

proc0\_main<sub>0</sub> ———

proc0\_main<sub>1</sub> ———

 $proc1\_main_0 - H proc1\_main_1 -$ 

figures-2: single-qubit-gate-global-to-local-mapping

proc0\_main<sub>0</sub> —

proc0\_main<sub>1</sub> —

proc0\_entanglement —

proc0\_teleport —

Processor index 0 qubits

 $proc1_main_0$  —

 $proc1_main_1$  —

proc1\_entanglement ——

proc1\_teleport —

Processor index 1 qubits

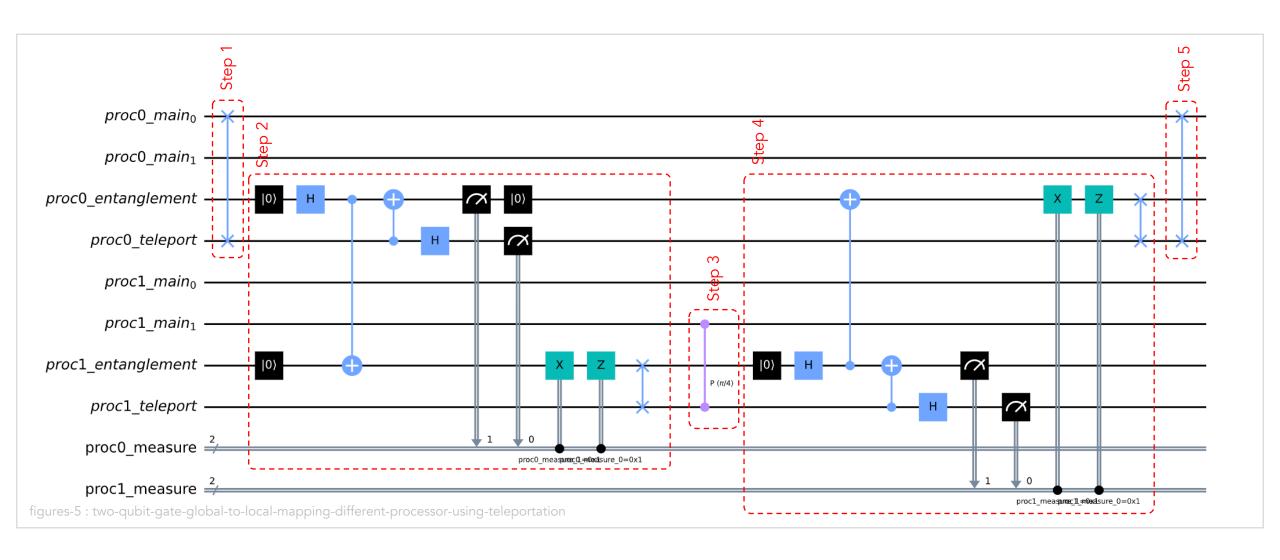
proc0\_measure  $\stackrel{2}{=}$ 

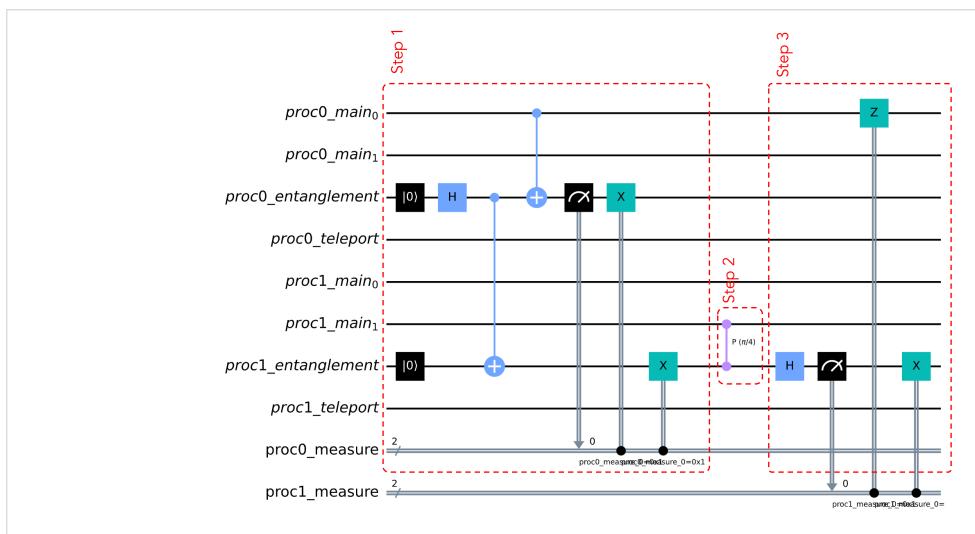
Processor index 0 classical bits

proc1\_measure  $\stackrel{2}{=}$ 

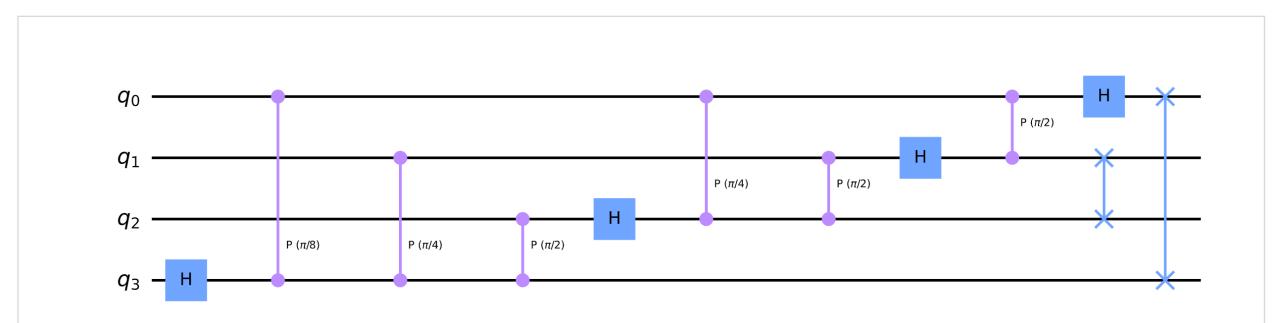
Processor index 1 classical bits

figures-4: quantum processor registers





figures-6: two-qubit-gate-global-to-local-mapping-different-processor-using-cat-state



figures-7: 4-bit local quantum Fourier transformation

