

Summary

- To avoid a setup violation:

$$ClockPeriod > t_{pQ} + t_{comb} + t_{setup}$$

- To avoid a hold violation:

$$t_{pQ} + t_{comb} > t_{hold}$$

With Skew and Jitter

- To avoid a setup violation:

$$ClockPeriod > t_{pQ} + t_{comb} + t_{setup} + t_{skew} + 2 \times t_{jitter}$$

- To avoid a hold violation:

$$t_{pQ} + t_{comb} > t_{hold} + t_{skew} + 2 \times t_{jitter}$$