

# PFP-ZU+

ZYNQ ULTRASCALE+ PCIe FPGA PROCESSOR

**TECHWAY**  
SIGNAL VISION SYSTEM

Reduce cost of MPSoC technology integration

## APPLICATIONS

- Co-processing
- Test bench
- Prototyping
- Data-recording
- High-speed data-switching

## BENEFITS

- PCIe format
- Embedded processing
- Stand-alone mode
- Versatile solution with FMC+ connector
- Multiple standard interface
- Cost-effective
- Modularity : FMC+ site, User I/O, FireFly™ slot

## KEY FEATURES

- PCIe Gen3 x4
- MPSoC processor : Zynq UltraScale+ FPGA
- FMC+ connector
- High-speed protocol capable :  
Up to 16,3 Gbps
- Programmable oscillators
- Extended optical interface
- Windows or Linux support



Have you heard about SoC ? Xilinx's System on Chip (SoC) is the new disruptive technology for high-end Embedded systems. SoC integrates the software programmability of ARM processor with the firmware programmability of FPGA in one unique component.

SoC offers an unrivalled levels of system performance, flexibility, and scalability. This component is the perfect solution to build stand-alone "SWaP" (Size Weight and Power) optimized equipment.

TECHWAY has 10+ years development experience in Xilinx FPGA PCIe platform with FMC interface. Thanks to our know-how, we offer cost-effective solutions to bring the SoC technology into industrial applications.

The new PFP-ZU+ is a multi-purpose PCIe platform with FMC+ site based on the latest Xilinx's SoC called Zynq UltraScale+.

PFP-ZU+ is a perfect fit for system integrators who are looking for reducing development time thanks to ready-to-integrate boards.



DEFENCE



INDUSTRY



Information and photos subject to change without notice

# PFP-ZU+

ZYNQ ULTRASCALE+ PCIe FPGA PROCESSOR



## HARDWARE

- PCIe Gen3 x4
- MPSoC processor : Zynq UltraScale+ FPGA
- FMC+ connector (160 I/O + up to 24 HSS)
- Memories for FPGA :
  - 2x 1GB @2400Mbps DDR4 banks for PL
- Memories for Processors :
  - 1x 2GB @2400Mbps DDR4 bank for PS
  - 1x eMMC (Flash NAND)
  - 1x QSPI
  - 1x µSD slot

## FIRMWARE

- VHDL PCIe core (Gen3 x4)
- Continuous & Scatter gather DMA
- VHDL DDR4 memory controller
- VHDL Flash controller
- VHDL System monitoring
- VHDL Clock programmer

## SOFTWARE

- Linux BSP for Arm
- Simplified & Open API
- SDK for Linux & Windows
- Design examples
- Support

## ENVIRONMENTAL INFORMATION

- Operating temperature range : 0°C to 50°C
- Storage temperature range : -55°C to 125°C
- Compliant with ROHS and REACH process
- ECCN : EAR 99

## PFP-ZU+ BOARDS

The PFP-ZU+'s versatility comes from useful features including a fully FMC+ site, DDR4 and RDRAM2 memories, a management system, etc. Thanks to ARM processor, you access to multiple interfaces which allow to design stand-alone equipment easily.

Built on a common real-time processor and programmable logic equipped platform, our PFP-ZU+ features ZU7CG & ZU11EG SoC to optimize performance/price ratio.

Zynq® UltraScale+™ MPSoC devices provide 64-bit processor scalability while combining real-time control with soft and hard engines for graphics, video, waveform, and packet processing.

PFP-ZU+ can be easily used in a standard PC environment (drivers available for both Linux and Windows) or in your own enclosure as a stand-alone equipment.



## ORDERING INFORMATION

Reference	SoC	FMC+	FireFly™ slot (option)
PFP-ZU-07	ZU7CG FFVF1517	16 SerDes up to 16,3 Gbps	■
PFP-ZU-011	ZU11EG FFVF1517	24 SerDes up to 16,3 Gbps	■

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