

---

## USB 2.0 UTMI+ lv13 PHY

---

### Features

- SMIC 40 nm low leakage 6 metal process
- Ultra low area:
  - <0.06 mm<sup>2</sup> excluding OTG and I/O pads
  - <0.065 mm<sup>2</sup> including OTG but excluding I/O pads
- Ultra low power, typically:
  - 30 mW during HS-transmission
  - 7 mW during HS-receive
  - 5 mW during HS-idle
- Extensive built in self test for production testing
- UTMI+ level 3 compliant
- Internal reference resistor that automatically replaces the external reference resistor if no external resistor has been connected
- One control bit DP/DM polarity inversion for simplified PCB signal routing both for top and bottom mounted connectors
- Supports 4, 8, 12, 20, 25, 40, 50 and 100 MHz reference clock frequencies