GATESIDE

Optimization Report

General Parameters

Chip Name: e.g. the 5 qubit chip, unless we have codenames
Affected Qubits: e.g. Q1, Q4
Date and Time: 2021-07-28 11:13:01

Gate: iSWAP
Fidelity: 0.99966
Modulation Time: 50.96699 ns
Energy Levels per Qubit: 4

Signal Parameters

Signal Shape:

$$\Phi(t) = \Theta + \delta(t)\cos(\omega_\Phi t)$$

Approximate Frequency of the Tunable Bus:

$$\omega(\Phi) = \omega_0\sqrt{\cos(\pi\Phi(t))}$$

Parameters of Optimal Signal:
Theta: -0.42124
Delta: 0.03604
Omega_Phi: 0.56555 GHz
Modulation Time of Delta: 50.96699 ns
Rise Time of Modulation (0 to 100%): 25 ns

Circuit Parameters

Frequencies:
 Q1: 4.7381 GHz
 Q2: 4.1762 GHz
 Coupler: 8.96 GHz

Anharmonicities:
 Q1: -0.221 GHz
 Q2: -0.23 GHz
 Coupler: -0.08 GHz

Coupling Strengths:
 Q1 to Coupler: 0.0545 GHz
 Q2 to Coupler: 0.05552 GHz

Graphs