

PI3TB212

10.3Gbps Thunderbolt™ and DisplayPort™ Switch

Pericom Semiconductor's PI3TB212 is a high-speed multiplexer/demultiplexer switch. The PI3TB212 can switch signals up to 10.3125Gbps for DisplayPort™ and Thunderbolt™(TB) applications. The device supports 5.4Gbps for DisplayPort™ and 10.3125Gbps for Thunderbolt™.

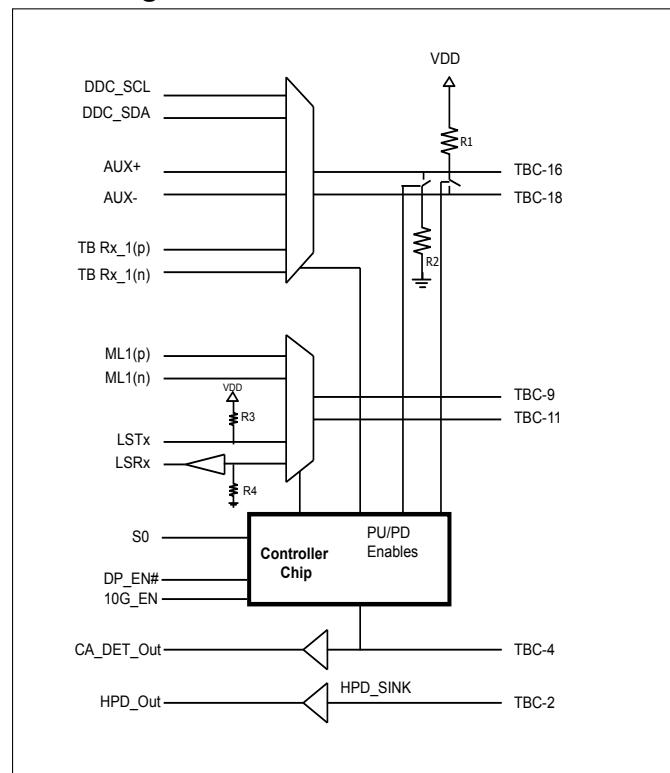
PI3TB212 is a major advance over first-generation Thunderbolt™ (TB) solutions. PI3TB212 integrates the 10.3125 Gbps Thunderbolt path. This eliminates external PIN diode switches, thereby reducing board space, reducing cost, and improving link performance.

PI3TB212 achieves excellent signal integrity at 10.3125 Gbps as evidenced by measured results.

Application

- PC, Notebook
- HD Storage interface

Block Diagram



Features

- Supports 5.4Gbps for DisplayPort 1.2 and 10.3Gbps for Thunderbolt Electrical Standard
- Supports DP and DP++ Configuration
- Supports AUX and DDC MUX
- V_{DD} Operating Range for normal operation: $3.3V \pm 10\%$
- Extended operation down to 2.5V min on the LSTx/LSRx to TBC-9/TBC-11 channels (performance not guaranteed, but all buffers will still operate)
- ESD protection on all pins
- Packaging (Pb-free & Green): 3.0 mm x 3.0 mm, 24-contact TQFN

Application Diagram

