Difference between PowerTrace Serial and PowerTrace III+Serial Preprocessor

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The following outlines the key distinctions:

1. **Data Lane Capabilities:**

   - **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 PCIe-based or HSDP project in the future, He cannot use the PowerTrace III with the Serial Preprocessor. Instead, the PowerTrace Serial should be used.