

# Optimization Report

## General Parameters

Chip Name: e.g. the 5 qubit chip, unless we have codenames

Targeted 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:

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

Amplitude Modulation:

$$\delta(t) = \delta_0 \cdot S(t)$$

Parameters of Optimal Signal:

$\Theta$ : -0.42124 [ $\Phi_0$ ]

$\delta_0$ : 0.03604 [ $\Phi_0$ ]

$\omega_{\Phi}$ : 0.56555 GHz

Total Modulation Time of  $\delta(t)$ : 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



