

## **XCVU080 FPGA Module**

00101000101110001010000100011100

0000111110010100010111000101000010

.10101000010111000001110100110100010 1510000101110000011101001101000101

## **Product Summary**

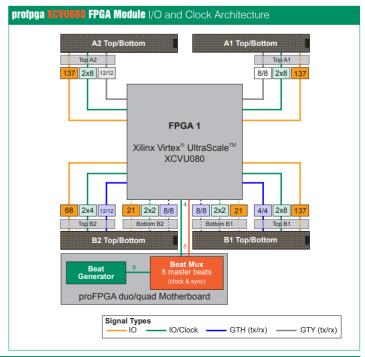
The proFPGA XCVU080 FPGA module is the logic core for the scalable, and modular multi FPGA proFPGA solution, which fulfills highest needs in the area of FPGA based Prototyping. It addresses customers who need a scalable and most flexible high performance ASIC Prototyping solution for early software development 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 XCVU080 FPGA module, which only works in combination with a proFPGA uno, duo or quad motherboard offers with its latest Virtex<sup>®</sup> UltraScale<sup>™</sup> FPGA technology maximum capacity of up to 5.3 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 52 high speed serial transceivers (20 x GTY and 32x GTH) running up to 16.375 Gbps for high speed interfaces like PCle Gen4. All of the 6 extension sites offer individually and step less adjustable voltage regions from 1.2V up to 1.8V.

· vermee	
protpga XCVUU8L	FPGA Module Specification
FPGA Type	- Xilinx Virtex XCVU080 (speedgrade 1, 2)
Capacity	- Up to 5.3 M ASIC gates
FPGA memory	- 50 Mbit
DSP slices	- 672
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 52 high speed transceivers on top and bottom side - 1x 12 and 1x 8 GTY, 1 x 12 and 1 x 4 GTH to top side - 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-XCVU080-1/PROF-FM-XCVU080-2 (speedgrade 1/2)





Copyright © 2016 PRO DESIGN Electronic GmbH. All rights reserved. The proFPGA logo is a registered trademarks of PRO DESIGN Electronic GmbH. All other names mentioned herein are trademarks or registered trademarks of their respective companies.

PRO DESIGN Electronic GmbH Albert-Mayer-Str. 14 - 16 83052 Bruckmuehl, Germany

Phone: +49 (0) 8062-808-0 FAX: +49 (0) 8062-808-404 profpga@prodesign-europe.com

