

VERSA™ 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

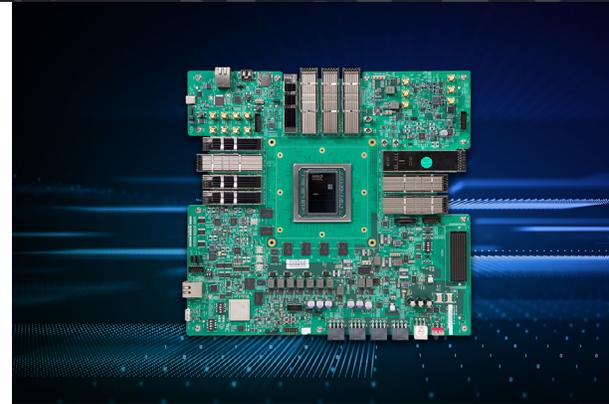
- High I/O bandwidth and logic density
- 112 G PAM4 transceivers
- 600 G Ethernet (DCMAC) cores, supporting 100-400 GbE standards
- 100 G Multirate Ethernet (MRMAC) cores, supporting 10-100 GbE standards
- 400 G High-Speed Cryptographic (HSC) engines

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

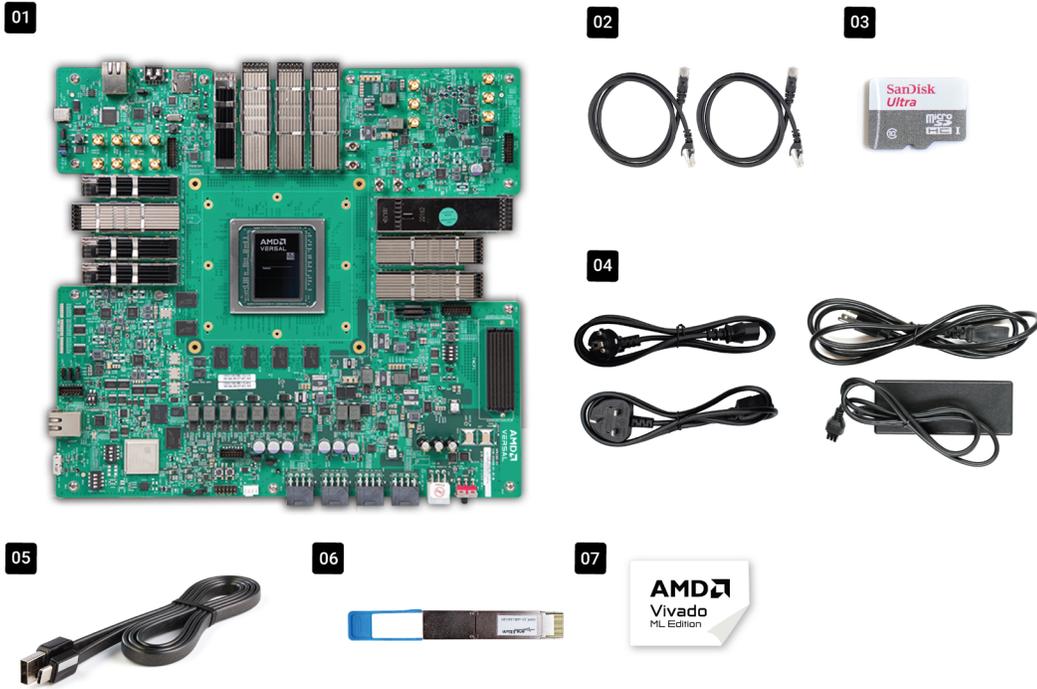
- Recommendation Systems
- Search Engines
- Video Analytics

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 | QSFDP-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

The information contained herein is for informational purposes only and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD's products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale.

COPYRIGHT NOTICE

© Copyright 2023 Advanced Micro Devices, Inc. All rights reserved. Xilinx, the Xilinx logo, AMD, the AMD Arrow logo, Alveo, Artix, Kintex, Kria, Spartan, Versal, Vitis, Virtex, Vivado, Zynq, and other designated brands included herein are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies. AMBA, AMBA Designer, ARM, ARM1176JZ-S, CoreSight, Cortex, and PrimeCell are trademarks of ARM in the EU and other countries. PCIe, and PCI Express are trademarks of PCI-SIG and used under license. PID1997603