

# 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 7M logic cells, 112G 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

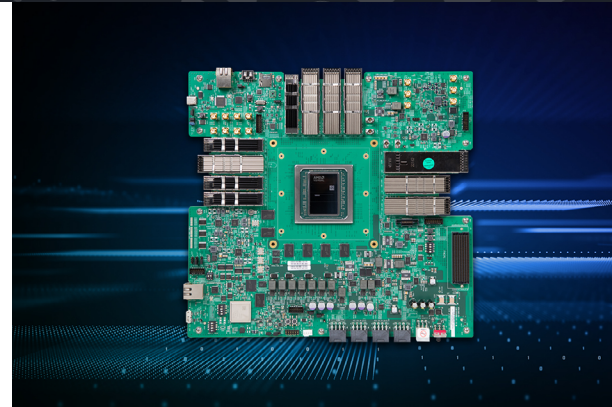
- High I/O bandwidth and logic density
- 112G PAM4 transceivers
- 600G Ethernet (DCMAC) cores, supporting 100-400 GbE standards
- 100G Multirate Ethernet (MRMAC) cores, supporting 10-100 GbE standards
- 400G High-Speed Cryptographic (HSC) engines

### 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 memory
- Micro SD card interface

### Development Tools and Enhanced Debug Methodology

- Co-optimized with a Vivado™ 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

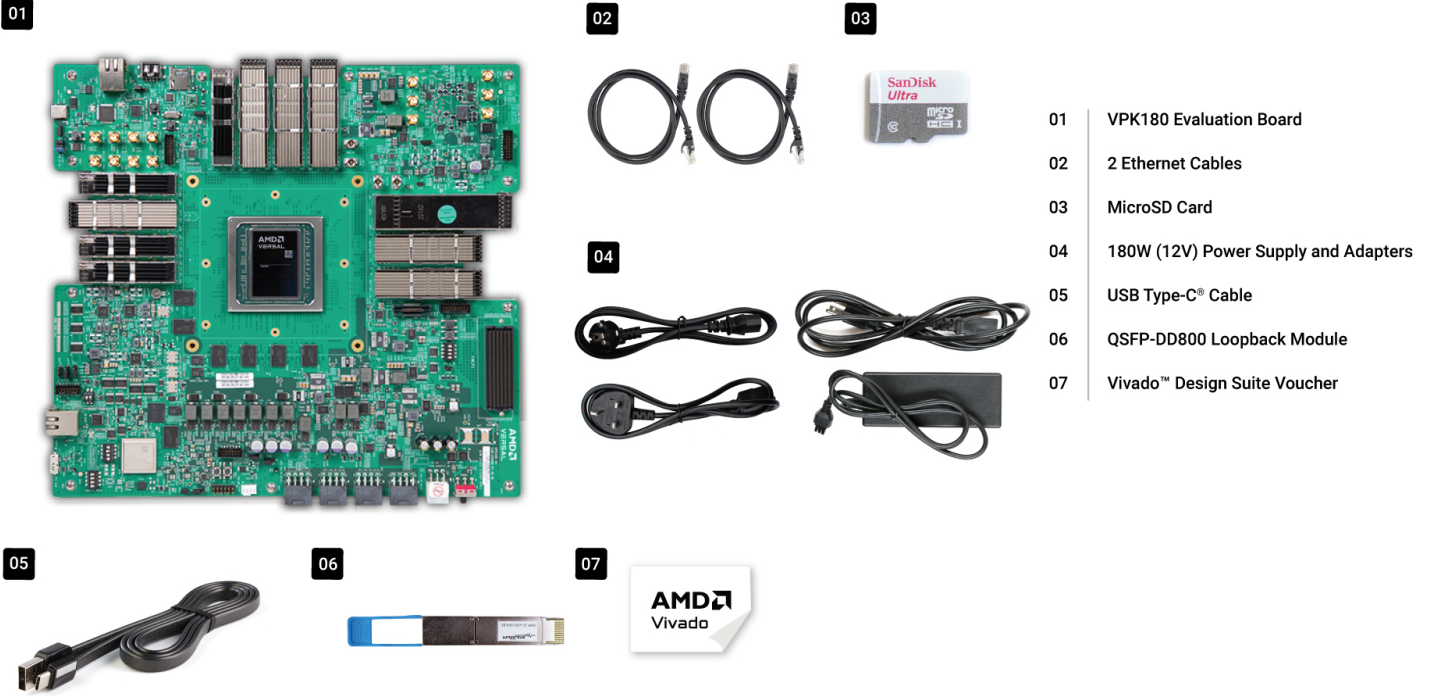
- Recommendation Systems
- Search Engines
- Video Analytics

### TEST AND MEASUREMENT

- Network Testers
- PCIe® Protocol Analyzers
- RF/Microwave Instrumentation

### AEROSPACE AND DEFENSE

- Avionics
- Digital Adaptive Radar
- Secure Communications



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

**NEXT STEPS**

• For more information, documents, and reference designs, or to purchase, visit [www.amd.com/vpk180](http://www.amd.com/vpk180).

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