start

1st nibble   2nd nibble   1st nibble

CLKOUT

7

$\overline{CLKOUT}$

3

⟨ D[0:3] out | D[0:3] Valid X D[4:7] out | D[4:7] Valid X | ⟩

10

CLKOUT2

$\overline{CLKOUT2}$

t_{pd}

⟨ Q[0:3]

t_{pd}

⟨ Q[4:7]

Data Collection Window

$$CLKIN = CLKOUT2 + 2\ HC\phi 4$$

$$OR$$

$$\overline{CLKOUT2 + 3\ HC\phi 4}$$

$$OR$$

$$CLKOUT2 + 4\ HC\phi 4$$