The VPK180 Evaluation Kit features the Versal™ Premium series VP1802 device, which offers a powerful combination of over 7 M logic cells, 112 G PAM4 transceivers, and hardened, power-optimized cores for multi-terabit interfacing.

The kit comes with a breadth of connectivity options, development tools, and example designs to accelerate prototyping of demanding compute and networking systems across multiple markets.

**VERSAL™ PREMIUM SERIES VPK180 EVALUATION KIT**

**OVERVIEW**

The VPK180 Evaluation Kit features the Versal™ Premium series VP1802 device, which offers a powerful combination of over 7 M logic cells, 112 G PAM4 transceivers, and hardened, power-optimized cores for multi-terabit interfacing.

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**HIGHLIGHTS**

Versal Premium Series Capabilities
- High I/O bandwidth and logic density
- 112 G PAM4 transceivers
- 600 G Ethernet (DCMAC) cores, supporting 100-400 GbE standards
- 100 G Multirate Ethernet (MRMAC) cores, supporting 10-100 GbE standards
- 400 G High-Speed Cryptographic (HSC) engines

Breadth of Onboard Connectivity Options
- SFP-DD (4), QSFP-DD (6), and OSFP (1) connectors for high-speed data communication
- FPGA Mezzanine Card (FMC+) connector with 68 user-defined signals and 8 GTYPs
- 12 GB (6x 2 GB, 32-bit), 192-bit LPDDR4 component @ 4266 Mbps memory
- Micro SD card interface

Development Tools and Enhanced Debug Methodology
- Co-optimized with a Vivado™ ML design suite voucher and the Vitis™ unified software platform
- Shipped with pre-built boot images

**TARGET APPLICATIONS**

**WIRED COMMUNICATION**
- Data Center Interconnect
- Metro Core Transport
- Security Appliances

**DATA CENTER**
- Recommendation Systems
- Search Engines
- Video Analytics

**TEST AND MEASUREMENT**
- Network Testers
- PCIe® Protocol Analyzers
- RF/Microwave Instrumentation

**AEROSPACE AND DEFENSE**
- Avionics
- Digital Adaptive Radar
- Secure Communications

READY TO CONNECT? VISIT www.amd.com/vpk180
PRODUCT BRIEF

01 VPK180 Evaluation Board 05 USB Type C Cable
02 2 Ethernet Cables 06 QSFP-DD800 Loopback Module
03 Micro SD Card 07 Vivado™ ML Design Suite Voucher
04 180 W (12 V) Power Supply and Adapters

NEXT STEPS

• For more information, documents, and reference designs, or to purchase, visit www.amd.com/vpk180.

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