Product Brief

XCVU13P FPGA Module

Product Summary

The proFPGA XCVU13P 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 reuseability for several projects, which guarantees the best return on invest.

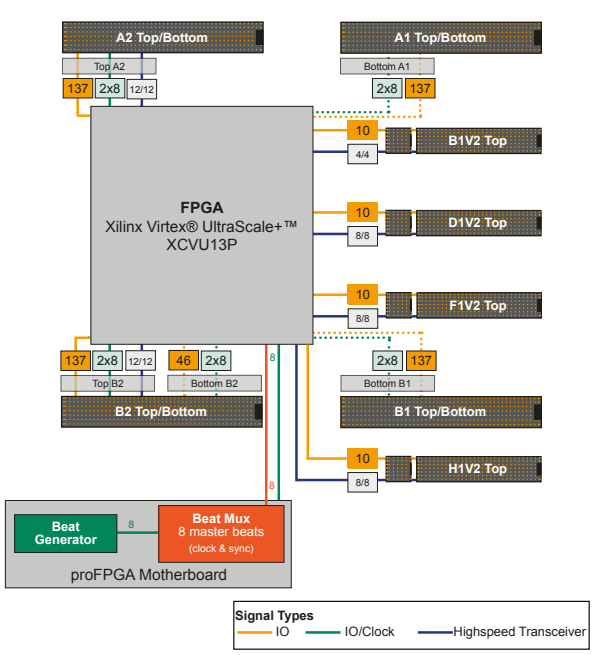
The proFPGA XCVU13P FPGA module, which only works in combination with an proFPGA uno, duo or quad motherboard offers with its latest Virtex UltraScale+ FPGA technology a capacity of up to 20 M ASIC gates alone in one FPGA. It is designed to achieve highest performance in combination with its high speed connectors. The module offers with its 9 extension sites up to 674 user I/Os for daughter boards (e.g. memory boards, interface boards), interconneting cables or customer specific application boards.

Besides the standard I/Os the module also provides 52 high speed serial transceivers (MGTs) for high speed interfaces like PCIe Gen3, Gen4, DDR4 memories, QSFP+ or QSFP28. 4 extension sites offer individually and stepless adjustable voltage regions from 1.1V up to 1.8V.

profpga XCVU13P FPGA Module Specification

FPGA Type	- Xilinx Virtex Virtex UltraScale+ XCVU13P
Capacity	- Up to 20 M ASIC gates
FPGA-internal memory	- Up to 94.5 Mbit - Up to 360 Mbit (UltraRAM)
Signaling rate	- Up to 1.4 Gbps (standard I/O)/ 32.75 Gbps (MGT)
Extension sites	- 5 x Standard V1 and 4 x Highspeed V2 connectors
I/O resources	- Overall 674 signals for I/O and inter FPGA connection - 4 x 153 I/Os to top and bottom side connectors - 1 x 62 I/Os to top and bottom side connectors - 4 x 10 I/Os on top side proFPGA V2 connectors - Single-ended or differential
High speed I/O transceivers	- overall 52 MGTS - 2x12 on proFPGA V1 extension sites - 3x8 and 1x4 on proFPGA V2 high-speed extension sites
FPGAs interconnections	- Flexible via high-speed interconnection boards or cables
Voltage regions	- 9 voltage regions per FPGA Module - 5 voltage regions at 1.8V - 4 individually adjustable stepless from 1.1 up 1.8V - Automated adjustment of right voltage for daughter boards
Configuration	- With proFPGA uno/duo/quad Motherboard via Ethernet, PCIe
Order Code	- PROF-FM-XCVU13P

profpga XCVU13P FPGA Module I/O and Clock Architecture



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