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.

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.

## 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
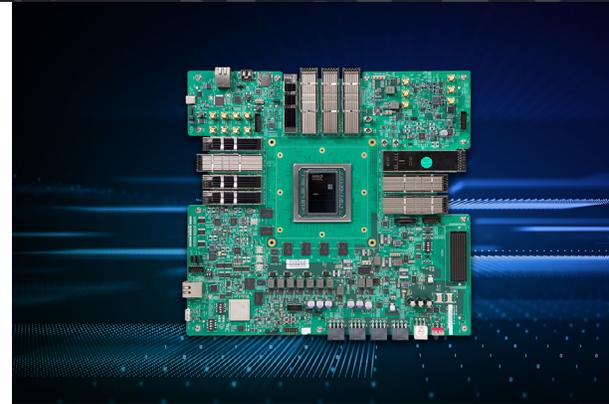
TARGET APPLICATIONS

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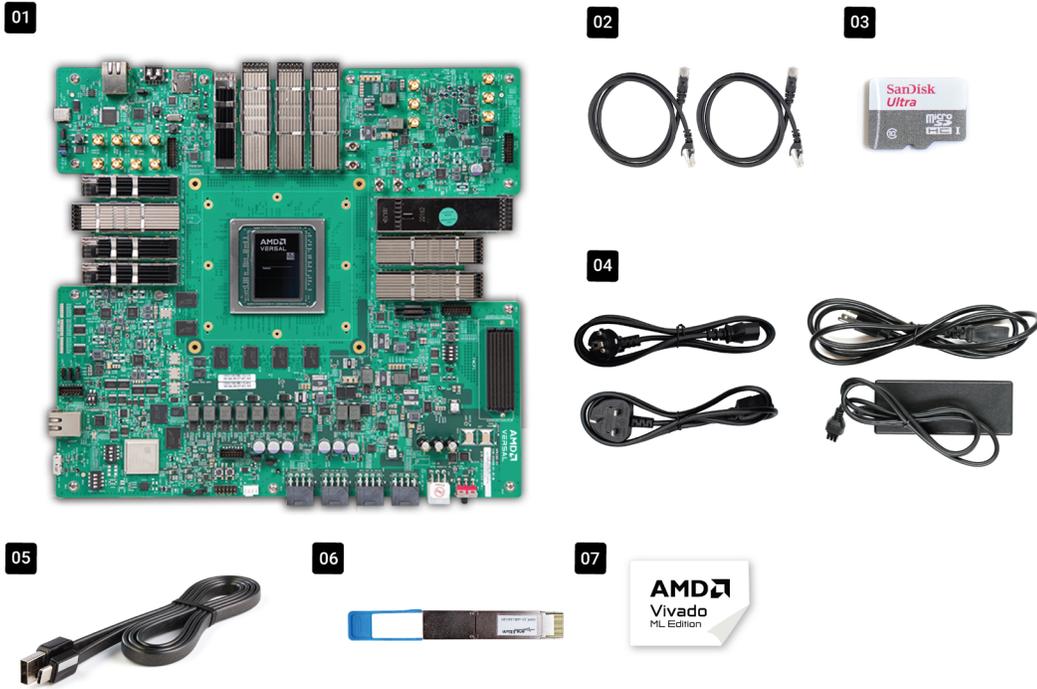- Security Appliances

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

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.

DISCLAIMERS