

Knowledgebase > Setup / update > Difference between PowerTrace Serial and PowerTrace III+Serial Preprocessor

Difference between PowerTrace Serial and PowerTrace III+Serial Preprocessor

2024-12-04 - Comments (0) - Setup / update

The following outlines the key distinctions:

- PowerTrace Serial supports up :
 - 8 lanes/12.5 GT/s
 - 4 lanes/22.5 GT/s with Aurora 2 Preprocessor
- In contrast, the Serial Preprocessor allows for up to 4 lanes, with the speed distributed as follows:
 - Up to 6.25 GT/s per lane for configurations using 3 lanes.
 - Up to 5.00 GT/s per lane for configurations using 4 lanes.

- Serial interfaces are designed specifically for high-speed data transfers.
 Minimum transfer rates for each system are as follows:
 - **500 Mbps** for the PowerTrace Serial.
 - **625 Mbps** for the Serial Preprocessor.

2. **Design Considerations for PCIe/HSDP**

If a customer plans to transition to a PCle-based or HSDP project in the future, He cannot use the PowerTrace III with the Serial Preprocessor. Instead, the PowerTrace Serial should be used.