Product Brief

XCVU160 FPGA Module

Product Summary

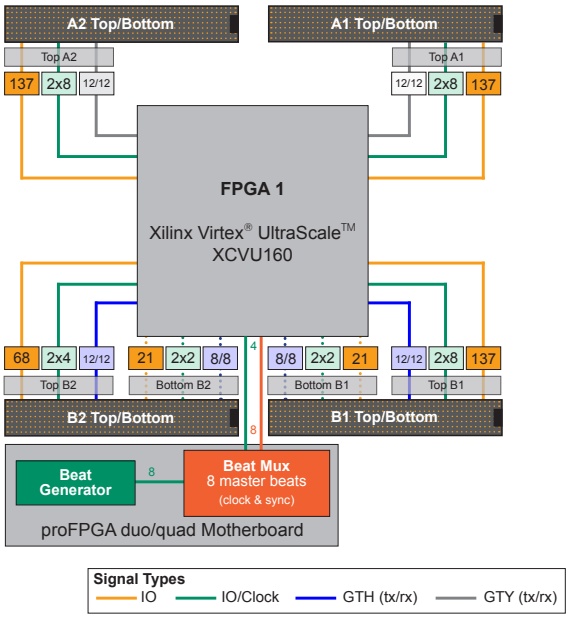
The proFPGA XCVU160 FPGA module is the logic core for the scalable, and modular multi FPGA proFPGA solution, which fulfills highest needs in the area of FPGA based Prototyping. It addresses customers who need a scalable and most flexible high performance ASIC Prototyping solution for early software development and real time system verification. The innovative system concept and technologies offer highest flexibility and reusability for several projects, which guarantees the best return on invest.

The proFPGA XCVU160 FPGA module, which only works in combination with a proFPGA uno, duo or quad motherboard offers with its latest Virtex® UltraScale™ FPGA technology maximum capacity of up to 11 M ASIC gates alone in one FPGA. It is designed to achieve highest performance in combination with its high speed connectors. The module offers with its 6 extension sites up to 585 user I/Os for daughter boards (e.g. memory boards, interface boards), interconnecting cables or customer specific application boards.

Besides the standard I/Os the module also provides 64 high speed serial transceivers (24 x GTY and 40 x GTH) running up to 16.375 Gbps for high speed interfaces like PCIe Gen4. All of the 6 extension sites offer individually and step less adjustable voltage regions from 1.2V up to 1.8V.

profpga XCVU160 FPGA Module Specification	
FPGA Type	- Xilinx Virtex XCVU160 (speedgrade 1, 2)
Capacity	- Up to 11 M ASIC gates
FPGA memory	- 115 Mbit
DSP slices	- 1560
Signaling rate	- Standard I/O: up to 1Gbps single ended - GTH Transceiver: up to 12.5/16.375 Gbps speedgrade 1/2 - GTY Transceiver: up to 12.5/16.375 Gbps speedgrade 1/2
Extension sites	- 6 Extension sites with High Performance connectors
I/O resources	- Overall 585 signals for I/O and inter FPGA connection - 3x153 I/Os and 1x 76 I/Os to top side connectors - 2x 25 I/Os to bottom side connectors - Single-ended or differential
High speed I/O transceivers	- Overall 64 high speed transceivers on top and bottom side - 2x 12 GTY and 2 x 12 GTH to top side connectors - 2 x 8 GTH to bottom side connectors
Voltage regions	- 6 individually adjustable voltage regions per FPGA Module - Step less from 1.2 up 1.8V - Automated adjustment of right voltage for daughter boards
Configuration	- With proFPGA duo/quad Motherboard via Ethernet, USB, PCIe
Order Code	- PROF-FM-XCVU160-1/PROF-FM-XCVU160-2 (speedgrade 1/2)

profpga XCVU160 FPGA Module I/O and Clock Architecture



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