



d) Comparison of 1 Qubit and 2 Qubit Operations, Initialization & Readout, and Architecture Compatibility.

	1 Qubit	2 Qubit Operations		Initialization & Readout	Architecture Compatibility	
		Electron control qubit	Nuclear control qubit			
Electron	Wide pulse to drive all transitions 	Spin to photon 	Projected into entangled state 	Narrow pulse to drive single transition 		Shared Coil Separate Coil
Nuclear	Periodic coupling E in $ 0\rangle$ or $ 1\rangle$ 	E in superposition state 	E in superposition state 	E in $ 0\rangle$ or $ 1\rangle$ 	Shared Coil Separate Coil	
	Direct driving E decoheres 	E preserved 	Change phase odd & even pulses 	E in superposition state 	E in $ 0\rangle$ or $ 1\rangle$ 	Separate Coil

↑ DC magnetic field
↑ AC magnetic field