

# EE Digital Electronics:

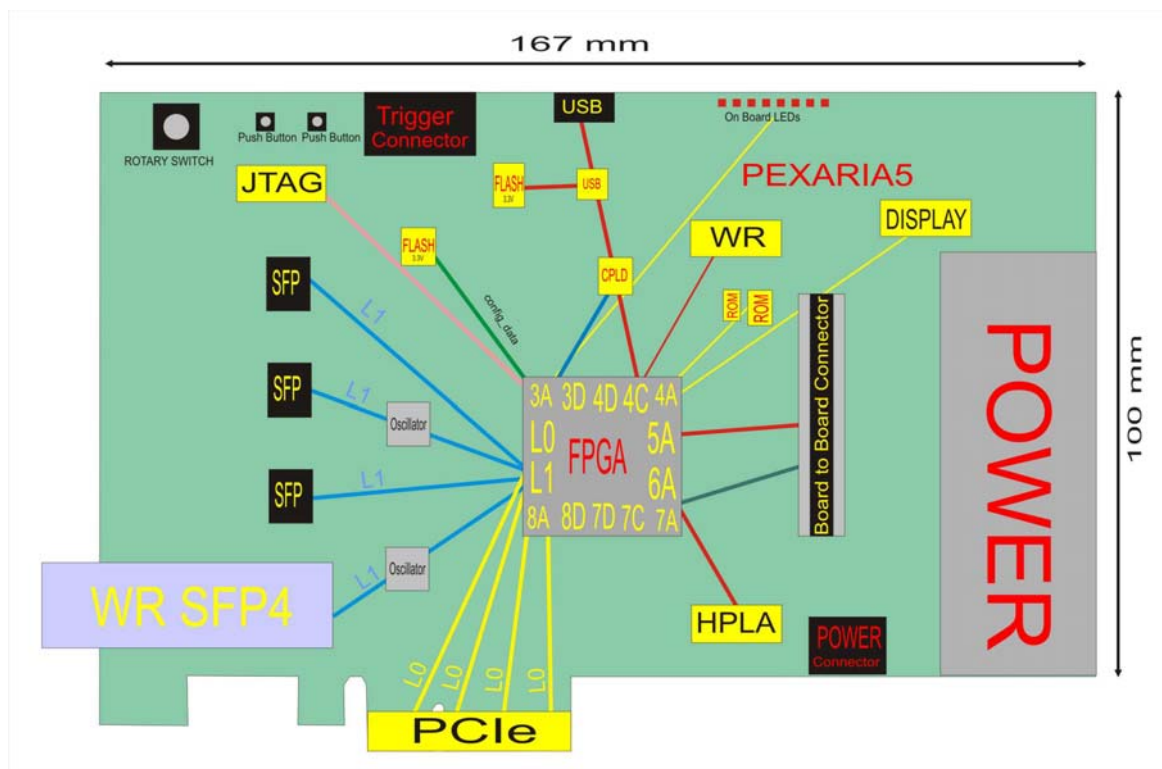
Date:	07.10.2013
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Title:	PEXARIA5 General Description.

PEXARIA5 is a PCI-express to optical link interface card with White-Rabbit functionality. The card is based on Altera ARRIA 5 GX FPGA.

Board features:

- 4 x SFP connectors and cages.
- PCI Express Connector, x 4 PCIe Gen1 or Gen2.
- Arria 5 GX, 5AGXMA3D4F27C5 FPGA.
- Board to board connector (32 LVDS pairs).
- 2 x Clock Oscillators 100 MHz and 125 MHz.
- White-Rabbit interface (WR).
- USB Interface<sup>1</sup> (USB micro connector).
- JTAG Interface connector.
- SPI x 4 Flash Memory 256 Mb.
- Configuration CPLD.
- Two one-wire ROMs/EEPROMs.
- 8 x user LEDs<sup>1</sup>.
- LCD Graphic Display connector<sup>1</sup>.
- Logic analyzer connector (16 channels HPLA)<sup>1</sup>.
- User Rotary Switch 16 positions.
- 2 user Push Buttons<sup>1</sup>.
- High current DC-DC modules (up to 13A) for FPGA core. Power status LEDs.
- Auxiliary power supply connector<sup>1</sup>.

<sup>1</sup> For debug purposes.



Connection diagram of Pexaria 5

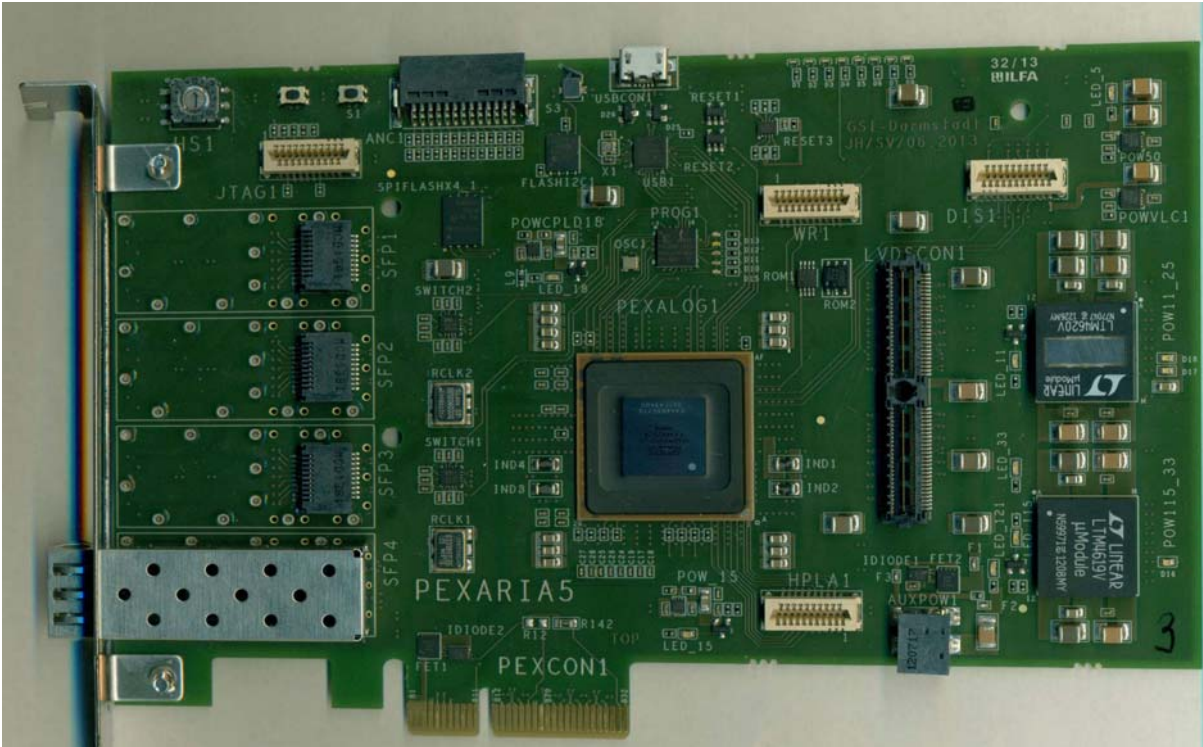


Photo of PEXARIA5