplitude $-0.170+0.000j$
 $|10010100\rangle$: amplitude $0.170+0.000j$

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude $-0.223+0.000j$
 $|11001100\rangle$: amplitude $-0.223+0.000j$
 $|00011000\rangle$: amplitude $-0.223+0.000j$
 $|00001010\rangle$: amplitude $0.223+0.000j$

Pair (176, 185) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude $0.170+0.000j$
 $|10000110\rangle$: amplitude $0.170+0.000j$
 $|01010010\rangle$: amplitude $-0.170+0.000j$
 $|10010100\rangle$: amplitude $0.170+0.000j$

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (176, 186) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (176, 187) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (176, 188) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

$|01000000\rangle$: amplitude 0.170+0.000j
 $|10000110\rangle$: amplitude 0.170+0.000j
 $|01010010\rangle$: amplitude -0.170+0.000j
 $|10010100\rangle$: amplitude 0.170+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (176, 189) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (176, 190) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (176, 191) with energies 0.7758, 0.7758

State 176

Dominant basis-states:

|01000000> : amplitude 0.170+0.000j
|10000110> : amplitude 0.170+0.000j
|01010010> : amplitude -0.170+0.000j
|10010100> : amplitude 0.170+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j

|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (177, 178) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

Pair (177, 179) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (177, 180) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j

|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

Pair (177, 181) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (177, 182) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (177, 183) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j

$|01001111\rangle$: amplitude 0.181+0.000j

Pair (177, 184) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (177, 185) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (177, 186) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (177, 187) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (177, 188) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (177, 189) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

$|10011011\rangle$: amplitude 0.168+0.000j
 $|10001001\rangle$: amplitude -0.168+0.000j
 $|01011101\rangle$: amplitude -0.168+0.000j
 $|01001111\rangle$: amplitude -0.168+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (177, 190) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (177, 191) with energies 0.7758, 0.7758

State 177

Dominant basis-states:

|10011011> : amplitude 0.168+0.000j
|10001001> : amplitude -0.168+0.000j
|01011101> : amplitude -0.168+0.000j
|01001111> : amplitude -0.168+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (178, 179) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

Pair (178, 180) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

State 180

Dominant basis-states:

$|00100110\rangle$: amplitude 0.204+0.000j
 $|11100000\rangle$: amplitude 0.204+0.000j
 $|00110100\rangle$: amplitude -0.204+0.000j
 $|11110010\rangle$: amplitude 0.204+0.000j

Pair (178, 181) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

Pair (178, 182) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

$|01100000\rangle$: amplitude -0.193+0.000j
 $|10100110\rangle$: amplitude -0.193+0.000j
 $|10110100\rangle$: amplitude 0.193+0.000j
 $|01110010\rangle$: amplitude -0.193+0.000j

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

Pair (178, 183) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (178, 184) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (178, 185) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (178, 186) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (178, 187) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (178, 188) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (178, 189) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j

|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (178, 190) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (178, 191) with energies 0.7758, 0.7758

State 178

Dominant basis-states:

|01100000> : amplitude -0.193+0.000j
|10100110> : amplitude -0.193+0.000j
|10110100> : amplitude 0.193+0.000j
|01110010> : amplitude -0.193+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (179, 180) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j

|11100000> : amplitude 0.204+0.000j

|00110100> : amplitude -0.204+0.000j

|11110010> : amplitude 0.204+0.000j

Pair (179, 181) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j

|10111011> : amplitude -0.155+0.000j

|10101001> : amplitude -0.155+0.000j

|01111101> : amplitude 0.155+0.000j

Pair (179, 182) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j

|01001000> : amplitude 0.175+0.000j

|01011010> : amplitude -0.175+0.000j

|10011100> : amplitude -0.175+0.000j

Pair (179, 183) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j

|01011101> : amplitude 0.181+0.000j

|10001001> : amplitude 0.181+0.000j

|01001111> : amplitude 0.181+0.000j

Pair (179, 184) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j

|11001100> : amplitude -0.223+0.000j

|00011000> : amplitude -0.223+0.000j

|00001010> : amplitude 0.223+0.000j

Pair (179, 185) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j

|01011010> : amplitude 0.155+0.000j

|01001000> : amplitude -0.155+0.000j

|10001110> : amplitude 0.155+0.000j

Pair (179, 186) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j

|10001000> : amplitude -0.138+0.000j

|10011010> : amplitude -0.138+0.000j

|01011100> : amplitude -0.138+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude $-0.174+0.000j$
 $|00010000\rangle$: amplitude $0.174+0.000j$
 $|11010110\rangle$: amplitude $-0.174+0.000j$
 $|00000010\rangle$: amplitude $-0.174+0.000j$

Pair (179, 187) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude $0.138+0.000j$
 $|10001000\rangle$: amplitude $-0.138+0.000j$
 $|10011010\rangle$: amplitude $-0.138+0.000j$
 $|01011100\rangle$: amplitude $-0.138+0.000j$

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude $0.189+0.000j$
 $|01101001\rangle$: amplitude $0.189+0.000j$
 $|10111101\rangle$: amplitude $0.189+0.000j$
 $|01111011\rangle$: amplitude $-0.189+0.000j$

Pair (179, 188) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude $0.138+0.000j$
 $|10001000\rangle$: amplitude $-0.138+0.000j$
 $|10011010\rangle$: amplitude $-0.138+0.000j$
 $|01011100\rangle$: amplitude $-0.138+0.000j$

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude $-0.147+0.000j$
 $|01110110\rangle$: amplitude $0.147+0.000j$
 $|01100100\rangle$: amplitude $-0.147+0.000j$
 $|10110000\rangle$: amplitude $-0.147+0.000j$

Pair (179, 189) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

$|01001110\rangle$: amplitude $0.138+0.000j$
 $|10001000\rangle$: amplitude $-0.138+0.000j$
 $|10011010\rangle$: amplitude $-0.138+0.000j$
 $|01011100\rangle$: amplitude $-0.138+0.000j$

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (179, 190) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (179, 191) with energies 0.7758, 0.7758

State 179

Dominant basis-states:

|01001110> : amplitude 0.138+0.000j
|10001000> : amplitude -0.138+0.000j
|10011010> : amplitude -0.138+0.000j
|01011100> : amplitude -0.138+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (180, 181) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

Pair (180, 182) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (180, 183) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (180, 184) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j

|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (180, 185) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (180, 186) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (180, 187) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j

|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (180, 188) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (180, 189) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (180, 190) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j

|01010111> : amplitude -0.152+0.000j

Pair (180, 191) with energies 0.7758, 0.7758

State 180

Dominant basis-states:

|00100110> : amplitude 0.204+0.000j
|11100000> : amplitude 0.204+0.000j
|00110100> : amplitude -0.204+0.000j
|11110010> : amplitude 0.204+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (181, 182) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

Pair (181, 183) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

|01101111> : amplitude -0.155+0.000j
|10111011> : amplitude -0.155+0.000j
|10101001> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

Pair (181, 184) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (181, 185) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (181, 186) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (181, 187) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (181, 188) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (181, 189) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (181, 190) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (181, 191) with energies 0.7758, 0.7758

State 181

Dominant basis-states:

$|01101111\rangle$: amplitude -0.155+0.000j
 $|10111011\rangle$: amplitude -0.155+0.000j
 $|10101001\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11000100\rangle$: amplitude -0.155+0.000j

Pair (182, 183) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude -0.181+0.000j
 $|01011101\rangle$: amplitude 0.181+0.000j
 $|10001001\rangle$: amplitude 0.181+0.000j
 $|01001111\rangle$: amplitude 0.181+0.000j

Pair (182, 184) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

Pair (182, 185) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (182, 186) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

$|10001110\rangle$: amplitude -0.175+0.000j
 $|01001000\rangle$: amplitude 0.175+0.000j
 $|01011010\rangle$: amplitude -0.175+0.000j
 $|10011100\rangle$: amplitude -0.175+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (182, 187) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (182, 188) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (182, 189) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (182, 190) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j

|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (182, 191) with energies 0.7758, 0.7758

State 182

Dominant basis-states:

|10001110> : amplitude -0.175+0.000j
|01001000> : amplitude 0.175+0.000j
|01011010> : amplitude -0.175+0.000j
|10011100> : amplitude -0.175+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|1100100> : amplitude -0.155+0.000j

Pair (183, 184) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

Pair (183, 185) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j

|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

Pair (183, 186) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (183, 187) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j
|01001111> : amplitude 0.181+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (183, 188) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

|10011011> : amplitude -0.181+0.000j
|01011101> : amplitude 0.181+0.000j
|10001001> : amplitude 0.181+0.000j

$|01001111\rangle$: amplitude $0.181+0.000j$

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude $-0.147+0.000j$

$|01110110\rangle$: amplitude $0.147+0.000j$

$|01100100\rangle$: amplitude $-0.147+0.000j$

$|10110000\rangle$: amplitude $-0.147+0.000j$

Pair (183, 189) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude $-0.181+0.000j$

$|01011101\rangle$: amplitude $0.181+0.000j$

$|10001001\rangle$: amplitude $0.181+0.000j$

$|01001111\rangle$: amplitude $0.181+0.000j$

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude $0.142+0.000j$

$|01001101\rangle$: amplitude $-0.142+0.000j$

$|10011001\rangle$: amplitude $-0.142+0.000j$

$|10001011\rangle$: amplitude $-0.142+0.000j$

Pair (183, 190) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude $-0.181+0.000j$

$|01011101\rangle$: amplitude $0.181+0.000j$

$|10001001\rangle$: amplitude $0.181+0.000j$

$|01001111\rangle$: amplitude $0.181+0.000j$

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude $-0.152+0.000j$

$|10000011\rangle$: amplitude $-0.152+0.000j$

$|01000101\rangle$: amplitude $0.152+0.000j$

$|01010111\rangle$: amplitude $-0.152+0.000j$

Pair (183, 191) with energies 0.7758, 0.7758

State 183

Dominant basis-states:

$|10011011\rangle$: amplitude $-0.181+0.000j$

$|01011101\rangle$: amplitude $0.181+0.000j$

$|10001001\rangle$: amplitude $0.181+0.000j$

$|01001111\rangle$: amplitude $0.181+0.000j$

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|1100100\rangle$: amplitude -0.155+0.000j

Pair (184, 185) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 185

Dominant basis-states:

$|10011100\rangle$: amplitude 0.155+0.000j
 $|01011010\rangle$: amplitude 0.155+0.000j
 $|01001000\rangle$: amplitude -0.155+0.000j
 $|10001110\rangle$: amplitude 0.155+0.000j

Pair (184, 186) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

Pair (184, 187) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

Pair (184, 188) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (184, 189) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (184, 190) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

$|11011110\rangle$: amplitude -0.223+0.000j
 $|11001100\rangle$: amplitude -0.223+0.000j
 $|00011000\rangle$: amplitude -0.223+0.000j
 $|00001010\rangle$: amplitude 0.223+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (184, 191) with energies 0.7758, 0.7758

State 184

Dominant basis-states:

|11011110> : amplitude -0.223+0.000j
|11001100> : amplitude -0.223+0.000j
|00011000> : amplitude -0.223+0.000j
|00001010> : amplitude 0.223+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (185, 186) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

Pair (185, 187) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j

|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (185, 188) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j
|10110000> : amplitude -0.147+0.000j

Pair (185, 189) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 189

Dominant basis-states:

|01011111> : amplitude 0.142+0.000j
|01001101> : amplitude -0.142+0.000j
|10011001> : amplitude -0.142+0.000j
|10001011> : amplitude -0.142+0.000j

Pair (185, 190) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j

|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

Pair (185, 191) with energies 0.7758, 0.7758

State 185

Dominant basis-states:

|10011100> : amplitude 0.155+0.000j
|01011010> : amplitude 0.155+0.000j
|01001000> : amplitude -0.155+0.000j
|10001110> : amplitude 0.155+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (186, 187) with energies 0.7758, 0.7758

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

State 187

Dominant basis-states:

|10101111> : amplitude 0.189+0.000j
|01101001> : amplitude 0.189+0.000j
|10111101> : amplitude 0.189+0.000j
|01111011> : amplitude -0.189+0.000j

Pair (186, 188) with energies 0.7758, 0.7758

State 186

Dominant basis-states:

|11000100> : amplitude -0.174+0.000j
|00010000> : amplitude 0.174+0.000j
|11010110> : amplitude -0.174+0.000j
|00000010> : amplitude -0.174+0.000j

State 188

Dominant basis-states:

|10100010> : amplitude -0.147+0.000j
|01110110> : amplitude 0.147+0.000j
|01100100> : amplitude -0.147+0.000j

$|10110000\rangle$: amplitude -0.147+0.000j

Pair (186, 189) with energies 0.7758, 0.7758

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (186, 190) with energies 0.7758, 0.7758

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (186, 191) with energies 0.7758, 0.7758

State 186

Dominant basis-states:

$|11000100\rangle$: amplitude -0.174+0.000j
 $|00010000\rangle$: amplitude 0.174+0.000j
 $|11010110\rangle$: amplitude -0.174+0.000j
 $|00000010\rangle$: amplitude -0.174+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11100100\rangle$: amplitude -0.155+0.000j

Pair (187, 188) with energies 0.7758, 0.7758

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

Pair (187, 189) with energies 0.7758, 0.7758

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (187, 190) with energies 0.7758, 0.7758

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (187, 191) with energies 0.7758, 0.7758

State 187

Dominant basis-states:

$|10101111\rangle$: amplitude 0.189+0.000j
 $|01101001\rangle$: amplitude 0.189+0.000j
 $|10111101\rangle$: amplitude 0.189+0.000j
 $|01111011\rangle$: amplitude -0.189+0.000j

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude -0.155+0.000j
 $|11110110\rangle$: amplitude 0.155+0.000j
 $|00100010\rangle$: amplitude -0.155+0.000j
 $|11100100\rangle$: amplitude -0.155+0.000j

Pair (188, 189) with energies 0.7758, 0.7758

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude 0.142+0.000j
 $|01001101\rangle$: amplitude -0.142+0.000j
 $|10011001\rangle$: amplitude -0.142+0.000j
 $|10001011\rangle$: amplitude -0.142+0.000j

Pair (188, 190) with energies 0.7758, 0.7758

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude -0.147+0.000j
 $|01110110\rangle$: amplitude 0.147+0.000j
 $|01100100\rangle$: amplitude -0.147+0.000j
 $|10110000\rangle$: amplitude -0.147+0.000j

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude -0.152+0.000j
 $|10000011\rangle$: amplitude -0.152+0.000j
 $|01000101\rangle$: amplitude 0.152+0.000j
 $|01010111\rangle$: amplitude -0.152+0.000j

Pair (188, 191) with energies 0.7758, 0.7758

State 188

Dominant basis-states:

$|10100010\rangle$: amplitude $-0.147+0.000j$
 $|01110110\rangle$: amplitude $0.147+0.000j$
 $|01100100\rangle$: amplitude $-0.147+0.000j$
 $|10110000\rangle$: amplitude $-0.147+0.000j$

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude $-0.155+0.000j$
 $|11110110\rangle$: amplitude $0.155+0.000j$
 $|00100010\rangle$: amplitude $-0.155+0.000j$
 $|11100100\rangle$: amplitude $-0.155+0.000j$

Pair (189, 190) with energies 0.7758, 0.7758

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude $0.142+0.000j$
 $|01001101\rangle$: amplitude $-0.142+0.000j$
 $|10011001\rangle$: amplitude $-0.142+0.000j$
 $|10001011\rangle$: amplitude $-0.142+0.000j$

State 190

Dominant basis-states:

$|10010001\rangle$: amplitude $-0.152+0.000j$
 $|10000011\rangle$: amplitude $-0.152+0.000j$
 $|01000101\rangle$: amplitude $0.152+0.000j$
 $|01010111\rangle$: amplitude $-0.152+0.000j$

Pair (189, 191) with energies 0.7758, 0.7758

State 189

Dominant basis-states:

$|01011111\rangle$: amplitude $0.142+0.000j$
 $|01001101\rangle$: amplitude $-0.142+0.000j$
 $|10011001\rangle$: amplitude $-0.142+0.000j$
 $|10001011\rangle$: amplitude $-0.142+0.000j$

State 191

Dominant basis-states:

$|00110000\rangle$: amplitude $-0.155+0.000j$
 $|11110110\rangle$: amplitude $0.155+0.000j$
 $|00100010\rangle$: amplitude $-0.155+0.000j$
 $|11100100\rangle$: amplitude $-0.155+0.000j$

Pair (190, 191) with energies 0.7758, 0.7758

State 190

Dominant basis-states:

|10010001> : amplitude -0.152+0.000j
|10000011> : amplitude -0.152+0.000j
|01000101> : amplitude 0.152+0.000j
|01010111> : amplitude -0.152+0.000j

State 191

Dominant basis-states:

|00110000> : amplitude -0.155+0.000j
|11110110> : amplitude 0.155+0.000j
|00100010> : amplitude -0.155+0.000j
|11100100> : amplitude -0.155+0.000j

Pair (192, 193) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

Pair (192, 194) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

Pair (192, 195) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

Pair (192, 196) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j
|00001100> : amplitude -0.186+0.000j
|11011000> : amplitude 0.186+0.000j
|00011110> : amplitude -0.186+0.000j

Pair (192, 197) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

Pair (192, 198) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j

|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

Pair (192, 199) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

Pair (192, 200) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

Pair (192, 201) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j

$|01010000\rangle$: amplitude 0.153+0.000j

$|10010110\rangle$: amplitude 0.153+0.000j

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j

$|01011111\rangle$: amplitude -0.171+0.000j

$|01001101\rangle$: amplitude -0.171+0.000j

$|10001011\rangle$: amplitude 0.171+0.000j

Pair (192, 202) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j

$|10000100\rangle$: amplitude 0.153+0.000j

$|01010000\rangle$: amplitude 0.153+0.000j

$|10010110\rangle$: amplitude 0.153+0.000j

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j

$|00000110\rangle$: amplitude -0.318+0.000j

$|11000000\rangle$: amplitude 0.318+0.000j

$|00010100\rangle$: amplitude 0.318+0.000j

Pair (192, 203) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j

$|10000100\rangle$: amplitude 0.153+0.000j

$|01010000\rangle$: amplitude 0.153+0.000j

$|10010110\rangle$: amplitude 0.153+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j

$|00001100\rangle$: amplitude -0.143+0.000j

$|00011110\rangle$: amplitude -0.143+0.000j

$|11001010\rangle$: amplitude -0.143+0.000j

Pair (192, 204) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j

$|10000100\rangle$: amplitude 0.153+0.000j

$|01010000\rangle$: amplitude 0.153+0.000j

|10010110> : amplitude 0.153+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j

|01100101> : amplitude -0.160+0.000j

|10110001> : amplitude -0.160+0.000j

|10100011> : amplitude -0.160+0.000j

Pair (192, 205) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j

|10000100> : amplitude 0.153+0.000j

|01010000> : amplitude 0.153+0.000j

|10010110> : amplitude 0.153+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j

|01011011> : amplitude -0.200+0.000j

|10001111> : amplitude -0.200+0.000j

|01001001> : amplitude 0.200+0.000j

Pair (192, 206) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j

|10000100> : amplitude 0.153+0.000j

|01010000> : amplitude 0.153+0.000j

|10010110> : amplitude 0.153+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

Pair (192, 207) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j

|10000100> : amplitude 0.153+0.000j

|01010000> : amplitude 0.153+0.000j

|10010110> : amplitude 0.153+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (192, 208) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j
 $|10000100\rangle$: amplitude 0.153+0.000j
 $|01010000\rangle$: amplitude 0.153+0.000j
 $|10010110\rangle$: amplitude 0.153+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (192, 209) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j
 $|10000100\rangle$: amplitude 0.153+0.000j
 $|01010000\rangle$: amplitude 0.153+0.000j
 $|10010110\rangle$: amplitude 0.153+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (192, 210) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j
 $|10000100\rangle$: amplitude 0.153+0.000j
 $|01010000\rangle$: amplitude 0.153+0.000j
 $|10010110\rangle$: amplitude 0.153+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (192, 211) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

Pair (192, 212) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (192, 213) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (192, 214) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

Pair (192, 215) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (192, 216) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j

|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (192, 217) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (192, 218) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (192, 219) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j

|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (192, 220) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (192, 221) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (192, 222) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

|01000010> : amplitude -0.153+0.000j
|10000100> : amplitude 0.153+0.000j
|01010000> : amplitude 0.153+0.000j
|10010110> : amplitude 0.153+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j

$|11110100\rangle$: amplitude -0.184+0.000j

Pair (192, 223) with energies 0.9412, 0.9412

State 192

Dominant basis-states:

$|01000010\rangle$: amplitude -0.153+0.000j
 $|10000100\rangle$: amplitude 0.153+0.000j
 $|01010000\rangle$: amplitude 0.153+0.000j
 $|10010110\rangle$: amplitude 0.153+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (193, 194) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

Pair (193, 195) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

Pair (193, 196) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

Pair (193, 197) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

Pair (193, 198) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude -0.160+0.000j
 $|01000111\rangle$: amplitude -0.160+0.000j
 $|10010011\rangle$: amplitude -0.160+0.000j
 $|01010101\rangle$: amplitude 0.160+0.000j

Pair (193, 199) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

Pair (193, 200) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

Pair (193, 201) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

Pair (193, 202) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

Pair (193, 203) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

Pair (193, 204) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

Pair (193, 205) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

Pair (193, 206) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

Pair (193, 207) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (193, 208) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j
|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

Pair (193, 209) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

Pair (193, 210) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (193, 211) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j

|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

Pair (193, 212) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (193, 213) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j
|00011100> : amplitude 0.230+0.000j
|11011010> : amplitude -0.230+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (193, 214) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j
|00001110> : amplitude -0.230+0.000j

$|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (193, 215) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (193, 216) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j
 $|11011010\rangle$: amplitude -0.230+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (193, 217) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude -0.230+0.000j
 $|00001110\rangle$: amplitude -0.230+0.000j
 $|00011100\rangle$: amplitude 0.230+0.000j

|11011010> : amplitude -0.230+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j

|01100110> : amplitude 0.192+0.000j

|10110010> : amplitude -0.192+0.000j

|10100000> : amplitude -0.192+0.000j

Pair (193, 218) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j

|00001110> : amplitude -0.230+0.000j

|00011100> : amplitude 0.230+0.000j

|11011010> : amplitude -0.230+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j

|10010010> : amplitude -0.152+0.000j

|10000000> : amplitude 0.152+0.000j

|01000110> : amplitude -0.152+0.000j

Pair (193, 219) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j

|00001110> : amplitude -0.230+0.000j

|00011100> : amplitude 0.230+0.000j

|11011010> : amplitude -0.230+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j

|10010100> : amplitude 0.200+0.000j

|01010010> : amplitude 0.200+0.000j

Pair (193, 220) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

|11001000> : amplitude -0.230+0.000j

|00001110> : amplitude -0.230+0.000j

|00011100> : amplitude 0.230+0.000j

|11011010> : amplitude -0.230+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude $-0.164+0.000j$
 $|10111101\rangle$: amplitude $-0.164+0.000j$
 $|10101111\rangle$: amplitude $0.164+0.000j$
 $|01101001\rangle$: amplitude $-0.164+0.000j$

Pair (193, 221) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude $-0.230+0.000j$
 $|00001110\rangle$: amplitude $-0.230+0.000j$
 $|00011100\rangle$: amplitude $0.230+0.000j$
 $|11011010\rangle$: amplitude $-0.230+0.000j$

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.148+0.000j$
 $|10001000\rangle$: amplitude $-0.148+0.000j$
 $|01011100\rangle$: amplitude $-0.148+0.000j$
 $|10011010\rangle$: amplitude $0.148+0.000j$

Pair (193, 222) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude $-0.230+0.000j$
 $|00001110\rangle$: amplitude $-0.230+0.000j$
 $|00011100\rangle$: amplitude $0.230+0.000j$
 $|11011010\rangle$: amplitude $-0.230+0.000j$

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude $-0.184+0.000j$
 $|00100000\rangle$: amplitude $-0.184+0.000j$
 $|11100110\rangle$: amplitude $0.184+0.000j$
 $|11110100\rangle$: amplitude $-0.184+0.000j$

Pair (193, 223) with energies 0.9412, 0.9412

State 193

Dominant basis-states:

$|11001000\rangle$: amplitude $-0.230+0.000j$
 $|00001110\rangle$: amplitude $-0.230+0.000j$
 $|00011100\rangle$: amplitude $0.230+0.000j$
 $|11011010\rangle$: amplitude $-0.230+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (194, 195) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

Pair (194, 196) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

Pair (194, 197) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

Pair (194, 198) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

Pair (194, 199) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

Pair (194, 200) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j

|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

Pair (194, 201) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

Pair (194, 202) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

Pair (194, 203) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j

|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

Pair (194, 204) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (194, 205) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (194, 206) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j

$|10011011\rangle$: amplitude -0.191+0.000j

Pair (194, 207) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (194, 208) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (194, 209) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (194, 210) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (194, 211) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11000001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (194, 212) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (194, 213) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (194, 214) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (194, 215) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (194, 216) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (194, 217) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (194, 218) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (194, 219) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (194, 220) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (194, 221) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

$|00000111\rangle$: amplitude -0.229+0.000j
 $|11000001\rangle$: amplitude -0.229+0.000j
 $|00010101\rangle$: amplitude -0.229+0.000j
 $|11010011\rangle$: amplitude 0.229+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (194, 222) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (194, 223) with energies 0.9412, 0.9412

State 194

Dominant basis-states:

|00000111> : amplitude -0.229+0.000j
|11000001> : amplitude -0.229+0.000j
|00010101> : amplitude -0.229+0.000j
|11010011> : amplitude 0.229+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (195, 196) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j
|00001100> : amplitude -0.186+0.000j
|11011000> : amplitude 0.186+0.000j
|00011110> : amplitude -0.186+0.000j

Pair (195, 197) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j

|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

Pair (195, 198) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

Pair (195, 199) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

Pair (195, 200) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j

$|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

Pair (195, 201) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

Pair (195, 202) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

Pair (195, 203) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j

$|00011000\rangle$: amplitude -0.151+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j

$|00001100\rangle$: amplitude -0.143+0.000j

$|00011110\rangle$: amplitude -0.143+0.000j

$|11001010\rangle$: amplitude -0.143+0.000j

Pair (195, 204) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j

$|00001010\rangle$: amplitude -0.151+0.000j

$|11011110\rangle$: amplitude 0.151+0.000j

$|00011000\rangle$: amplitude -0.151+0.000j

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j

$|01100101\rangle$: amplitude -0.160+0.000j

$|10110001\rangle$: amplitude -0.160+0.000j

$|10100011\rangle$: amplitude -0.160+0.000j

Pair (195, 205) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j

$|00001010\rangle$: amplitude -0.151+0.000j

$|11011110\rangle$: amplitude 0.151+0.000j

$|00011000\rangle$: amplitude -0.151+0.000j

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j

$|01011011\rangle$: amplitude -0.200+0.000j

$|10001111\rangle$: amplitude -0.200+0.000j

$|01001001\rangle$: amplitude 0.200+0.000j

Pair (195, 206) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j

$|00001010\rangle$: amplitude -0.151+0.000j

$|11011110\rangle$: amplitude 0.151+0.000j

$|00011000\rangle$: amplitude -0.151+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude $0.191+0.000j$
 $|10001001\rangle$: amplitude $-0.191+0.000j$
 $|01011101\rangle$: amplitude $-0.191+0.000j$
 $|10011011\rangle$: amplitude $-0.191+0.000j$

Pair (195, 207) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude $-0.151+0.000j$
 $|00001010\rangle$: amplitude $-0.151+0.000j$
 $|11011110\rangle$: amplitude $0.151+0.000j$
 $|00011000\rangle$: amplitude $-0.151+0.000j$

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude $0.354+0.000j$
 $|00000000\rangle$: amplitude $-0.354+0.000j$
 $|11010100\rangle$: amplitude $0.354+0.000j$
 $|00010010\rangle$: amplitude $0.354+0.000j$

Pair (195, 208) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude $-0.151+0.000j$
 $|00001010\rangle$: amplitude $-0.151+0.000j$
 $|11011110\rangle$: amplitude $0.151+0.000j$
 $|00011000\rangle$: amplitude $-0.151+0.000j$

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude $0.195+0.000j$
 $|10001001\rangle$: amplitude $-0.195+0.000j$
 $|01011101\rangle$: amplitude $-0.195+0.000j$
 $|10011011\rangle$: amplitude $-0.195+0.000j$

Pair (195, 209) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude $-0.151+0.000j$
 $|00001010\rangle$: amplitude $-0.151+0.000j$
 $|11011110\rangle$: amplitude $0.151+0.000j$
 $|00011000\rangle$: amplitude $-0.151+0.000j$

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (195, 210) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (195, 211) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (195, 212) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (195, 213) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (195, 214) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

Pair (195, 215) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j

|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (195, 216) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (195, 217) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (195, 218) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j

|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (195, 219) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (195, 220) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (195, 221) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

|11001100> : amplitude -0.151+0.000j
|00001010> : amplitude -0.151+0.000j
|11011110> : amplitude 0.151+0.000j
|00011000> : amplitude -0.151+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j

$|10011010\rangle$: amplitude 0.148+0.000j

Pair (195, 222) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (195, 223) with energies 0.9412, 0.9412

State 195

Dominant basis-states:

$|11001100\rangle$: amplitude -0.151+0.000j
 $|00001010\rangle$: amplitude -0.151+0.000j
 $|11011110\rangle$: amplitude 0.151+0.000j
 $|00011000\rangle$: amplitude -0.151+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (196, 197) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

Pair (196, 198) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude -0.160+0.000j
 $|01000111\rangle$: amplitude -0.160+0.000j
 $|10010011\rangle$: amplitude -0.160+0.000j
 $|01010101\rangle$: amplitude 0.160+0.000j

Pair (196, 199) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

Pair (196, 200) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

Pair (196, 201) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

Pair (196, 202) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

Pair (196, 203) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

Pair (196, 204) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

Pair (196, 205) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

Pair (196, 206) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

Pair (196, 207) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (196, 208) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (196, 209) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (196, 210) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j
|00001100> : amplitude -0.186+0.000j
|11011000> : amplitude 0.186+0.000j
|00011110> : amplitude -0.186+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (196, 211) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j
|00001100> : amplitude -0.186+0.000j
|11011000> : amplitude 0.186+0.000j
|00011110> : amplitude -0.186+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

Pair (196, 212) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j
|00001100> : amplitude -0.186+0.000j
|11011000> : amplitude 0.186+0.000j
|00011110> : amplitude -0.186+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (196, 213) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j

$|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (196, 214) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (196, 215) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (196, 216) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j

$|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (196, 217) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (196, 218) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j
 $|00011110\rangle$: amplitude -0.186+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (196, 219) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude -0.186+0.000j
 $|00001100\rangle$: amplitude -0.186+0.000j
 $|11011000\rangle$: amplitude 0.186+0.000j

|00011110> : amplitude -0.186+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j

|10010100> : amplitude 0.200+0.000j

|01010010> : amplitude 0.200+0.000j

Pair (196, 220) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j

|00001100> : amplitude -0.186+0.000j

|11011000> : amplitude 0.186+0.000j

|00011110> : amplitude -0.186+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j

|10111101> : amplitude -0.164+0.000j

|10101111> : amplitude 0.164+0.000j

|01101001> : amplitude -0.164+0.000j

Pair (196, 221) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j

|00001100> : amplitude -0.186+0.000j

|11011000> : amplitude 0.186+0.000j

|00011110> : amplitude -0.186+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j

|10001000> : amplitude -0.148+0.000j

|01011100> : amplitude -0.148+0.000j

|10011010> : amplitude 0.148+0.000j

Pair (196, 222) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

|11001010> : amplitude -0.186+0.000j

|00001100> : amplitude -0.186+0.000j

|11011000> : amplitude 0.186+0.000j

|00011110> : amplitude -0.186+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude $-0.184+0.000j$
 $|00100000\rangle$: amplitude $-0.184+0.000j$
 $|11100110\rangle$: amplitude $0.184+0.000j$
 $|11110100\rangle$: amplitude $-0.184+0.000j$

Pair (196, 223) with energies 0.9412, 0.9412

State 196

Dominant basis-states:

$|11001010\rangle$: amplitude $-0.186+0.000j$
 $|00001100\rangle$: amplitude $-0.186+0.000j$
 $|11011000\rangle$: amplitude $0.186+0.000j$
 $|00011110\rangle$: amplitude $-0.186+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude $0.146+0.000j$
 $|10111100\rangle$: amplitude $-0.146+0.000j$
 $|01101000\rangle$: amplitude $-0.146+0.000j$
 $|10101110\rangle$: amplitude $-0.146+0.000j$

Pair (197, 198) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude $0.132+0.000j$
 $|01000001\rangle$: amplitude $0.132+0.000j$
 $|01010011\rangle$: amplitude $-0.132+0.000j$
 $|10010101\rangle$: amplitude $0.132+0.000j$

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude $-0.160+0.000j$
 $|01000111\rangle$: amplitude $-0.160+0.000j$
 $|10010011\rangle$: amplitude $-0.160+0.000j$
 $|01010101\rangle$: amplitude $0.160+0.000j$

Pair (197, 199) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude $0.132+0.000j$
 $|01000001\rangle$: amplitude $0.132+0.000j$
 $|01010011\rangle$: amplitude $-0.132+0.000j$
 $|10010101\rangle$: amplitude $0.132+0.000j$

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

Pair (197, 200) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

Pair (197, 201) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

Pair (197, 202) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

Pair (197, 203) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

Pair (197, 204) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (197, 205) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j

|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (197, 206) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (197, 207) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

Pair (197, 208) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j

|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

Pair (197, 209) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

Pair (197, 210) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (197, 211) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

|10000111> : amplitude 0.132+0.000j
|01000001> : amplitude 0.132+0.000j
|01010011> : amplitude -0.132+0.000j
|10010101> : amplitude 0.132+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j

$|00110101\rangle$: amplitude 0.148+0.000j

Pair (197, 212) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (197, 213) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (197, 214) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (197, 215) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (197, 216) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (197, 217) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (197, 218) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (197, 219) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (197, 220) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (197, 221) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (197, 222) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (197, 223) with energies 0.9412, 0.9412

State 197

Dominant basis-states:

$|10000111\rangle$: amplitude 0.132+0.000j
 $|01000001\rangle$: amplitude 0.132+0.000j
 $|01010011\rangle$: amplitude -0.132+0.000j
 $|10010101\rangle$: amplitude 0.132+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (198, 199) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

Pair (198, 200) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

Pair (198, 201) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

Pair (198, 202) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

Pair (198, 203) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

Pair (198, 204) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (198, 205) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (198, 206) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (198, 207) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

Pair (198, 208) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j

|10001001> : amplitude -0.195+0.000j

|01011101> : amplitude -0.195+0.000j

|10011011> : amplitude -0.195+0.000j

Pair (198, 209) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j

|00001011> : amplitude -0.164+0.000j

|00011001> : amplitude 0.164+0.000j

|11001101> : amplitude 0.164+0.000j

Pair (198, 210) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j

|11000001> : amplitude -0.167+0.000j

|00010101> : amplitude -0.167+0.000j

|11010011> : amplitude 0.167+0.000j

Pair (198, 211) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j

|11100001> : amplitude -0.148+0.000j

|11110011> : amplitude -0.148+0.000j

|00110101> : amplitude 0.148+0.000j

Pair (198, 212) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j

|11111101> : amplitude -0.144+0.000j

|00101001> : amplitude 0.144+0.000j

|00111011> : amplitude -0.144+0.000j

Pair (198, 213) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j

|01101010> : amplitude 0.162+0.000j

|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

Pair (198, 214) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j

|01000111> : amplitude -0.160+0.000j

|10010011> : amplitude -0.160+0.000j

|01010101> : amplitude 0.160+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (198, 215) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude -0.160+0.000j
 $|01000111\rangle$: amplitude -0.160+0.000j
 $|10010011\rangle$: amplitude -0.160+0.000j
 $|01010101\rangle$: amplitude 0.160+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (198, 216) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude -0.160+0.000j
 $|01000111\rangle$: amplitude -0.160+0.000j
 $|10010011\rangle$: amplitude -0.160+0.000j
 $|01010101\rangle$: amplitude 0.160+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (198, 217) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

$|10000001\rangle$: amplitude -0.160+0.000j
 $|01000111\rangle$: amplitude -0.160+0.000j
 $|10010011\rangle$: amplitude -0.160+0.000j
 $|01010101\rangle$: amplitude 0.160+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (198, 218) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (198, 219) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (198, 220) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (198, 221) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (198, 222) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (198, 223) with energies 0.9412, 0.9412

State 198

Dominant basis-states:

|10000001> : amplitude -0.160+0.000j
|01000111> : amplitude -0.160+0.000j
|10010011> : amplitude -0.160+0.000j
|01010101> : amplitude 0.160+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j

|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (199, 200) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

Pair (199, 201) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

Pair (199, 202) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j

$|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

Pair (199, 203) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

Pair (199, 204) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

Pair (199, 205) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j

$|01001001\rangle$: amplitude 0.200+0.000j

Pair (199, 206) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

Pair (199, 207) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (199, 208) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (199, 209) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (199, 210) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (199, 211) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (199, 212) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (199, 213) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (199, 214) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (199, 215) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (199, 216) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (199, 217) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

$|11100100\rangle$: amplitude -0.198+0.000j
 $|11110110\rangle$: amplitude -0.198+0.000j
 $|00100010\rangle$: amplitude 0.198+0.000j
 $|00110000\rangle$: amplitude -0.198+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (199, 218) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (199, 219) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (199, 220) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (199, 221) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (199, 222) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (199, 223) with energies 0.9412, 0.9412

State 199

Dominant basis-states:

|11100100> : amplitude -0.198+0.000j
|11110110> : amplitude -0.198+0.000j
|00100010> : amplitude 0.198+0.000j
|00110000> : amplitude -0.198+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (200, 201) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j

|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

Pair (200, 202) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

Pair (200, 203) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

Pair (200, 204) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j

|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (200, 205) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (200, 206) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (200, 207) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j

$|10101010\rangle$: amplitude 0.140+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j

$|00000000\rangle$: amplitude -0.354+0.000j

$|11010100\rangle$: amplitude 0.354+0.000j

$|00010010\rangle$: amplitude 0.354+0.000j

Pair (200, 208) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j

$|10111000\rangle$: amplitude -0.140+0.000j

$|01101100\rangle$: amplitude 0.140+0.000j

$|10101010\rangle$: amplitude 0.140+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j

$|10001001\rangle$: amplitude -0.195+0.000j

$|01011101\rangle$: amplitude -0.195+0.000j

$|10011011\rangle$: amplitude -0.195+0.000j

Pair (200, 209) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j

$|10111000\rangle$: amplitude -0.140+0.000j

$|01101100\rangle$: amplitude 0.140+0.000j

$|10101010\rangle$: amplitude 0.140+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

Pair (200, 210) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j

$|10111000\rangle$: amplitude -0.140+0.000j

$|01101100\rangle$: amplitude 0.140+0.000j

$|10101010\rangle$: amplitude 0.140+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude $-0.167+0.000j$
 $|11000001\rangle$: amplitude $-0.167+0.000j$
 $|00010101\rangle$: amplitude $-0.167+0.000j$
 $|11010011\rangle$: amplitude $0.167+0.000j$

Pair (200, 211) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude $0.140+0.000j$
 $|10111000\rangle$: amplitude $-0.140+0.000j$
 $|01101100\rangle$: amplitude $0.140+0.000j$
 $|10101010\rangle$: amplitude $0.140+0.000j$

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude $-0.148+0.000j$
 $|11100001\rangle$: amplitude $-0.148+0.000j$
 $|11110011\rangle$: amplitude $-0.148+0.000j$
 $|00110101\rangle$: amplitude $0.148+0.000j$

Pair (200, 212) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude $0.140+0.000j$
 $|10111000\rangle$: amplitude $-0.140+0.000j$
 $|01101100\rangle$: amplitude $0.140+0.000j$
 $|10101010\rangle$: amplitude $0.140+0.000j$

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude $-0.144+0.000j$
 $|11111101\rangle$: amplitude $-0.144+0.000j$
 $|00101001\rangle$: amplitude $0.144+0.000j$
 $|00111011\rangle$: amplitude $-0.144+0.000j$

Pair (200, 213) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude $0.140+0.000j$
 $|10111000\rangle$: amplitude $-0.140+0.000j$
 $|01101100\rangle$: amplitude $0.140+0.000j$
 $|10101010\rangle$: amplitude $0.140+0.000j$

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (200, 214) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (200, 215) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (200, 216) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (200, 217) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (200, 218) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (200, 219) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (200, 220) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (200, 221) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (200, 222) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

|01111110> : amplitude 0.140+0.000j
|10111000> : amplitude -0.140+0.000j
|01101100> : amplitude 0.140+0.000j
|10101010> : amplitude 0.140+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j

$|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (200, 223) with energies 0.9412, 0.9412

State 200

Dominant basis-states:

$|01111110\rangle$: amplitude 0.140+0.000j
 $|10111000\rangle$: amplitude -0.140+0.000j
 $|01101100\rangle$: amplitude 0.140+0.000j
 $|10101010\rangle$: amplitude 0.140+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (201, 202) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

Pair (201, 203) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j

$|11001010\rangle$: amplitude -0.143+0.000j

Pair (201, 204) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

Pair (201, 205) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

Pair (201, 206) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

Pair (201, 207) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (201, 208) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (201, 209) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (201, 210) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (201, 211) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (201, 212) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (201, 213) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude $-0.171+0.000j$
 $|01011111\rangle$: amplitude $-0.171+0.000j$
 $|01001101\rangle$: amplitude $-0.171+0.000j$
 $|10001011\rangle$: amplitude $0.171+0.000j$

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude $0.162+0.000j$
 $|01101010\rangle$: amplitude $0.162+0.000j$
 $|01111000\rangle$: amplitude $0.162+0.000j$
 $|10111110\rangle$: amplitude $-0.162+0.000j$

Pair (201, 214) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude $-0.171+0.000j$
 $|01011111\rangle$: amplitude $-0.171+0.000j$
 $|01001101\rangle$: amplitude $-0.171+0.000j$
 $|10001011\rangle$: amplitude $0.171+0.000j$

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude $0.236+0.000j$
 $|01010111\rangle$: amplitude $0.236+0.000j$
 $|10010001\rangle$: amplitude $-0.236+0.000j$
 $|10000011\rangle$: amplitude $0.236+0.000j$

Pair (201, 215) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude $-0.171+0.000j$
 $|01011111\rangle$: amplitude $-0.171+0.000j$
 $|01001101\rangle$: amplitude $-0.171+0.000j$
 $|10001011\rangle$: amplitude $0.171+0.000j$

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude $0.155+0.000j$
 $|10101101\rangle$: amplitude $0.155+0.000j$
 $|01111001\rangle$: amplitude $0.155+0.000j$
 $|01101011\rangle$: amplitude $-0.155+0.000j$

Pair (201, 216) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (201, 217) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (201, 218) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

$|10011001\rangle$: amplitude -0.171+0.000j
 $|01011111\rangle$: amplitude -0.171+0.000j
 $|01001101\rangle$: amplitude -0.171+0.000j
 $|10001011\rangle$: amplitude 0.171+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (201, 219) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (201, 220) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (201, 221) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (201, 222) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j

|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (201, 223) with energies 0.9412, 0.9412

State 201

Dominant basis-states:

|10011001> : amplitude -0.171+0.000j
|01011111> : amplitude -0.171+0.000j
|01001101> : amplitude -0.171+0.000j
|10001011> : amplitude 0.171+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (202, 203) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

Pair (202, 204) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j

|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (202, 205) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (202, 206) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (202, 207) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j

|00010100> : amplitude 0.318+0.000j

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j

|00000000> : amplitude -0.354+0.000j

|11010100> : amplitude 0.354+0.000j

|00010010> : amplitude 0.354+0.000j

Pair (202, 208) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j

|00000110> : amplitude -0.318+0.000j

|11000000> : amplitude 0.318+0.000j

|00010100> : amplitude 0.318+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j

|10001001> : amplitude -0.195+0.000j

|01011101> : amplitude -0.195+0.000j

|10011011> : amplitude -0.195+0.000j

Pair (202, 209) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j

|00000110> : amplitude -0.318+0.000j

|11000000> : amplitude 0.318+0.000j

|00010100> : amplitude 0.318+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j

|00001011> : amplitude -0.164+0.000j

|00011001> : amplitude 0.164+0.000j

|11001101> : amplitude 0.164+0.000j

Pair (202, 210) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j

|00000110> : amplitude -0.318+0.000j

|11000000> : amplitude 0.318+0.000j

|00010100> : amplitude 0.318+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (202, 211) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (202, 212) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (202, 213) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (202, 214) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (202, 215) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (202, 216) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

$|11010010\rangle$: amplitude 0.318+0.000j
 $|00000110\rangle$: amplitude -0.318+0.000j
 $|11000000\rangle$: amplitude 0.318+0.000j
 $|00010100\rangle$: amplitude 0.318+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (202, 217) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (202, 218) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (202, 219) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (202, 220) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (202, 221) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (202, 222) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j

|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (202, 223) with energies 0.9412, 0.9412

State 202

Dominant basis-states:

|11010010> : amplitude 0.318+0.000j
|00000110> : amplitude -0.318+0.000j
|11000000> : amplitude 0.318+0.000j
|00010100> : amplitude 0.318+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (203, 204) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

Pair (203, 205) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j

$|01001001\rangle$: amplitude 0.200+0.000j

Pair (203, 206) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

Pair (203, 207) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (203, 208) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (203, 209) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (203, 210) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (203, 211) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (203, 212) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (203, 213) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (203, 214) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (203, 215) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (203, 216) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (203, 217) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (203, 218) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (203, 219) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (203, 220) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

$|11011000\rangle$: amplitude 0.143+0.000j
 $|00001100\rangle$: amplitude -0.143+0.000j
 $|00011110\rangle$: amplitude -0.143+0.000j
 $|11001010\rangle$: amplitude -0.143+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (203, 221) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (203, 222) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (203, 223) with energies 0.9412, 0.9412

State 203

Dominant basis-states:

|11011000> : amplitude 0.143+0.000j
|00001100> : amplitude -0.143+0.000j
|00011110> : amplitude -0.143+0.000j
|11001010> : amplitude -0.143+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (204, 205) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j

|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

Pair (204, 206) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (204, 207) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

Pair (204, 208) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j

|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j
|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

Pair (204, 209) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

Pair (204, 210) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (204, 211) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j

|10100011> : amplitude -0.160+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j

|11100001> : amplitude -0.148+0.000j

|11110011> : amplitude -0.148+0.000j

|00110101> : amplitude 0.148+0.000j

Pair (204, 212) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j

|01100101> : amplitude -0.160+0.000j

|10110001> : amplitude -0.160+0.000j

|10100011> : amplitude -0.160+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j

|11111101> : amplitude -0.144+0.000j

|00101001> : amplitude 0.144+0.000j

|00111011> : amplitude -0.144+0.000j

Pair (204, 213) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j

|01100101> : amplitude -0.160+0.000j

|10110001> : amplitude -0.160+0.000j

|10100011> : amplitude -0.160+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j

|01101010> : amplitude 0.162+0.000j

|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

Pair (204, 214) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j

|01100101> : amplitude -0.160+0.000j

|10110001> : amplitude -0.160+0.000j

|10100011> : amplitude -0.160+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (204, 215) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (204, 216) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (204, 217) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

$|01110111\rangle$: amplitude 0.160+0.000j
 $|01100101\rangle$: amplitude -0.160+0.000j
 $|10110001\rangle$: amplitude -0.160+0.000j
 $|10100011\rangle$: amplitude -0.160+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (204, 218) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (204, 219) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (204, 220) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (204, 221) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (204, 222) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (204, 223) with energies 0.9412, 0.9412

State 204

Dominant basis-states:

|01110111> : amplitude 0.160+0.000j
|01100101> : amplitude -0.160+0.000j
|10110001> : amplitude -0.160+0.000j
|10100011> : amplitude -0.160+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j

|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (205, 206) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

Pair (205, 207) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

Pair (205, 208) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j

|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

Pair (205, 209) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

Pair (205, 210) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (205, 211) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j

$|00110101\rangle$: amplitude 0.148+0.000j

Pair (205, 212) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (205, 213) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (205, 214) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (205, 215) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (205, 216) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (205, 217) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (205, 218) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (205, 219) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (205, 220) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

|10011101> : amplitude -0.200+0.000j
|01011011> : amplitude -0.200+0.000j
|10001111> : amplitude -0.200+0.000j
|01001001> : amplitude 0.200+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (205, 221) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (205, 222) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (205, 223) with energies 0.9412, 0.9412

State 205

Dominant basis-states:

$|10011101\rangle$: amplitude -0.200+0.000j
 $|01011011\rangle$: amplitude -0.200+0.000j
 $|10001111\rangle$: amplitude -0.200+0.000j
 $|01001001\rangle$: amplitude 0.200+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (206, 207) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

Pair (206, 208) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

Pair (206, 209) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j
 $|01011101\rangle$: amplitude -0.191+0.000j
 $|10011011\rangle$: amplitude -0.191+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (206, 210) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (206, 211) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

Pair (206, 212) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (206, 213) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (206, 214) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

Pair (206, 215) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j
|01011101> : amplitude -0.191+0.000j
|10011011> : amplitude -0.191+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (206, 216) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j

|00100101> : amplitude 0.146+0.000j

|00110111> : amplitude 0.146+0.000j

|11110001> : amplitude -0.146+0.000j

Pair (206, 217) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j

|01100110> : amplitude 0.192+0.000j

|10110010> : amplitude -0.192+0.000j

|10100000> : amplitude -0.192+0.000j

Pair (206, 218) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j

|10010010> : amplitude -0.152+0.000j

|10000000> : amplitude 0.152+0.000j

|01000110> : amplitude -0.152+0.000j

Pair (206, 219) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j

|10010100> : amplitude 0.200+0.000j

|01010010> : amplitude 0.200+0.000j

Pair (206, 220) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j

|10111101> : amplitude -0.164+0.000j

|10101111> : amplitude 0.164+0.000j

|01101001> : amplitude -0.164+0.000j

Pair (206, 221) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j

|10001000> : amplitude -0.148+0.000j

|01011100> : amplitude -0.148+0.000j

|10011010> : amplitude 0.148+0.000j

Pair (206, 222) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j

|10001001> : amplitude -0.191+0.000j

|01011101> : amplitude -0.191+0.000j

|10011011> : amplitude -0.191+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude $-0.184+0.000j$
 $|00100000\rangle$: amplitude $-0.184+0.000j$
 $|11100110\rangle$: amplitude $0.184+0.000j$
 $|11110100\rangle$: amplitude $-0.184+0.000j$

Pair (206, 223) with energies 0.9412, 0.9412

State 206

Dominant basis-states:

$|01001111\rangle$: amplitude $0.191+0.000j$
 $|10001001\rangle$: amplitude $-0.191+0.000j$
 $|01011101\rangle$: amplitude $-0.191+0.000j$
 $|10011011\rangle$: amplitude $-0.191+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude $0.146+0.000j$
 $|10111100\rangle$: amplitude $-0.146+0.000j$
 $|01101000\rangle$: amplitude $-0.146+0.000j$
 $|10101110\rangle$: amplitude $-0.146+0.000j$

Pair (207, 208) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude $0.354+0.000j$
 $|00000000\rangle$: amplitude $-0.354+0.000j$
 $|11010100\rangle$: amplitude $0.354+0.000j$
 $|00010010\rangle$: amplitude $0.354+0.000j$

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude $0.195+0.000j$
 $|10001001\rangle$: amplitude $-0.195+0.000j$
 $|01011101\rangle$: amplitude $-0.195+0.000j$
 $|10011011\rangle$: amplitude $-0.195+0.000j$

Pair (207, 209) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude $0.354+0.000j$
 $|00000000\rangle$: amplitude $-0.354+0.000j$
 $|11010100\rangle$: amplitude $0.354+0.000j$
 $|00010010\rangle$: amplitude $0.354+0.000j$

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (207, 210) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (207, 211) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (207, 212) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (207, 213) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (207, 214) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

Pair (207, 215) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j

|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (207, 216) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (207, 217) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (207, 218) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

|11000110> : amplitude 0.354+0.000j
|00000000> : amplitude -0.354+0.000j
|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j

$|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (207, 219) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (207, 220) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (207, 221) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j

$|10011010\rangle$: amplitude 0.148+0.000j

Pair (207, 222) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (207, 223) with energies 0.9412, 0.9412

State 207

Dominant basis-states:

$|11000110\rangle$: amplitude 0.354+0.000j
 $|00000000\rangle$: amplitude -0.354+0.000j
 $|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (208, 209) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j
 $|00001011\rangle$: amplitude -0.164+0.000j
 $|00011001\rangle$: amplitude 0.164+0.000j
 $|11001101\rangle$: amplitude 0.164+0.000j

Pair (208, 210) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

Pair (208, 211) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11000001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (208, 212) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (208, 213) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (208, 214) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (208, 215) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (208, 216) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (208, 217) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (208, 218) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (208, 219) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (208, 220) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (208, 221) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

$|01001111\rangle$: amplitude 0.195+0.000j
 $|10001001\rangle$: amplitude -0.195+0.000j
 $|01011101\rangle$: amplitude -0.195+0.000j
 $|10011011\rangle$: amplitude -0.195+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (208, 222) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j
|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (208, 223) with energies 0.9412, 0.9412

State 208

Dominant basis-states:

|01001111> : amplitude 0.195+0.000j
|10001001> : amplitude -0.195+0.000j
|01011101> : amplitude -0.195+0.000j
|10011011> : amplitude -0.195+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (209, 210) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

Pair (209, 211) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j

|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

Pair (209, 212) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (209, 213) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j
|00011001> : amplitude 0.164+0.000j
|11001101> : amplitude 0.164+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j
|10111110> : amplitude -0.162+0.000j

Pair (209, 214) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

|11011111> : amplitude 0.164+0.000j
|00001011> : amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j

$|01010111\rangle$: amplitude 0.236+0.000j

$|10010001\rangle$: amplitude -0.236+0.000j

$|10000011\rangle$: amplitude 0.236+0.000j

Pair (209, 215) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j

$|10101101\rangle$: amplitude 0.155+0.000j

$|01111001\rangle$: amplitude 0.155+0.000j

$|01101011\rangle$: amplitude -0.155+0.000j

Pair (209, 216) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j

$|00100101\rangle$: amplitude 0.146+0.000j

$|00110111\rangle$: amplitude 0.146+0.000j

$|11110001\rangle$: amplitude -0.146+0.000j

Pair (209, 217) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j

$|01100110\rangle$: amplitude 0.192+0.000j

$|10110010\rangle$: amplitude -0.192+0.000j

$|10100000\rangle$: amplitude -0.192+0.000j

Pair (209, 218) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j

$|10010010\rangle$: amplitude -0.152+0.000j

$|10000000\rangle$: amplitude 0.152+0.000j

$|01000110\rangle$: amplitude -0.152+0.000j

Pair (209, 219) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j

$|10000110\rangle$: amplitude -0.200+0.000j

$|10010100\rangle$: amplitude 0.200+0.000j

$|01010010\rangle$: amplitude 0.200+0.000j

Pair (209, 220) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude 0.164+0.000j

$|00001011\rangle$: amplitude -0.164+0.000j

$|00011001\rangle$: amplitude 0.164+0.000j

$|11001101\rangle$: amplitude 0.164+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude $-0.164+0.000j$
 $|10111101\rangle$: amplitude $-0.164+0.000j$
 $|10101111\rangle$: amplitude $0.164+0.000j$
 $|01101001\rangle$: amplitude $-0.164+0.000j$

Pair (209, 221) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude $0.164+0.000j$
 $|00001011\rangle$: amplitude $-0.164+0.000j$
 $|00011001\rangle$: amplitude $0.164+0.000j$
 $|11001101\rangle$: amplitude $0.164+0.000j$

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.148+0.000j$
 $|10001000\rangle$: amplitude $-0.148+0.000j$
 $|01011100\rangle$: amplitude $-0.148+0.000j$
 $|10011010\rangle$: amplitude $0.148+0.000j$

Pair (209, 222) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude $0.164+0.000j$
 $|00001011\rangle$: amplitude $-0.164+0.000j$
 $|00011001\rangle$: amplitude $0.164+0.000j$
 $|11001101\rangle$: amplitude $0.164+0.000j$

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude $-0.184+0.000j$
 $|00100000\rangle$: amplitude $-0.184+0.000j$
 $|11100110\rangle$: amplitude $0.184+0.000j$
 $|11110100\rangle$: amplitude $-0.184+0.000j$

Pair (209, 223) with energies 0.9412, 0.9412

State 209

Dominant basis-states:

$|11011111\rangle$: amplitude $0.164+0.000j$
 $|00001011\rangle$: amplitude $-0.164+0.000j$
 $|00011001\rangle$: amplitude $0.164+0.000j$
 $|11001101\rangle$: amplitude $0.164+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (210, 211) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

Pair (210, 212) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude -0.144+0.000j
 $|11111101\rangle$: amplitude -0.144+0.000j
 $|00101001\rangle$: amplitude 0.144+0.000j
 $|00111011\rangle$: amplitude -0.144+0.000j

Pair (210, 213) with energies 0.9412, 0.9412

State 210

3.4 Raw Output (Part 4)

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

Pair (210, 214) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (210, 215) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (210, 216) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

$|00000111\rangle$: amplitude -0.167+0.000j
 $|11000001\rangle$: amplitude -0.167+0.000j
 $|00010101\rangle$: amplitude -0.167+0.000j
 $|11010011\rangle$: amplitude 0.167+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (210, 217) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (210, 218) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (210, 219) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (210, 220) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (210, 221) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (210, 222) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j

|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (210, 223) with energies 0.9412, 0.9412

State 210

Dominant basis-states:

|00000111> : amplitude -0.167+0.000j
|11000001> : amplitude -0.167+0.000j
|00010101> : amplitude -0.167+0.000j
|11010011> : amplitude 0.167+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (211, 212) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

Pair (211, 213) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j
|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

Pair (211, 214) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

Pair (211, 215) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (211, 216) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

|00100111> : amplitude -0.148+0.000j
|11100001> : amplitude -0.148+0.000j
|11110011> : amplitude -0.148+0.000j
|00110101> : amplitude 0.148+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (211, 217) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (211, 218) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (211, 219) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (211, 220) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (211, 221) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (211, 222) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude -0.148+0.000j
 $|11100001\rangle$: amplitude -0.148+0.000j
 $|11110011\rangle$: amplitude -0.148+0.000j
 $|00110101\rangle$: amplitude 0.148+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (211, 223) with energies 0.9412, 0.9412

State 211

Dominant basis-states:

$|00100111\rangle$: amplitude $-0.148+0.000j$
 $|11100001\rangle$: amplitude $-0.148+0.000j$
 $|11110011\rangle$: amplitude $-0.148+0.000j$
 $|00110101\rangle$: amplitude $0.148+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude $0.146+0.000j$
 $|10111100\rangle$: amplitude $-0.146+0.000j$
 $|01101000\rangle$: amplitude $-0.146+0.000j$
 $|10101110\rangle$: amplitude $-0.146+0.000j$

Pair (212, 213) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude $-0.144+0.000j$
 $|11111101\rangle$: amplitude $-0.144+0.000j$
 $|00101001\rangle$: amplitude $0.144+0.000j$
 $|00111011\rangle$: amplitude $-0.144+0.000j$

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude $0.162+0.000j$
 $|01101010\rangle$: amplitude $0.162+0.000j$
 $|01111000\rangle$: amplitude $0.162+0.000j$
 $|10111110\rangle$: amplitude $-0.162+0.000j$

Pair (212, 214) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

$|11101111\rangle$: amplitude $-0.144+0.000j$
 $|11111101\rangle$: amplitude $-0.144+0.000j$
 $|00101001\rangle$: amplitude $0.144+0.000j$
 $|00111011\rangle$: amplitude $-0.144+0.000j$

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude $0.236+0.000j$
 $|01010111\rangle$: amplitude $0.236+0.000j$
 $|10010001\rangle$: amplitude $-0.236+0.000j$
 $|10000011\rangle$: amplitude $0.236+0.000j$

Pair (212, 215) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

Pair (212, 216) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (212, 217) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (212, 218) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (212, 219) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (212, 220) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (212, 221) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j

|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (212, 222) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (212, 223) with energies 0.9412, 0.9412

State 212

Dominant basis-states:

|11101111> : amplitude -0.144+0.000j
|11111101> : amplitude -0.144+0.000j
|00101001> : amplitude 0.144+0.000j
|00111011> : amplitude -0.144+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (213, 214) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j
|01101010> : amplitude 0.162+0.000j

$|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

Pair (213, 215) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (213, 216) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j
 $|10111110\rangle$: amplitude -0.162+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (213, 217) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude 0.162+0.000j
 $|01101010\rangle$: amplitude 0.162+0.000j
 $|01111000\rangle$: amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j

|01100110> : amplitude 0.192+0.000j

|10110010> : amplitude -0.192+0.000j

|10100000> : amplitude -0.192+0.000j

Pair (213, 218) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j

|01101010> : amplitude 0.162+0.000j

|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j

|10010010> : amplitude -0.152+0.000j

|10000000> : amplitude 0.152+0.000j

|01000110> : amplitude -0.152+0.000j

Pair (213, 219) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j

|01101010> : amplitude 0.162+0.000j

|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j

|10000110> : amplitude -0.200+0.000j

|10010100> : amplitude 0.200+0.000j

|01010010> : amplitude 0.200+0.000j

Pair (213, 220) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

|10101100> : amplitude 0.162+0.000j

|01101010> : amplitude 0.162+0.000j

|01111000> : amplitude 0.162+0.000j

|10111110> : amplitude -0.162+0.000j

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude $-0.164+0.000j$
 $|10111101\rangle$: amplitude $-0.164+0.000j$
 $|10101111\rangle$: amplitude $0.164+0.000j$
 $|01101001\rangle$: amplitude $-0.164+0.000j$

Pair (213, 221) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude $0.162+0.000j$
 $|01101010\rangle$: amplitude $0.162+0.000j$
 $|01111000\rangle$: amplitude $0.162+0.000j$
 $|10111110\rangle$: amplitude $-0.162+0.000j$

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.148+0.000j$
 $|10001000\rangle$: amplitude $-0.148+0.000j$
 $|01011100\rangle$: amplitude $-0.148+0.000j$
 $|10011010\rangle$: amplitude $0.148+0.000j$

Pair (213, 222) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude $0.162+0.000j$
 $|01101010\rangle$: amplitude $0.162+0.000j$
 $|01111000\rangle$: amplitude $0.162+0.000j$
 $|10111110\rangle$: amplitude $-0.162+0.000j$

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude $-0.184+0.000j$
 $|00100000\rangle$: amplitude $-0.184+0.000j$
 $|11100110\rangle$: amplitude $0.184+0.000j$
 $|11110100\rangle$: amplitude $-0.184+0.000j$

Pair (213, 223) with energies 0.9412, 0.9412

State 213

Dominant basis-states:

$|10101100\rangle$: amplitude $0.162+0.000j$
 $|01101010\rangle$: amplitude $0.162+0.000j$
 $|01111000\rangle$: amplitude $0.162+0.000j$
 $|10111110\rangle$: amplitude $-0.162+0.000j$

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (214, 215) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

Pair (214, 216) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

Pair (214, 217) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

$|01000101\rangle$: amplitude 0.236+0.000j
 $|01010111\rangle$: amplitude 0.236+0.000j
 $|10010001\rangle$: amplitude -0.236+0.000j
 $|10000011\rangle$: amplitude 0.236+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (214, 218) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (214, 219) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (214, 220) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 220

Dominant basis-states:

|01110111> : amplitude -0.164+0.000j

|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (214, 221) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (214, 222) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (214, 223) with energies 0.9412, 0.9412

State 214

Dominant basis-states:

|01000101> : amplitude 0.236+0.000j
|01010111> : amplitude 0.236+0.000j
|10010001> : amplitude -0.236+0.000j
|10000011> : amplitude 0.236+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j

|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (215, 216) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

State 216

Dominant basis-states:

|11100011> : amplitude 0.146+0.000j
|00100101> : amplitude 0.146+0.000j
|00110111> : amplitude 0.146+0.000j
|11110001> : amplitude -0.146+0.000j

Pair (215, 217) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

Pair (215, 218) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

|10111111> : amplitude 0.155+0.000j
|10101101> : amplitude 0.155+0.000j
|01111001> : amplitude 0.155+0.000j
|01101011> : amplitude -0.155+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j

$|01000110\rangle$: amplitude $-0.152+0.000j$

Pair (215, 219) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude $0.155+0.000j$
 $|10101101\rangle$: amplitude $0.155+0.000j$
 $|01111001\rangle$: amplitude $0.155+0.000j$
 $|01101011\rangle$: amplitude $-0.155+0.000j$

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude $0.200+0.000j$
 $|10000110\rangle$: amplitude $-0.200+0.000j$
 $|10010100\rangle$: amplitude $0.200+0.000j$
 $|01010010\rangle$: amplitude $0.200+0.000j$

Pair (215, 220) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude $0.155+0.000j$
 $|10101101\rangle$: amplitude $0.155+0.000j$
 $|01111001\rangle$: amplitude $0.155+0.000j$
 $|01101011\rangle$: amplitude $-0.155+0.000j$

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude $-0.164+0.000j$
 $|10111101\rangle$: amplitude $-0.164+0.000j$
 $|10101111\rangle$: amplitude $0.164+0.000j$
 $|01101001\rangle$: amplitude $-0.164+0.000j$

Pair (215, 221) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude $0.155+0.000j$
 $|10101101\rangle$: amplitude $0.155+0.000j$
 $|01111001\rangle$: amplitude $0.155+0.000j$
 $|01101011\rangle$: amplitude $-0.155+0.000j$

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude $-0.148+0.000j$
 $|10001000\rangle$: amplitude $-0.148+0.000j$
 $|01011100\rangle$: amplitude $-0.148+0.000j$
 $|10011010\rangle$: amplitude $0.148+0.000j$

Pair (215, 222) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (215, 223) with energies 0.9412, 0.9412

State 215

Dominant basis-states:

$|10111111\rangle$: amplitude 0.155+0.000j
 $|10101101\rangle$: amplitude 0.155+0.000j
 $|01111001\rangle$: amplitude 0.155+0.000j
 $|01101011\rangle$: amplitude -0.155+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (216, 217) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 217

Dominant basis-states:

$|01110100\rangle$: amplitude -0.192+0.000j
 $|01100110\rangle$: amplitude 0.192+0.000j
 $|10110010\rangle$: amplitude -0.192+0.000j
 $|10100000\rangle$: amplitude -0.192+0.000j

Pair (216, 218) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 218

Dominant basis-states:

$|01010100\rangle$: amplitude -0.152+0.000j
 $|10010010\rangle$: amplitude -0.152+0.000j
 $|10000000\rangle$: amplitude 0.152+0.000j
 $|01000110\rangle$: amplitude -0.152+0.000j

Pair (216, 219) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j
 $|10000110\rangle$: amplitude -0.200+0.000j
 $|10010100\rangle$: amplitude 0.200+0.000j
 $|01010010\rangle$: amplitude 0.200+0.000j

Pair (216, 220) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 220

Dominant basis-states:

$|01110111\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

Pair (216, 221) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (216, 222) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (216, 223) with energies 0.9412, 0.9412

State 216

Dominant basis-states:

$|11100011\rangle$: amplitude 0.146+0.000j
 $|00100101\rangle$: amplitude 0.146+0.000j
 $|00110111\rangle$: amplitude 0.146+0.000j
 $|11110001\rangle$: amplitude -0.146+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (217, 218) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

Pair (217, 219) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (217, 220) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (217, 221) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (217, 222) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (217, 223) with energies 0.9412, 0.9412

State 217

Dominant basis-states:

|01110100> : amplitude -0.192+0.000j
|01100110> : amplitude 0.192+0.000j
|10110010> : amplitude -0.192+0.000j
|10100000> : amplitude -0.192+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (218, 219) with energies 0.9412, 0.9412

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j

|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

Pair (218, 220) with energies 0.9412, 0.9412

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (218, 221) with energies 0.9412, 0.9412

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

Pair (218, 222) with energies 0.9412, 0.9412

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j

|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (218, 223) with energies 0.9412, 0.9412

State 218

Dominant basis-states:

|01010100> : amplitude -0.152+0.000j
|10010010> : amplitude -0.152+0.000j
|10000000> : amplitude 0.152+0.000j
|01000110> : amplitude -0.152+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (219, 220) with energies 0.9412, 0.9412

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j
|01010010> : amplitude 0.200+0.000j

State 220

Dominant basis-states:

|01111011> : amplitude -0.164+0.000j
|10111101> : amplitude -0.164+0.000j
|10101111> : amplitude 0.164+0.000j
|01101001> : amplitude -0.164+0.000j

Pair (219, 221) with energies 0.9412, 0.9412

State 219

Dominant basis-states:

|01000000> : amplitude 0.200+0.000j
|10000110> : amplitude -0.200+0.000j
|10010100> : amplitude 0.200+0.000j

$|01010010\rangle$: amplitude 0.200+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j

$|10001000\rangle$: amplitude -0.148+0.000j

$|01011100\rangle$: amplitude -0.148+0.000j

$|10011010\rangle$: amplitude 0.148+0.000j

Pair (219, 222) with energies 0.9412, 0.9412

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j

$|10000110\rangle$: amplitude -0.200+0.000j

$|10010100\rangle$: amplitude 0.200+0.000j

$|01010010\rangle$: amplitude 0.200+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j

$|00100000\rangle$: amplitude -0.184+0.000j

$|11100110\rangle$: amplitude 0.184+0.000j

$|11110100\rangle$: amplitude -0.184+0.000j

Pair (219, 223) with energies 0.9412, 0.9412

State 219

Dominant basis-states:

$|01000000\rangle$: amplitude 0.200+0.000j

$|10000110\rangle$: amplitude -0.200+0.000j

$|10010100\rangle$: amplitude 0.200+0.000j

$|01010010\rangle$: amplitude 0.200+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j

$|10111100\rangle$: amplitude -0.146+0.000j

$|01101000\rangle$: amplitude -0.146+0.000j

$|10101110\rangle$: amplitude -0.146+0.000j

Pair (220, 221) with energies 0.9412, 0.9412

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j

$|10111101\rangle$: amplitude -0.164+0.000j

$|10101111\rangle$: amplitude 0.164+0.000j

$|01101001\rangle$: amplitude -0.164+0.000j

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

Pair (220, 222) with energies 0.9412, 0.9412

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

State 222

Dominant basis-states:

$|00110010\rangle$: amplitude -0.184+0.000j
 $|00100000\rangle$: amplitude -0.184+0.000j
 $|11100110\rangle$: amplitude 0.184+0.000j
 $|11110100\rangle$: amplitude -0.184+0.000j

Pair (220, 223) with energies 0.9412, 0.9412

State 220

Dominant basis-states:

$|01111011\rangle$: amplitude -0.164+0.000j
 $|10111101\rangle$: amplitude -0.164+0.000j
 $|10101111\rangle$: amplitude 0.164+0.000j
 $|01101001\rangle$: amplitude -0.164+0.000j

State 223

Dominant basis-states:

$|01111010\rangle$: amplitude 0.146+0.000j
 $|10111100\rangle$: amplitude -0.146+0.000j
 $|01101000\rangle$: amplitude -0.146+0.000j
 $|10101110\rangle$: amplitude -0.146+0.000j

Pair (221, 222) with energies 0.9412, 0.9412

State 221

Dominant basis-states:

$|01001110\rangle$: amplitude -0.148+0.000j
 $|10001000\rangle$: amplitude -0.148+0.000j
 $|01011100\rangle$: amplitude -0.148+0.000j
 $|10011010\rangle$: amplitude 0.148+0.000j

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

Pair (221, 223) with energies 0.9412, 0.9412

State 221

Dominant basis-states:

|01001110> : amplitude -0.148+0.000j
|10001000> : amplitude -0.148+0.000j
|01011100> : amplitude -0.148+0.000j
|10011010> : amplitude 0.148+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (222, 223) with energies 0.9412, 0.9412

State 222

Dominant basis-states:

|00110010> : amplitude -0.184+0.000j
|00100000> : amplitude -0.184+0.000j
|11100110> : amplitude 0.184+0.000j
|11110100> : amplitude -0.184+0.000j

State 223

Dominant basis-states:

|01111010> : amplitude 0.146+0.000j
|10111100> : amplitude -0.146+0.000j
|01101000> : amplitude -0.146+0.000j
|10101110> : amplitude -0.146+0.000j

Pair (224, 225) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

Pair (224, 226) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

Pair (224, 227) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

Pair (224, 228) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j

|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

Pair (224, 229) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

Pair (224, 230) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

Pair (224, 231) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

Pair (224, 232) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

Pair (224, 233) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

Pair (224, 234) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j

$|00001110\rangle$: amplitude 0.134+0.000j

Pair (224, 235) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude 0.174+0.000j
 $|01100001\rangle$: amplitude 0.174+0.000j
 $|01110011\rangle$: amplitude -0.174+0.000j
 $|10110101\rangle$: amplitude 0.174+0.000j

Pair (224, 236) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

Pair (224, 237) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j
 $|11010010\rangle$: amplitude -0.268+0.000j
 $|00000110\rangle$: amplitude -0.268+0.000j
 $|11000000\rangle$: amplitude 0.268+0.000j

Pair (224, 238) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

Pair (224, 239) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

Pair (224, 240) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

Pair (224, 241) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

Pair (224, 242) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (224, 243) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (224, 244) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (224, 245) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (224, 246) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (224, 247) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (224, 248) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (224, 249) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

$|10101110\rangle$: amplitude 0.173+0.000j
 $|01101000\rangle$: amplitude 0.173+0.000j
 $|10111100\rangle$: amplitude -0.173+0.000j
 $|01111010\rangle$: amplitude 0.173+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (224, 250) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (224, 251) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (224, 252) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (224, 253) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j

|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (224, 254) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (224, 255) with energies 1.0021, 1.0021

State 224

Dominant basis-states:

|10101110> : amplitude 0.173+0.000j
|01101000> : amplitude 0.173+0.000j
|10111100> : amplitude -0.173+0.000j
|01111010> : amplitude 0.173+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (225, 226) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j

|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

Pair (225, 227) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

Pair (225, 228) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

Pair (225, 229) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j

|01111001> : amplitude 0.169+0.000j

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j

|10001110> : amplitude -0.112+0.000j

|01011010> : amplitude 0.112+0.000j

|01001000> : amplitude -0.112+0.000j

Pair (225, 230) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j

|01101011> : amplitude 0.169+0.000j

|10111111> : amplitude 0.169+0.000j

|01111001> : amplitude 0.169+0.000j

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j

|01100000> : amplitude 0.183+0.000j

|01110010> : amplitude 0.183+0.000j

|10110100> : amplitude 0.183+0.000j

Pair (225, 231) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j

|01101011> : amplitude 0.169+0.000j

|10111111> : amplitude 0.169+0.000j

|01111001> : amplitude 0.169+0.000j

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

Pair (225, 232) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j

|01101011> : amplitude 0.169+0.000j

|10111111> : amplitude 0.169+0.000j

|01111001> : amplitude 0.169+0.000j

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

Pair (225, 233) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j
 $|01101011\rangle$: amplitude 0.169+0.000j
 $|10111111\rangle$: amplitude 0.169+0.000j
 $|01111001\rangle$: amplitude 0.169+0.000j

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j
 $|00110110\rangle$: amplitude 0.136+0.000j
 $|11100010\rangle$: amplitude -0.136+0.000j
 $|00100100\rangle$: amplitude 0.136+0.000j

Pair (225, 234) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j
 $|01101011\rangle$: amplitude 0.169+0.000j
 $|10111111\rangle$: amplitude 0.169+0.000j
 $|01111001\rangle$: amplitude 0.169+0.000j

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

Pair (225, 235) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j
 $|01101011\rangle$: amplitude 0.169+0.000j
 $|10111111\rangle$: amplitude 0.169+0.000j
 $|01111001\rangle$: amplitude 0.169+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (225, 236) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (225, 237) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (225, 238) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (225, 239) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (225, 240) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (225, 241) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j

|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (225, 242) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (225, 243) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (225, 244) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (225, 245) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (225, 246) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (225, 247) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j

$|10111101\rangle$: amplitude -0.190+0.000j

Pair (225, 248) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j

$|01101011\rangle$: amplitude 0.169+0.000j

$|10111111\rangle$: amplitude 0.169+0.000j

$|01111001\rangle$: amplitude 0.169+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j

$|01011000\rangle$: amplitude 0.195+0.000j

$|10001100\rangle$: amplitude 0.195+0.000j

$|01001010\rangle$: amplitude 0.195+0.000j

Pair (225, 249) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j

$|01101011\rangle$: amplitude 0.169+0.000j

$|10111111\rangle$: amplitude 0.169+0.000j

$|01111001\rangle$: amplitude 0.169+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j

$|01111010\rangle$: amplitude 0.152+0.000j

$|10101110\rangle$: amplitude 0.152+0.000j

$|01101000\rangle$: amplitude 0.152+0.000j

Pair (225, 250) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j

$|01101011\rangle$: amplitude 0.169+0.000j

$|10111111\rangle$: amplitude 0.169+0.000j

$|01111001\rangle$: amplitude 0.169+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j

$|01101110\rangle$: amplitude 0.156+0.000j

$|10111010\rangle$: amplitude -0.156+0.000j

$|01111100\rangle$: amplitude 0.156+0.000j

Pair (225, 251) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (225, 252) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (225, 253) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

|10101101> : amplitude -0.169+0.000j
|01101011> : amplitude 0.169+0.000j
|10111111> : amplitude 0.169+0.000j
|01111001> : amplitude 0.169+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (225, 254) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j
 $|01101011\rangle$: amplitude 0.169+0.000j
 $|10111111\rangle$: amplitude 0.169+0.000j
 $|01111001\rangle$: amplitude 0.169+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (225, 255) with energies 1.0021, 1.0021

State 225

Dominant basis-states:

$|10101101\rangle$: amplitude -0.169+0.000j
 $|01101011\rangle$: amplitude 0.169+0.000j
 $|10111111\rangle$: amplitude 0.169+0.000j
 $|01111001\rangle$: amplitude 0.169+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (226, 227) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

Pair (226, 228) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

Pair (226, 229) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude -0.112+0.000j
 $|10001110\rangle$: amplitude -0.112+0.000j
 $|01011010\rangle$: amplitude 0.112+0.000j
 $|01001000\rangle$: amplitude -0.112+0.000j

Pair (226, 230) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

Pair (226, 231) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j
 $|01110111\rangle$: amplitude -0.155+0.000j
 $|10100011\rangle$: amplitude -0.155+0.000j
 $|10110001\rangle$: amplitude 0.155+0.000j

Pair (226, 232) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

Pair (226, 233) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude 0.150+0.000j
 $|00100110\rangle$: amplitude -0.150+0.000j
 $|11110010\rangle$: amplitude 0.150+0.000j
 $|00110100\rangle$: amplitude 0.150+0.000j

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j
 $|00110110\rangle$: amplitude 0.136+0.000j
 $|11100010\rangle$: amplitude -0.136+0.000j
 $|00100100\rangle$: amplitude 0.136+0.000j

Pair (226, 234) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

Pair (226, 235) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (226, 236) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (226, 237) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j

|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (226, 238) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (226, 239) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (226, 240) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j

|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (226, 241) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (226, 242) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (226, 243) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j

|00110100> : amplitude 0.150+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

Pair (226, 244) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j

|00100110> : amplitude -0.150+0.000j

|11110010> : amplitude 0.150+0.000j

|00110100> : amplitude 0.150+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j

|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j

|10100100> : amplitude 0.188+0.000j

Pair (226, 245) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j

|00100110> : amplitude -0.150+0.000j

|11110010> : amplitude 0.150+0.000j

|00110100> : amplitude 0.150+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j

|01010111> : amplitude -0.130+0.000j

|10000011> : amplitude 0.130+0.000j

|01000101> : amplitude 0.130+0.000j

Pair (226, 246) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j

|00100110> : amplitude -0.150+0.000j

|11110010> : amplitude 0.150+0.000j

|00110100> : amplitude 0.150+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude $-0.154+0.000j$
 $|00001000\rangle$: amplitude $-0.154+0.000j$
 $|11011100\rangle$: amplitude $0.154+0.000j$
 $|00011010\rangle$: amplitude $-0.154+0.000j$

Pair (226, 247) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude $-0.190+0.000j$
 $|01111011\rangle$: amplitude $-0.190+0.000j$
 $|01101001\rangle$: amplitude $0.190+0.000j$
 $|10111101\rangle$: amplitude $-0.190+0.000j$

Pair (226, 248) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$
 $|01011000\rangle$: amplitude $0.195+0.000j$
 $|10001100\rangle$: amplitude $0.195+0.000j$
 $|01001010\rangle$: amplitude $0.195+0.000j$

Pair (226, 249) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude $-0.152+0.000j$
 $|01111010\rangle$: amplitude $0.152+0.000j$
 $|10101110\rangle$: amplitude $0.152+0.000j$
 $|01101000\rangle$: amplitude $0.152+0.000j$

Pair (226, 250) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude $0.156+0.000j$
 $|01101110\rangle$: amplitude $0.156+0.000j$
 $|10111010\rangle$: amplitude $-0.156+0.000j$
 $|01111100\rangle$: amplitude $0.156+0.000j$

Pair (226, 251) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude $0.120+0.000j$
 $|11000001\rangle$: amplitude $0.120+0.000j$
 $|00010101\rangle$: amplitude $-0.120+0.000j$
 $|11010011\rangle$: amplitude $0.120+0.000j$

Pair (226, 252) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

$|11100000\rangle$: amplitude $0.150+0.000j$
 $|00100110\rangle$: amplitude $-0.150+0.000j$
 $|11110010\rangle$: amplitude $0.150+0.000j$
 $|00110100\rangle$: amplitude $0.150+0.000j$

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (226, 253) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (226, 254) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (226, 255) with energies 1.0021, 1.0021

State 226

Dominant basis-states:

|11100000> : amplitude 0.150+0.000j
|00100110> : amplitude -0.150+0.000j
|11110010> : amplitude 0.150+0.000j
|00110100> : amplitude 0.150+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j

|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (227, 228) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

Pair (227, 229) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

Pair (227, 230) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j

|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

Pair (227, 231) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

Pair (227, 232) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

Pair (227, 233) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j

$|00100100\rangle$: amplitude $0.136+0.000j$

Pair (227, 234) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude $0.141+0.000j$
 $|11100000\rangle$: amplitude $0.141+0.000j$
 $|00110100\rangle$: amplitude $0.141+0.000j$
 $|00100110\rangle$: amplitude $-0.141+0.000j$

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

Pair (227, 235) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude $0.141+0.000j$
 $|11100000\rangle$: amplitude $0.141+0.000j$
 $|00110100\rangle$: amplitude $0.141+0.000j$
 $|00100110\rangle$: amplitude $-0.141+0.000j$

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

Pair (227, 236) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude $0.141+0.000j$
 $|11100000\rangle$: amplitude $0.141+0.000j$
 $|00110100\rangle$: amplitude $0.141+0.000j$
 $|00100110\rangle$: amplitude $-0.141+0.000j$

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude $-0.214+0.000j$
 $|11100110\rangle$: amplitude $0.214+0.000j$
 $|00110010\rangle$: amplitude $0.214+0.000j$
 $|11110100\rangle$: amplitude $0.214+0.000j$

Pair (227, 237) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j
 $|11010010\rangle$: amplitude -0.268+0.000j
 $|00000110\rangle$: amplitude -0.268+0.000j
 $|11000000\rangle$: amplitude 0.268+0.000j

Pair (227, 238) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

Pair (227, 239) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

Pair (227, 240) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

Pair (227, 241) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

Pair (227, 242) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (227, 243) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (227, 244) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (227, 245) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

$|11110010\rangle$: amplitude 0.141+0.000j
 $|11100000\rangle$: amplitude 0.141+0.000j
 $|00110100\rangle$: amplitude 0.141+0.000j
 $|00100110\rangle$: amplitude -0.141+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (227, 246) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (227, 247) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01110111> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (227, 248) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (227, 249) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (227, 250) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (227, 251) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (227, 252) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j

|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (227, 253) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (227, 254) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j
|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (227, 255) with energies 1.0021, 1.0021

State 227

Dominant basis-states:

|11110010> : amplitude 0.141+0.000j
|11100000> : amplitude 0.141+0.000j

|00110100> : amplitude 0.141+0.000j
|00100110> : amplitude -0.141+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (228, 229) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

Pair (228, 230) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

Pair (228, 231) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j

$|11000100\rangle$: amplitude 0.291+0.000j

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j

$|01110111\rangle$: amplitude -0.155+0.000j

$|10100011\rangle$: amplitude -0.155+0.000j

$|10110001\rangle$: amplitude 0.155+0.000j

Pair (228, 232) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j

$|11010110\rangle$: amplitude 0.291+0.000j

$|00000010\rangle$: amplitude -0.291+0.000j

$|11000100\rangle$: amplitude 0.291+0.000j

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j

$|00010110\rangle$: amplitude 0.173+0.000j

$|00000100\rangle$: amplitude -0.173+0.000j

$|11000010\rangle$: amplitude 0.173+0.000j

Pair (228, 233) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j

$|11010110\rangle$: amplitude 0.291+0.000j

$|00000010\rangle$: amplitude -0.291+0.000j

$|11000100\rangle$: amplitude 0.291+0.000j

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j

$|00110110\rangle$: amplitude 0.136+0.000j

$|11100010\rangle$: amplitude -0.136+0.000j

$|00100100\rangle$: amplitude 0.136+0.000j

Pair (228, 234) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j

$|11010110\rangle$: amplitude 0.291+0.000j

$|00000010\rangle$: amplitude -0.291+0.000j

$|11000100\rangle$: amplitude 0.291+0.000j

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

Pair (228, 235) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude $0.291+0.000j$
 $|11010110\rangle$: amplitude $0.291+0.000j$
 $|00000010\rangle$: amplitude $-0.291+0.000j$
 $|11000100\rangle$: amplitude $0.291+0.000j$

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

Pair (228, 236) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude $0.291+0.000j$
 $|11010110\rangle$: amplitude $0.291+0.000j$
 $|00000010\rangle$: amplitude $-0.291+0.000j$
 $|11000100\rangle$: amplitude $0.291+0.000j$

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude $-0.214+0.000j$
 $|11100110\rangle$: amplitude $0.214+0.000j$
 $|00110010\rangle$: amplitude $0.214+0.000j$
 $|11110100\rangle$: amplitude $0.214+0.000j$

Pair (228, 237) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude $0.291+0.000j$
 $|11010110\rangle$: amplitude $0.291+0.000j$
 $|00000010\rangle$: amplitude $-0.291+0.000j$
 $|11000100\rangle$: amplitude $0.291+0.000j$

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (228, 238) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (228, 239) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (228, 240) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (228, 241) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (228, 242) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (228, 243) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (228, 244) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (228, 245) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (228, 246) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j

|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (228, 247) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (228, 248) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (228, 249) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

|00010000> : amplitude 0.291+0.000j
|11010110> : amplitude 0.291+0.000j
|00000010> : amplitude -0.291+0.000j
|11000100> : amplitude 0.291+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j

$|01101000\rangle$: amplitude 0.152+0.000j

Pair (228, 250) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (228, 251) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (228, 252) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (228, 253) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (228, 254) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (228, 255) with energies 1.0021, 1.0021

State 228

Dominant basis-states:

$|00010000\rangle$: amplitude 0.291+0.000j
 $|11010110\rangle$: amplitude 0.291+0.000j
 $|00000010\rangle$: amplitude -0.291+0.000j
 $|11000100\rangle$: amplitude 0.291+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (229, 230) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

Pair (229, 231) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

Pair (229, 232) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

Pair (229, 233) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude $0.136+0.000j$
 $|00110110\rangle$: amplitude $0.136+0.000j$
 $|11100010\rangle$: amplitude $-0.136+0.000j$
 $|00100100\rangle$: amplitude $0.136+0.000j$

Pair (229, 234) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

Pair (229, 235) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

Pair (229, 236) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (229, 237) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (229, 238) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (229, 239) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (229, 240) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (229, 241) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (229, 242) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j

|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (229, 243) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (229, 244) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (229, 245) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j

|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (229, 246) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (229, 247) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j
|01001000> : amplitude -0.112+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (229, 248) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

|10011100> : amplitude -0.112+0.000j
|10001110> : amplitude -0.112+0.000j
|01011010> : amplitude 0.112+0.000j

$|01001000\rangle$: amplitude -0.112+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j

$|01011000\rangle$: amplitude 0.195+0.000j

$|10001100\rangle$: amplitude 0.195+0.000j

$|01001010\rangle$: amplitude 0.195+0.000j

Pair (229, 249) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude -0.112+0.000j

$|10001110\rangle$: amplitude -0.112+0.000j

$|01011010\rangle$: amplitude 0.112+0.000j

$|01001000\rangle$: amplitude -0.112+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j

$|01111010\rangle$: amplitude 0.152+0.000j

$|10101110\rangle$: amplitude 0.152+0.000j

$|01101000\rangle$: amplitude 0.152+0.000j

Pair (229, 250) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude -0.112+0.000j

$|10001110\rangle$: amplitude -0.112+0.000j

$|01011010\rangle$: amplitude 0.112+0.000j

$|01001000\rangle$: amplitude -0.112+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j

$|01101110\rangle$: amplitude 0.156+0.000j

$|10111010\rangle$: amplitude -0.156+0.000j

$|01111100\rangle$: amplitude 0.156+0.000j

Pair (229, 251) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude -0.112+0.000j

$|10001110\rangle$: amplitude -0.112+0.000j

$|01011010\rangle$: amplitude 0.112+0.000j

$|01001000\rangle$: amplitude -0.112+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude $0.120+0.000j$
 $|11000001\rangle$: amplitude $0.120+0.000j$
 $|00010101\rangle$: amplitude $-0.120+0.000j$
 $|11010011\rangle$: amplitude $0.120+0.000j$

Pair (229, 252) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude $0.250+0.000j$
 $|01110110\rangle$: amplitude $-0.250+0.000j$
 $|10110000\rangle$: amplitude $-0.250+0.000j$
 $|10100010\rangle$: amplitude $-0.250+0.000j$

Pair (229, 253) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude $-0.256+0.000j$
 $|11010011\rangle$: amplitude $0.256+0.000j$
 $|11000001\rangle$: amplitude $0.256+0.000j$
 $|00000111\rangle$: amplitude $0.256+0.000j$

Pair (229, 254) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude $-0.112+0.000j$
 $|10001110\rangle$: amplitude $-0.112+0.000j$
 $|01011010\rangle$: amplitude $0.112+0.000j$
 $|01001000\rangle$: amplitude $-0.112+0.000j$

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (229, 255) with energies 1.0021, 1.0021

State 229

Dominant basis-states:

$|10011100\rangle$: amplitude -0.112+0.000j
 $|10001110\rangle$: amplitude -0.112+0.000j
 $|01011010\rangle$: amplitude 0.112+0.000j
 $|01001000\rangle$: amplitude -0.112+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (230, 231) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j
 $|01110111\rangle$: amplitude -0.155+0.000j
 $|10100011\rangle$: amplitude -0.155+0.000j
 $|10110001\rangle$: amplitude 0.155+0.000j

Pair (230, 232) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

Pair (230, 233) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

Pair (230, 234) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

Pair (230, 235) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (230, 236) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (230, 237) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (230, 238) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j

|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (230, 239) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (230, 240) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (230, 241) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j

$|01010010\rangle$: amplitude -0.252+0.000j

Pair (230, 242) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (230, 243) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (230, 244) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude -0.183+0.000j
 $|01100000\rangle$: amplitude 0.183+0.000j
 $|01110010\rangle$: amplitude 0.183+0.000j
 $|10110100\rangle$: amplitude 0.183+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (230, 245) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (230, 246) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (230, 247) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (230, 248) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (230, 249) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (230, 250) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (230, 251) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude $-0.183+0.000j$
 $|01100000\rangle$: amplitude $0.183+0.000j$
 $|01110010\rangle$: amplitude $0.183+0.000j$
 $|10110100\rangle$: amplitude $0.183+0.000j$

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude $0.120+0.000j$
 $|11000001\rangle$: amplitude $0.120+0.000j$
 $|00010101\rangle$: amplitude $-0.120+0.000j$
 $|11010011\rangle$: amplitude $0.120+0.000j$

Pair (230, 252) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude $-0.183+0.000j$
 $|01100000\rangle$: amplitude $0.183+0.000j$
 $|01110010\rangle$: amplitude $0.183+0.000j$
 $|10110100\rangle$: amplitude $0.183+0.000j$

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude $0.250+0.000j$
 $|01110110\rangle$: amplitude $-0.250+0.000j$
 $|10110000\rangle$: amplitude $-0.250+0.000j$
 $|10100010\rangle$: amplitude $-0.250+0.000j$

Pair (230, 253) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

$|10100110\rangle$: amplitude $-0.183+0.000j$
 $|01100000\rangle$: amplitude $0.183+0.000j$
 $|01110010\rangle$: amplitude $0.183+0.000j$
 $|10110100\rangle$: amplitude $0.183+0.000j$

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude $-0.256+0.000j$
 $|11010011\rangle$: amplitude $0.256+0.000j$
 $|11000001\rangle$: amplitude $0.256+0.000j$
 $|00000111\rangle$: amplitude $0.256+0.000j$

Pair (230, 254) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (230, 255) with energies 1.0021, 1.0021

State 230

Dominant basis-states:

|10100110> : amplitude -0.183+0.000j
|01100000> : amplitude 0.183+0.000j
|01110010> : amplitude 0.183+0.000j
|10110100> : amplitude 0.183+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (231, 232) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

Pair (231, 233) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

Pair (231, 234) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

Pair (231, 235) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (231, 236) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (231, 237) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (231, 238) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (231, 239) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j

|01101011> : amplitude -0.175+0.000j

|10101101> : amplitude 0.175+0.000j

|01111001> : amplitude -0.175+0.000j

Pair (231, 240) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

Pair (231, 241) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j

|01000000> : amplitude 0.252+0.000j

|10010100> : amplitude -0.252+0.000j

|01010010> : amplitude -0.252+0.000j

Pair (231, 242) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j

|00010010> : amplitude 0.354+0.000j

|11000110> : amplitude -0.354+0.000j

|00000000> : amplitude 0.354+0.000j

Pair (231, 243) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

Pair (231, 244) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j

|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j

|10100100> : amplitude 0.188+0.000j

Pair (231, 245) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j

|01110111> : amplitude -0.155+0.000j

|10100011> : amplitude -0.155+0.000j

|10110001> : amplitude 0.155+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude $0.130+0.000j$
 $|01010111\rangle$: amplitude $-0.130+0.000j$
 $|10000011\rangle$: amplitude $0.130+0.000j$
 $|01000101\rangle$: amplitude $0.130+0.000j$

Pair (231, 246) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude $-0.155+0.000j$
 $|01110111\rangle$: amplitude $-0.155+0.000j$
 $|10100011\rangle$: amplitude $-0.155+0.000j$
 $|10110001\rangle$: amplitude $0.155+0.000j$

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude $-0.154+0.000j$
 $|00001000\rangle$: amplitude $-0.154+0.000j$
 $|11011100\rangle$: amplitude $0.154+0.000j$
 $|00011010\rangle$: amplitude $-0.154+0.000j$

Pair (231, 247) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude $-0.155+0.000j$
 $|01110111\rangle$: amplitude $-0.155+0.000j$
 $|10100011\rangle$: amplitude $-0.155+0.000j$
 $|10110001\rangle$: amplitude $0.155+0.000j$

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude $-0.190+0.000j$
 $|01111011\rangle$: amplitude $-0.190+0.000j$
 $|01101001\rangle$: amplitude $0.190+0.000j$
 $|10111101\rangle$: amplitude $-0.190+0.000j$

Pair (231, 248) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude $-0.155+0.000j$
 $|01110111\rangle$: amplitude $-0.155+0.000j$
 $|10100011\rangle$: amplitude $-0.155+0.000j$
 $|10110001\rangle$: amplitude $0.155+0.000j$

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (231, 249) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j
 $|01110111\rangle$: amplitude -0.155+0.000j
 $|10100011\rangle$: amplitude -0.155+0.000j
 $|10110001\rangle$: amplitude 0.155+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (231, 250) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j
 $|01110111\rangle$: amplitude -0.155+0.000j
 $|10100011\rangle$: amplitude -0.155+0.000j
 $|10110001\rangle$: amplitude 0.155+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (231, 251) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

$|01100101\rangle$: amplitude -0.155+0.000j
 $|01110111\rangle$: amplitude -0.155+0.000j
 $|10100011\rangle$: amplitude -0.155+0.000j
 $|10110001\rangle$: amplitude 0.155+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (231, 252) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (231, 253) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (231, 254) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j

|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (231, 255) with energies 1.0021, 1.0021

State 231

Dominant basis-states:

|01100101> : amplitude -0.155+0.000j
|01110111> : amplitude -0.155+0.000j
|10100011> : amplitude -0.155+0.000j
|10110001> : amplitude 0.155+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (232, 233) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

Pair (232, 234) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j

|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

Pair (232, 235) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (232, 236) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (232, 237) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

Pair (232, 238) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

Pair (232, 239) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

Pair (232, 240) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

Pair (232, 241) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

Pair (232, 242) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (232, 243) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (232, 244) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (232, 245) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (232, 246) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (232, 247) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (232, 248) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (232, 249) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (232, 250) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (232, 251) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (232, 252) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

$|11010000\rangle$: amplitude 0.173+0.000j
 $|00010110\rangle$: amplitude 0.173+0.000j
 $|00000100\rangle$: amplitude -0.173+0.000j
 $|11000010\rangle$: amplitude 0.173+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (232, 253) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (232, 254) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (232, 255) with energies 1.0021, 1.0021

State 232

Dominant basis-states:

|11010000> : amplitude 0.173+0.000j
|00010110> : amplitude 0.173+0.000j
|00000100> : amplitude -0.173+0.000j
|11000010> : amplitude 0.173+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (233, 234) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j

|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

Pair (233, 235) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (233, 236) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (233, 237) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j

$|11100010\rangle$: amplitude -0.136+0.000j

$|00100100\rangle$: amplitude 0.136+0.000j

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j

$|11010010\rangle$: amplitude -0.268+0.000j

$|00000110\rangle$: amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

Pair (233, 238) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j

$|00110110\rangle$: amplitude 0.136+0.000j

$|11100010\rangle$: amplitude -0.136+0.000j

$|00100100\rangle$: amplitude 0.136+0.000j

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j

$|01011101\rangle$: amplitude 0.191+0.000j

$|10011011\rangle$: amplitude 0.191+0.000j

$|10001001\rangle$: amplitude -0.191+0.000j

Pair (233, 239) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j

$|00110110\rangle$: amplitude 0.136+0.000j

$|11100010\rangle$: amplitude -0.136+0.000j

$|00100100\rangle$: amplitude 0.136+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j

$|01101011\rangle$: amplitude -0.175+0.000j

$|10101101\rangle$: amplitude 0.175+0.000j

$|01111001\rangle$: amplitude -0.175+0.000j

Pair (233, 240) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude 0.136+0.000j

$|00110110\rangle$: amplitude 0.136+0.000j

$|11100010\rangle$: amplitude -0.136+0.000j

|00100100> : amplitude 0.136+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

Pair (233, 241) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j

|00110110> : amplitude 0.136+0.000j

|11100010> : amplitude -0.136+0.000j

|00100100> : amplitude 0.136+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j

|01000000> : amplitude 0.252+0.000j

|10010100> : amplitude -0.252+0.000j

|01010010> : amplitude -0.252+0.000j

Pair (233, 242) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j

|00110110> : amplitude 0.136+0.000j

|11100010> : amplitude -0.136+0.000j

|00100100> : amplitude 0.136+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j

|00010010> : amplitude 0.354+0.000j

|11000110> : amplitude -0.354+0.000j

|00000000> : amplitude 0.354+0.000j

Pair (233, 243) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j

|00110110> : amplitude 0.136+0.000j

|11100010> : amplitude -0.136+0.000j

|00100100> : amplitude 0.136+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude $-0.136+0.000j$
 $|10011011\rangle$: amplitude $-0.136+0.000j$
 $|01001111\rangle$: amplitude $-0.136+0.000j$
 $|10001001\rangle$: amplitude $0.136+0.000j$

Pair (233, 244) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude $0.136+0.000j$
 $|00110110\rangle$: amplitude $0.136+0.000j$
 $|11100010\rangle$: amplitude $-0.136+0.000j$
 $|00100100\rangle$: amplitude $0.136+0.000j$

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude $0.188+0.000j$
 $|01110000\rangle$: amplitude $0.188+0.000j$
 $|01100010\rangle$: amplitude $-0.188+0.000j$
 $|10100100\rangle$: amplitude $0.188+0.000j$

Pair (233, 245) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude $0.136+0.000j$
 $|00110110\rangle$: amplitude $0.136+0.000j$
 $|11100010\rangle$: amplitude $-0.136+0.000j$
 $|00100100\rangle$: amplitude $0.136+0.000j$

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude $0.130+0.000j$
 $|01010111\rangle$: amplitude $-0.130+0.000j$
 $|10000011\rangle$: amplitude $0.130+0.000j$
 $|01000101\rangle$: amplitude $0.130+0.000j$

Pair (233, 246) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

$|11110000\rangle$: amplitude $0.136+0.000j$
 $|00110110\rangle$: amplitude $0.136+0.000j$
 $|11100010\rangle$: amplitude $-0.136+0.000j$
 $|00100100\rangle$: amplitude $0.136+0.000j$

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (233, 247) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (233, 248) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (233, 249) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (233, 250) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (233, 251) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (233, 252) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j

|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (233, 253) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (233, 254) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (233, 255) with energies 1.0021, 1.0021

State 233

Dominant basis-states:

|11110000> : amplitude 0.136+0.000j
|00110110> : amplitude 0.136+0.000j
|11100010> : amplitude -0.136+0.000j
|00100100> : amplitude 0.136+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j

|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (234, 235) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

Pair (234, 236) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|1100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (234, 237) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

Pair (234, 238) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

Pair (234, 239) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

Pair (234, 240) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

Pair (234, 241) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

Pair (234, 242) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (234, 243) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude -0.134+0.000j
 $|00011100\rangle$: amplitude 0.134+0.000j
 $|11001000\rangle$: amplitude 0.134+0.000j
 $|00001110\rangle$: amplitude 0.134+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (234, 244) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (234, 245) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (234, 246) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (234, 247) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude $-0.190+0.000j$
 $|01111011\rangle$: amplitude $-0.190+0.000j$
 $|01101001\rangle$: amplitude $0.190+0.000j$
 $|10111101\rangle$: amplitude $-0.190+0.000j$

Pair (234, 248) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$
 $|01011000\rangle$: amplitude $0.195+0.000j$
 $|10001100\rangle$: amplitude $0.195+0.000j$
 $|01001010\rangle$: amplitude $0.195+0.000j$

Pair (234, 249) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

$|11011010\rangle$: amplitude $-0.134+0.000j$
 $|00011100\rangle$: amplitude $0.134+0.000j$
 $|11001000\rangle$: amplitude $0.134+0.000j$
 $|00001110\rangle$: amplitude $0.134+0.000j$

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude $-0.152+0.000j$
 $|01111010\rangle$: amplitude $0.152+0.000j$
 $|10101110\rangle$: amplitude $0.152+0.000j$
 $|01101000\rangle$: amplitude $0.152+0.000j$

Pair (234, 250) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (234, 251) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (234, 252) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (234, 253) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (234, 254) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (234, 255) with energies 1.0021, 1.0021

State 234

Dominant basis-states:

|11011010> : amplitude -0.134+0.000j
|00011100> : amplitude 0.134+0.000j
|11001000> : amplitude 0.134+0.000j
|00001110> : amplitude 0.134+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (235, 236) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

Pair (235, 237) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (235, 238) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (235, 239) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j

|01101011> : amplitude -0.175+0.000j

|10101101> : amplitude 0.175+0.000j

|01111001> : amplitude -0.175+0.000j

Pair (235, 240) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

Pair (235, 241) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j

|01000000> : amplitude 0.252+0.000j

|10010100> : amplitude -0.252+0.000j

|01010010> : amplitude -0.252+0.000j

Pair (235, 242) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j

|00010010> : amplitude 0.354+0.000j

|11000110> : amplitude -0.354+0.000j

|00000000> : amplitude 0.354+0.000j

Pair (235, 243) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

Pair (235, 244) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j

|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j

|10100100> : amplitude 0.188+0.000j

Pair (235, 245) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j

|01100001> : amplitude 0.174+0.000j

|01110011> : amplitude -0.174+0.000j

|10110101> : amplitude 0.174+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude $0.130+0.000j$
 $|01010111\rangle$: amplitude $-0.130+0.000j$
 $|10000011\rangle$: amplitude $0.130+0.000j$
 $|01000101\rangle$: amplitude $0.130+0.000j$

Pair (235, 246) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude $-0.154+0.000j$
 $|00001000\rangle$: amplitude $-0.154+0.000j$
 $|11011100\rangle$: amplitude $0.154+0.000j$
 $|00011010\rangle$: amplitude $-0.154+0.000j$

Pair (235, 247) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude $-0.190+0.000j$
 $|01111011\rangle$: amplitude $-0.190+0.000j$
 $|01101001\rangle$: amplitude $0.190+0.000j$
 $|10111101\rangle$: amplitude $-0.190+0.000j$

Pair (235, 248) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

$|10100111\rangle$: amplitude $0.174+0.000j$
 $|01100001\rangle$: amplitude $0.174+0.000j$
 $|01110011\rangle$: amplitude $-0.174+0.000j$
 $|10110101\rangle$: amplitude $0.174+0.000j$

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (235, 249) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (235, 250) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (235, 251) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (235, 252) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (235, 253) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (235, 254) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j

|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (235, 255) with energies 1.0021, 1.0021

State 235

Dominant basis-states:

|10100111> : amplitude 0.174+0.000j
|01100001> : amplitude 0.174+0.000j
|01110011> : amplitude -0.174+0.000j
|10110101> : amplitude 0.174+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (236, 237) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

Pair (236, 238) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j

|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (236, 239) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (236, 240) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (236, 241) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j

$|01010010\rangle$: amplitude -0.252+0.000j

Pair (236, 242) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

Pair (236, 243) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (236, 244) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (236, 245) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (236, 246) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (236, 247) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (236, 248) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (236, 249) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (236, 250) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (236, 251) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 251

Dominant basis-states:

$|00000011\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (236, 252) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (236, 253) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

$|00100000\rangle$: amplitude -0.214+0.000j
 $|11100110\rangle$: amplitude 0.214+0.000j
 $|00110010\rangle$: amplitude 0.214+0.000j
 $|11110100\rangle$: amplitude 0.214+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (236, 254) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (236, 255) with energies 1.0021, 1.0021

State 236

Dominant basis-states:

|00100000> : amplitude -0.214+0.000j
|11100110> : amplitude 0.214+0.000j
|00110010> : amplitude 0.214+0.000j
|11110100> : amplitude 0.214+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (237, 238) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

Pair (237, 239) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

Pair (237, 240) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (237, 241) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (237, 242) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j

|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (237, 243) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (237, 244) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j
|00000110> : amplitude -0.268+0.000j
|11000000> : amplitude 0.268+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (237, 245) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j
|11010010> : amplitude -0.268+0.000j

|00000110> : amplitude -0.268+0.000j

|11000000> : amplitude 0.268+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j

|01010111> : amplitude -0.130+0.000j

|10000011> : amplitude 0.130+0.000j

|01000101> : amplitude 0.130+0.000j

Pair (237, 246) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j

|11010010> : amplitude -0.268+0.000j

|00000110> : amplitude -0.268+0.000j

|11000000> : amplitude 0.268+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j

|00001000> : amplitude -0.154+0.000j

|11011100> : amplitude 0.154+0.000j

|00011010> : amplitude -0.154+0.000j

Pair (237, 247) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j

|11010010> : amplitude -0.268+0.000j

|00000110> : amplitude -0.268+0.000j

|11000000> : amplitude 0.268+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j

|01111011> : amplitude -0.190+0.000j

|01101001> : amplitude 0.190+0.000j

|10111101> : amplitude -0.190+0.000j

Pair (237, 248) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

|00010100> : amplitude -0.268+0.000j

|11010010> : amplitude -0.268+0.000j

|00000110> : amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j

$|01011000\rangle$: amplitude 0.195+0.000j

$|10001100\rangle$: amplitude 0.195+0.000j

$|01001010\rangle$: amplitude 0.195+0.000j

Pair (237, 249) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j

$|11010010\rangle$: amplitude -0.268+0.000j

$|00000110\rangle$: amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j

$|01111010\rangle$: amplitude 0.152+0.000j

$|10101110\rangle$: amplitude 0.152+0.000j

$|01101000\rangle$: amplitude 0.152+0.000j

Pair (237, 250) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j

$|11010010\rangle$: amplitude -0.268+0.000j

$|00000110\rangle$: amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j

$|01101110\rangle$: amplitude 0.156+0.000j

$|10111010\rangle$: amplitude -0.156+0.000j

$|01111100\rangle$: amplitude 0.156+0.000j

Pair (237, 251) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j

$|11010010\rangle$: amplitude -0.268+0.000j

$|00000110\rangle$: amplitude -0.268+0.000j

$|11000000\rangle$: amplitude 0.268+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude $0.120+0.000j$
 $|11000001\rangle$: amplitude $0.120+0.000j$
 $|00010101\rangle$: amplitude $-0.120+0.000j$
 $|11010011\rangle$: amplitude $0.120+0.000j$

Pair (237, 252) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude $-0.268+0.000j$
 $|11010010\rangle$: amplitude $-0.268+0.000j$
 $|00000110\rangle$: amplitude $-0.268+0.000j$
 $|11000000\rangle$: amplitude $0.268+0.000j$

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude $0.250+0.000j$
 $|01110110\rangle$: amplitude $-0.250+0.000j$
 $|10110000\rangle$: amplitude $-0.250+0.000j$
 $|10100010\rangle$: amplitude $-0.250+0.000j$

Pair (237, 253) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude $-0.268+0.000j$
 $|11010010\rangle$: amplitude $-0.268+0.000j$
 $|00000110\rangle$: amplitude $-0.268+0.000j$
 $|11000000\rangle$: amplitude $0.268+0.000j$

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude $-0.256+0.000j$
 $|11010011\rangle$: amplitude $0.256+0.000j$
 $|11000001\rangle$: amplitude $0.256+0.000j$
 $|00000111\rangle$: amplitude $0.256+0.000j$

Pair (237, 254) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude $-0.268+0.000j$
 $|11010010\rangle$: amplitude $-0.268+0.000j$
 $|00000110\rangle$: amplitude $-0.268+0.000j$
 $|11000000\rangle$: amplitude $0.268+0.000j$

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (237, 255) with energies 1.0021, 1.0021

State 237

Dominant basis-states:

$|00010100\rangle$: amplitude -0.268+0.000j
 $|11010010\rangle$: amplitude -0.268+0.000j
 $|00000110\rangle$: amplitude -0.268+0.000j
 $|11000000\rangle$: amplitude 0.268+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (238, 239) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

Pair (238, 240) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (238, 241) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (238, 242) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (238, 243) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (238, 244) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (238, 245) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (238, 246) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j

|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (238, 247) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (238, 248) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (238, 249) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

|01001111> : amplitude 0.191+0.000j
|01011101> : amplitude 0.191+0.000j
|10011011> : amplitude 0.191+0.000j
|10001001> : amplitude -0.191+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j

$|01101000\rangle$: amplitude 0.152+0.000j

Pair (238, 250) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (238, 251) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (238, 252) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (238, 253) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (238, 254) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (238, 255) with energies 1.0021, 1.0021

State 238

Dominant basis-states:

$|01001111\rangle$: amplitude 0.191+0.000j
 $|01011101\rangle$: amplitude 0.191+0.000j
 $|10011011\rangle$: amplitude 0.191+0.000j
 $|10001001\rangle$: amplitude -0.191+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (239, 240) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

Pair (239, 241) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (239, 242) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (239, 243) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

Pair (239, 244) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (239, 245) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (239, 246) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (239, 247) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (239, 248) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

$|10111111\rangle$: amplitude -0.175+0.000j
 $|01101011\rangle$: amplitude -0.175+0.000j
 $|10101101\rangle$: amplitude 0.175+0.000j
 $|01111001\rangle$: amplitude -0.175+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (239, 249) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (239, 250) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (239, 251) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (239, 252) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j

|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (239, 253) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (239, 254) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j
|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (239, 255) with energies 1.0021, 1.0021

State 239

Dominant basis-states:

|10111111> : amplitude -0.175+0.000j
|01101011> : amplitude -0.175+0.000j

|10101101> : amplitude 0.175+0.000j
|01111001> : amplitude -0.175+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (240, 241) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

Pair (240, 242) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (240, 243) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

Pair (240, 244) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j

|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j

|10100100> : amplitude 0.188+0.000j

Pair (240, 245) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j

|01010111> : amplitude -0.130+0.000j

|10000011> : amplitude 0.130+0.000j

|01000101> : amplitude 0.130+0.000j

Pair (240, 246) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j

|00110011> : amplitude 0.158+0.000j

|00100001> : amplitude 0.158+0.000j

|11100111> : amplitude 0.158+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (240, 247) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (240, 248) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (240, 249) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (240, 250) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (240, 251) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (240, 252) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

$|11110101\rangle$: amplitude -0.158+0.000j
 $|00110011\rangle$: amplitude 0.158+0.000j
 $|00100001\rangle$: amplitude 0.158+0.000j
 $|11100111\rangle$: amplitude 0.158+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (240, 253) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (240, 254) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (240, 255) with energies 1.0021, 1.0021

State 240

Dominant basis-states:

|11110101> : amplitude -0.158+0.000j
|00110011> : amplitude 0.158+0.000j
|00100001> : amplitude 0.158+0.000j
|11100111> : amplitude 0.158+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j

|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (241, 242) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

Pair (241, 243) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (241, 244) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

Pair (241, 245) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (241, 246) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (241, 247) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j

$|10111101\rangle$: amplitude -0.190+0.000j

Pair (241, 248) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (241, 249) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (241, 250) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

$|10000110\rangle$: amplitude -0.252+0.000j
 $|01000000\rangle$: amplitude 0.252+0.000j
 $|10010100\rangle$: amplitude -0.252+0.000j
 $|01010010\rangle$: amplitude -0.252+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (241, 251) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (241, 252) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (241, 253) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (241, 254) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (241, 255) with energies 1.0021, 1.0021

State 241

Dominant basis-states:

|10000110> : amplitude -0.252+0.000j
|01000000> : amplitude 0.252+0.000j
|10010100> : amplitude -0.252+0.000j
|01010010> : amplitude -0.252+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (242, 243) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

Pair (242, 244) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

Pair (242, 245) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

Pair (242, 246) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (242, 247) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (242, 248) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (242, 249) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

$|11010100\rangle$: amplitude 0.354+0.000j
 $|00010010\rangle$: amplitude 0.354+0.000j
 $|11000110\rangle$: amplitude -0.354+0.000j
 $|00000000\rangle$: amplitude 0.354+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (242, 250) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (242, 251) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (242, 252) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (242, 253) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j

|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (242, 254) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (242, 255) with energies 1.0021, 1.0021

State 242

Dominant basis-states:

|11010100> : amplitude 0.354+0.000j
|00010010> : amplitude 0.354+0.000j
|11000110> : amplitude -0.354+0.000j
|00000000> : amplitude 0.354+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (243, 244) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j

|01110000> : amplitude 0.188+0.000j

|01100010> : amplitude -0.188+0.000j

|10100100> : amplitude 0.188+0.000j

Pair (243, 245) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j

|01010111> : amplitude -0.130+0.000j

|10000011> : amplitude 0.130+0.000j

|01000101> : amplitude 0.130+0.000j

Pair (243, 246) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

|10001001> : amplitude 0.136+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j

|00001000> : amplitude -0.154+0.000j

|11011100> : amplitude 0.154+0.000j

|00011010> : amplitude -0.154+0.000j

Pair (243, 247) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j

|10011011> : amplitude -0.136+0.000j

|01001111> : amplitude -0.136+0.000j

$|10001001\rangle$: amplitude $0.136+0.000j$

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude $-0.190+0.000j$

$|01111011\rangle$: amplitude $-0.190+0.000j$

$|01101001\rangle$: amplitude $0.190+0.000j$

$|10111101\rangle$: amplitude $-0.190+0.000j$

Pair (243, 248) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude $-0.136+0.000j$

$|10011011\rangle$: amplitude $-0.136+0.000j$

$|01001111\rangle$: amplitude $-0.136+0.000j$

$|10001001\rangle$: amplitude $0.136+0.000j$

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$

$|01011000\rangle$: amplitude $0.195+0.000j$

$|10001100\rangle$: amplitude $0.195+0.000j$

$|01001010\rangle$: amplitude $0.195+0.000j$

Pair (243, 249) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude $-0.136+0.000j$

$|10011011\rangle$: amplitude $-0.136+0.000j$

$|01001111\rangle$: amplitude $-0.136+0.000j$

$|10001001\rangle$: amplitude $0.136+0.000j$

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude $-0.152+0.000j$

$|01111010\rangle$: amplitude $0.152+0.000j$

$|10101110\rangle$: amplitude $0.152+0.000j$

$|01101000\rangle$: amplitude $0.152+0.000j$

Pair (243, 250) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude $-0.136+0.000j$

$|10011011\rangle$: amplitude $-0.136+0.000j$

$|01001111\rangle$: amplitude $-0.136+0.000j$

$|10001001\rangle$: amplitude $0.136+0.000j$

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (243, 251) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (243, 252) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (243, 253) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

$|01011101\rangle$: amplitude -0.136+0.000j
 $|10011011\rangle$: amplitude -0.136+0.000j
 $|01001111\rangle$: amplitude -0.136+0.000j
 $|10001001\rangle$: amplitude 0.136+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (243, 254) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (243, 255) with energies 1.0021, 1.0021

State 243

Dominant basis-states:

|01011101> : amplitude -0.136+0.000j
|10011011> : amplitude -0.136+0.000j
|01001111> : amplitude -0.136+0.000j
|10001001> : amplitude 0.136+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (244, 245) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

Pair (244, 246) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

Pair (244, 247) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

Pair (244, 248) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j

|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (244, 249) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (244, 250) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (244, 251) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j

|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (244, 252) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (244, 253) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (244, 254) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

|10110110> : amplitude 0.188+0.000j
|01110000> : amplitude 0.188+0.000j
|01100010> : amplitude -0.188+0.000j
|10100100> : amplitude 0.188+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j

$|01001000\rangle$: amplitude 0.168+0.000j

Pair (244, 255) with energies 1.0021, 1.0021

State 244

Dominant basis-states:

$|10110110\rangle$: amplitude 0.188+0.000j
 $|01110000\rangle$: amplitude 0.188+0.000j
 $|01100010\rangle$: amplitude -0.188+0.000j
 $|10100100\rangle$: amplitude 0.188+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (245, 246) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

Pair (245, 247) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (245, 248) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (245, 249) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (245, 250) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (245, 251) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (245, 252) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (245, 253) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

|10010001> : amplitude 0.130+0.000j
|01010111> : amplitude -0.130+0.000j
|10000011> : amplitude 0.130+0.000j
|01000101> : amplitude 0.130+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (245, 254) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (245, 255) with energies 1.0021, 1.0021

State 245

Dominant basis-states:

$|10010001\rangle$: amplitude 0.130+0.000j
 $|01010111\rangle$: amplitude -0.130+0.000j
 $|10000011\rangle$: amplitude 0.130+0.000j
 $|01000101\rangle$: amplitude 0.130+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (246, 247) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

State 247

Dominant basis-states:

$|10101111\rangle$: amplitude -0.190+0.000j
 $|01111011\rangle$: amplitude -0.190+0.000j
 $|01101001\rangle$: amplitude 0.190+0.000j
 $|10111101\rangle$: amplitude -0.190+0.000j

Pair (246, 248) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude -0.195+0.000j
 $|01011000\rangle$: amplitude 0.195+0.000j
 $|10001100\rangle$: amplitude 0.195+0.000j
 $|01001010\rangle$: amplitude 0.195+0.000j

Pair (246, 249) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

Pair (246, 250) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

$|11001110\rangle$: amplitude -0.154+0.000j
 $|00001000\rangle$: amplitude -0.154+0.000j
 $|11011100\rangle$: amplitude 0.154+0.000j
 $|00011010\rangle$: amplitude -0.154+0.000j

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

Pair (246, 251) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (246, 252) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (246, 253) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (246, 254) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j

|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (246, 255) with energies 1.0021, 1.0021

State 246

Dominant basis-states:

|11001110> : amplitude -0.154+0.000j
|00001000> : amplitude -0.154+0.000j
|11011100> : amplitude 0.154+0.000j
|00011010> : amplitude -0.154+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (247, 248) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

Pair (247, 249) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j

|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

Pair (247, 250) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (247, 251) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j
|10111101> : amplitude -0.190+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (247, 252) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j
|01111011> : amplitude -0.190+0.000j
|01101001> : amplitude 0.190+0.000j

|10111101> : amplitude -0.190+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j

|01110110> : amplitude -0.250+0.000j

|10110000> : amplitude -0.250+0.000j

|10100010> : amplitude -0.250+0.000j

Pair (247, 253) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j

|01111011> : amplitude -0.190+0.000j

|01101001> : amplitude 0.190+0.000j

|10111101> : amplitude -0.190+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j

|11010011> : amplitude 0.256+0.000j

|11000001> : amplitude 0.256+0.000j

|00000111> : amplitude 0.256+0.000j

Pair (247, 254) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j

|01111011> : amplitude -0.190+0.000j

|01101001> : amplitude 0.190+0.000j

|10111101> : amplitude -0.190+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j

|01011010> : amplitude -0.168+0.000j

|10001110> : amplitude 0.168+0.000j

|01001000> : amplitude 0.168+0.000j

Pair (247, 255) with energies 1.0021, 1.0021

State 247

Dominant basis-states:

|10101111> : amplitude -0.190+0.000j

|01111011> : amplitude -0.190+0.000j

|01101001> : amplitude 0.190+0.000j

|10111101> : amplitude -0.190+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude $0.155+0.000j$
 $|01101111\rangle$: amplitude $-0.155+0.000j$
 $|01111101\rangle$: amplitude $0.155+0.000j$
 $|10111011\rangle$: amplitude $0.155+0.000j$

Pair (248, 249) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$
 $|01011000\rangle$: amplitude $0.195+0.000j$
 $|10001100\rangle$: amplitude $0.195+0.000j$
 $|01001010\rangle$: amplitude $0.195+0.000j$

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude $-0.152+0.000j$
 $|01111010\rangle$: amplitude $0.152+0.000j$
 $|10101110\rangle$: amplitude $0.152+0.000j$
 $|01101000\rangle$: amplitude $0.152+0.000j$

Pair (248, 250) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$
 $|01011000\rangle$: amplitude $0.195+0.000j$
 $|10001100\rangle$: amplitude $0.195+0.000j$
 $|01001010\rangle$: amplitude $0.195+0.000j$

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude $0.156+0.000j$
 $|01101110\rangle$: amplitude $0.156+0.000j$
 $|10111010\rangle$: amplitude $-0.156+0.000j$
 $|01111100\rangle$: amplitude $0.156+0.000j$

Pair (248, 251) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

$|10011110\rangle$: amplitude $-0.195+0.000j$
 $|01011000\rangle$: amplitude $0.195+0.000j$
 $|10001100\rangle$: amplitude $0.195+0.000j$
 $|01001010\rangle$: amplitude $0.195+0.000j$

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j
|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (248, 252) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (248, 253) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (248, 254) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j
|10001110> : amplitude 0.168+0.000j
|01001000> : amplitude 0.168+0.000j

Pair (248, 255) with energies 1.0021, 1.0021

State 248

Dominant basis-states:

|10011110> : amplitude -0.195+0.000j
|01011000> : amplitude 0.195+0.000j
|10001100> : amplitude 0.195+0.000j
|01001010> : amplitude 0.195+0.000j

State 255

Dominant basis-states:

|10101001> : amplitude 0.155+0.000j
|01101111> : amplitude -0.155+0.000j
|01111101> : amplitude 0.155+0.000j
|10111011> : amplitude 0.155+0.000j

Pair (249, 250) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

State 250

Dominant basis-states:

|10101000> : amplitude 0.156+0.000j
|01101110> : amplitude 0.156+0.000j
|10111010> : amplitude -0.156+0.000j
|01111100> : amplitude 0.156+0.000j

Pair (249, 251) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

State 251

Dominant basis-states:

|00000111> : amplitude 0.120+0.000j

|11000001> : amplitude 0.120+0.000j
|00010101> : amplitude -0.120+0.000j
|11010011> : amplitude 0.120+0.000j

Pair (249, 252) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

State 252

Dominant basis-states:

|01100100> : amplitude 0.250+0.000j
|01110110> : amplitude -0.250+0.000j
|10110000> : amplitude -0.250+0.000j
|10100010> : amplitude -0.250+0.000j

Pair (249, 253) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

State 253

Dominant basis-states:

|00010101> : amplitude -0.256+0.000j
|11010011> : amplitude 0.256+0.000j
|11000001> : amplitude 0.256+0.000j
|00000111> : amplitude 0.256+0.000j

Pair (249, 254) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

|10111100> : amplitude -0.152+0.000j
|01111010> : amplitude 0.152+0.000j
|10101110> : amplitude 0.152+0.000j
|01101000> : amplitude 0.152+0.000j

State 254

Dominant basis-states:

|10011100> : amplitude 0.168+0.000j
|01011010> : amplitude -0.168+0.000j

$|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (249, 255) with energies 1.0021, 1.0021

State 249

Dominant basis-states:

$|10111100\rangle$: amplitude -0.152+0.000j
 $|01111010\rangle$: amplitude 0.152+0.000j
 $|10101110\rangle$: amplitude 0.152+0.000j
 $|01101000\rangle$: amplitude 0.152+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (250, 251) with energies 1.0021, 1.0021

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

Pair (250, 252) with energies 1.0021, 1.0021

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j

$|10100010\rangle$: amplitude -0.250+0.000j

Pair (250, 253) with energies 1.0021, 1.0021

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (250, 254) with energies 1.0021, 1.0021

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (250, 255) with energies 1.0021, 1.0021

State 250

Dominant basis-states:

$|10101000\rangle$: amplitude 0.156+0.000j
 $|01101110\rangle$: amplitude 0.156+0.000j
 $|10111010\rangle$: amplitude -0.156+0.000j
 $|01111100\rangle$: amplitude 0.156+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (251, 252) with energies 1.0021, 1.0021

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

Pair (251, 253) with energies 1.0021, 1.0021

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (251, 254) with energies 1.0021, 1.0021

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (251, 255) with energies 1.0021, 1.0021

State 251

Dominant basis-states:

$|00000111\rangle$: amplitude 0.120+0.000j
 $|11000001\rangle$: amplitude 0.120+0.000j
 $|00010101\rangle$: amplitude -0.120+0.000j
 $|11010011\rangle$: amplitude 0.120+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

Pair (252, 253) with energies 1.0021, 1.0021

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude -0.256+0.000j
 $|11010011\rangle$: amplitude 0.256+0.000j
 $|11000001\rangle$: amplitude 0.256+0.000j
 $|00000111\rangle$: amplitude 0.256+0.000j

Pair (252, 254) with energies 1.0021, 1.0021

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude 0.250+0.000j
 $|01110110\rangle$: amplitude -0.250+0.000j
 $|10110000\rangle$: amplitude -0.250+0.000j
 $|10100010\rangle$: amplitude -0.250+0.000j

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

Pair (252, 255) with energies 1.0021, 1.0021

State 252

Dominant basis-states:

$|01100100\rangle$: amplitude $0.250+0.000j$
 $|01110110\rangle$: amplitude $-0.250+0.000j$
 $|10110000\rangle$: amplitude $-0.250+0.000j$
 $|10100010\rangle$: amplitude $-0.250+0.000j$

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude $0.155+0.000j$
 $|01101111\rangle$: amplitude $-0.155+0.000j$
 $|01111101\rangle$: amplitude $0.155+0.000j$
 $|10111011\rangle$: amplitude $0.155+0.000j$

Pair (253, 254) with energies 1.0021, 1.0021

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude $-0.256+0.000j$
 $|11010011\rangle$: amplitude $0.256+0.000j$
 $|11000001\rangle$: amplitude $0.256+0.000j$
 $|00000111\rangle$: amplitude $0.256+0.000j$

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude $0.168+0.000j$
 $|01011010\rangle$: amplitude $-0.168+0.000j$
 $|10001110\rangle$: amplitude $0.168+0.000j$
 $|01001000\rangle$: amplitude $0.168+0.000j$

Pair (253, 255) with energies 1.0021, 1.0021

State 253

Dominant basis-states:

$|00010101\rangle$: amplitude $-0.256+0.000j$
 $|11010011\rangle$: amplitude $0.256+0.000j$
 $|11000001\rangle$: amplitude $0.256+0.000j$
 $|00000111\rangle$: amplitude $0.256+0.000j$

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude $0.155+0.000j$
 $|01101111\rangle$: amplitude $-0.155+0.000j$
 $|01111101\rangle$: amplitude $0.155+0.000j$
 $|10111011\rangle$: amplitude $0.155+0.000j$

Pair (254, 255) with energies 1.0021, 1.0021

State 254

Dominant basis-states:

$|10011100\rangle$: amplitude 0.168+0.000j
 $|01011010\rangle$: amplitude -0.168+0.000j
 $|10001110\rangle$: amplitude 0.168+0.000j
 $|01001000\rangle$: amplitude 0.168+0.000j

State 255

Dominant basis-states:

$|10101001\rangle$: amplitude 0.155+0.000j
 $|01101111\rangle$: amplitude -0.155+0.000j
 $|01111101\rangle$: amplitude 0.155+0.000j
 $|10111011\rangle$: amplitude 0.155+0.000j

3.5 Raw Output (Part 5)

Process finished with exit code 0

4. Interpretation of Results

Patterns observed across expanded Hilbert space.

5. Proposed Next Steps (toward v0.4)

Integration with backend; stability metrics.