

PFP-ZU+

ZYNQ ULTRASCALE+ MPSOC PCIe PLATFORM

TECHWAY
SIGNAL VISION SYSTEM

Reduce cost of MPSoC technology integration

• APPLICATIONS

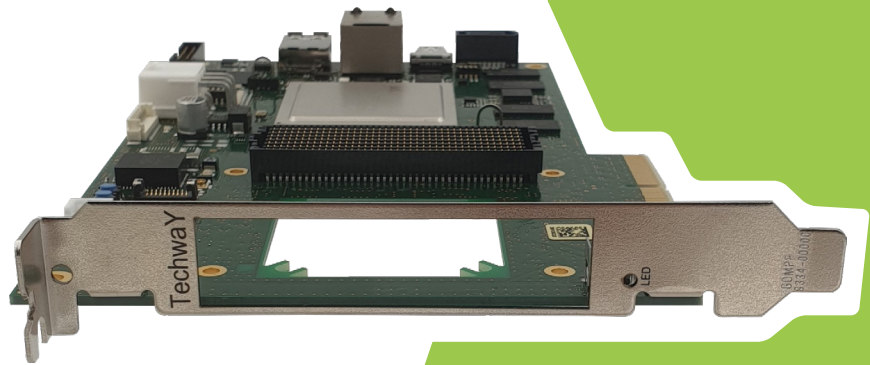
- Co-processing
- Test bench
- Prototyping
- Data-acquisition
- Data-recording
- High-speed data-switching

• BENEFITS

- PCIe format
- Embedded CPU processing
- Embedded FPGA processing
- Versatile interface with FMC+ connector
- Multiple standard interface
- Additional interface : User I/O, FireFly™ slot
- Cost-effective

• KEY FEATURES

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

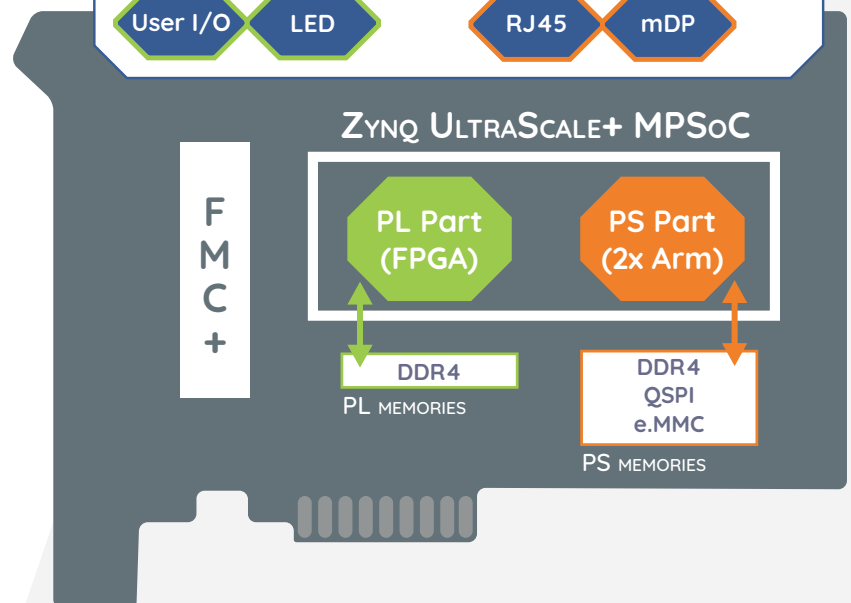
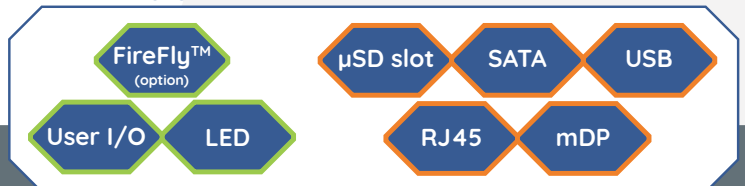


The new PFP-ZU+ is a multi-purpose PCIe platform with FMC+ site based on the latest Xilinx's SoC called Zynq UltraScale+. SoC integrates the software programmability of ARM processor with the firmware programmability of FPGA in one unique component.

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 20 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.

INTERFACES



 DEFENCE

 INDUSTRY



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PFP-ZU+

ZYNQ ULTRASCALE+ MPSoC PCIe PLATFORM



HARDWARE

- Zynq UltraScale+ MPSoC
 - ZU7CG
 - ZU11EG
- PL (FPGA) interfaces
 - PCIe Gen3 x4
 - FMC+ connector (160 I/O + up to 24 HSS)
 - FireFly™ slot (option)
 - LED
 - User I/O
 - RAM DDR4 banks (2x 1GB @2400Mbps)
- PS (CPU) interfaces
 - Ethernet port (10/100/1000BaseT)
 - USB (2.0/3.0)
 - SATA III
 - Mini Display Port
 - RAM DDR4 bank (1x 1GB @2400Mbps 32 bits)
 - 1x eMMC (Flash NAND)
 - 1x QSPI
 - 1x µSD slot
- Multiple boot options
- External power supply (stand-alone)

FIRMWARE

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

SOFTWARE

- Linux BSP for Arm (Peta Linux)
- Simplified & Open API
- Development Kit for Windows & Linux
- Design examples : C++ API
 - HDL block access
 - Hardware blocks
- Support & documentation

ENVIRONMENTAL INFORMATION

- Operating temperature range : 0°C to 50°C
- Storage temperature range : -55°C to 125°C
- Compliant with ROHS and REACH process
- ITAR free

PFP-ZU+ BOARDS

The PFP-ZU+'s versatility comes from useful features including a fully FMC+ site, DDR4 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 (Development Kit available for both Windows and Linux) or in your own enclosure as a stand-alone equipment.

PFP-ZU+ offers a FireFly™ slot option. It gives an additional optical fast data-output. PFP-ZU+ is a perfect fit for system integrators who are looking for reducing development time thanks to ready-to-integrate boards.



ORDERING INFORMATION

Reference	SoC	FMC+	FireFly™ slot (option)
PFP-ZU+_07	ZU7CG FFVF1517	16 SerDes up to 16,3 Gbps	✓
PFP-ZU+_11	ZU11EG FFVF1517	24 SerDes up to 16,3 Gbps	✓

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