

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 duo or quad motherboard offers with its latest Virtex UltraScale+ FPGA technology maximum 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 5 extension sites up to 674 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 48 high speed serial transceivers (MGTs) for high speed interfaces like PCIe Gen2, Gen3, USB 3.0 or DDR3 memories. All of the 5 extension sites offer individually and stepless adjustable voltage regions from 1.1V up to 1.8V.

VIRTEX.
UltraSCALE+



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 Gbps (standard I/O)/ 32.75 Gbps (MGT)
Extension sites	- 5 Extension sites with High Performance 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 - Single-ended or differential
High speed I/O transceivers	- 4 dedicated MGTs running up to 32.75 Gbps
FPGAs interconnections	- Flexible via high-speed interconnection boards or cables
Voltage regions	- 5 individually adjustable voltage regions per FPGA Module - Stepless from 1.1 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-XCVU13P

profpga XCVU13P FPGA Module I/O and Clock Architecture

