

7.4 Device Functional Modes

7.4.1 Reset Implementation

When EN is deasserted (low), the SN65DSI83 device is in shutdown or reset state. In this state, CMOS inputs are ignored, the MIPI D-PHY inputs are disabled and outputs are high impedance. It is critical to transition the EN input from a low level to a high level after the V<sub>CC</sub> supply has reached the minimum operating voltage, as shown in Figure 7-1. This is achieved by a control signal to the EN input, or by an external capacitor connected between EN and GND.

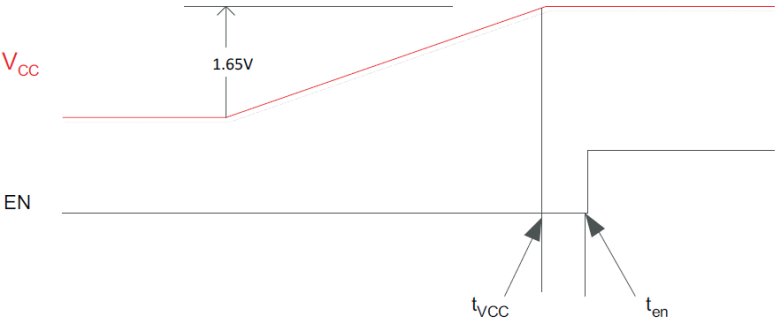


Figure 7-1. Cold Start V<sub>CC</sub> Ramp up to EN

Fig 1 Start Vcc Ramp up to EN

| EN, ULPS, RESET    |                             |                              |     |    |
|--------------------|-----------------------------|------------------------------|-----|----|
| t <sub>en</sub>    | Enable time from EN or ULPS | t <sub>ci(o)</sub> = 12.9 ns | 1   | ms |
| t <sub>dis</sub>   | Disable time to standby     |                              | 0.1 | ms |
| t <sub>reset</sub> | Reset Time                  |                              | 10  | ms |

Fig 2 t<sub>en</sub> spec

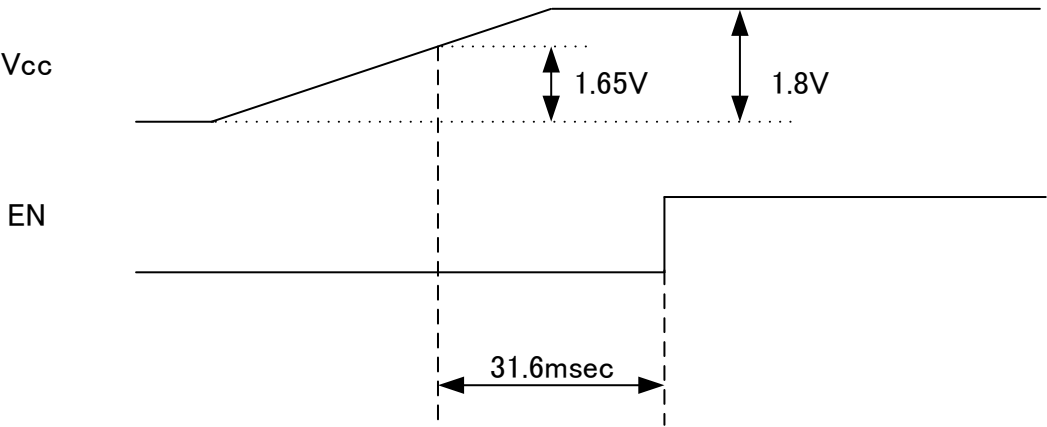


Fig 3 our system