

# XCVU19P FPGA Module

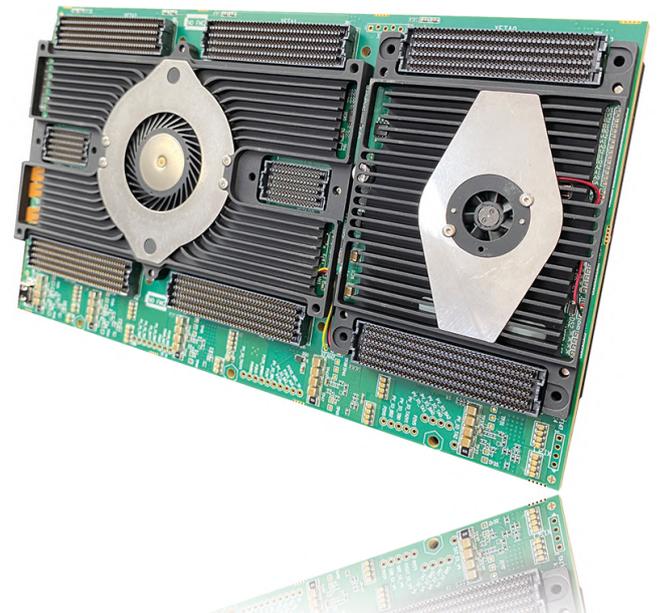
## Product Summary

The proFPGA XCVU19P 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 XCVU19P FPGA module, which only works in combination with an proFPGA uno, duo or quad Motherboard 2.0 offers with its latest Xilinx Virtex® UltraScale+™ FPGA technology maximum capacity of up to 48 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 14 extension sites up to 1932 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 multi gigabit serial transceivers (MGTs) for high speed interfaces like PCIe gen3/4, SATA or QSFP+/28 memories. 12 extension sites offer individually and stepless adjustable voltage regions from 1.2V up to 1.8V and two sites offer up to 3.3V

VIRTEX®  
UltraSCALE+™



profpga XCVU19P FPGA Module Specification	
FPGA Type	- Xilinx Virtex Virtex UltraScale+ XCVU19P
Capacity	- Up to 48 M ASIC gates
FPGA-internal memory	- Up to 75 Mbit - Up to 90 Mbit (UltraRAM)
Signaling rate	- Up to 1 Gbps (standard I/O)/ 28 Gbps (MGT)
Extension sites	- 14 Extension sites with High Performance connectors
I/O resources	- Overall 1932 signals for I/O and inter FPGA connection - 6 x 153 and 2 x 48 to top side connectors - 6 x 153 to bottom side connectors - Single-ended or differential
High speed I/O transceivers	- 48 dedicated MGTs running up to 28 Gbps
FPGAs interconnections	- Flexible via high-speed interconnection boards or cables
Voltage regions	- 14 individually adjustable voltage regions per FPGA Module - Stepless from 1.2 up 1.8V (2 sites up to 3.3V) - Automated adjustment of right voltage for daughter boards
Configuration	- With proFPGA uno/duo/quad Motherboard via Ethernet, USB, PCIe
Order Code	- PROF-FM-XCVU19P

