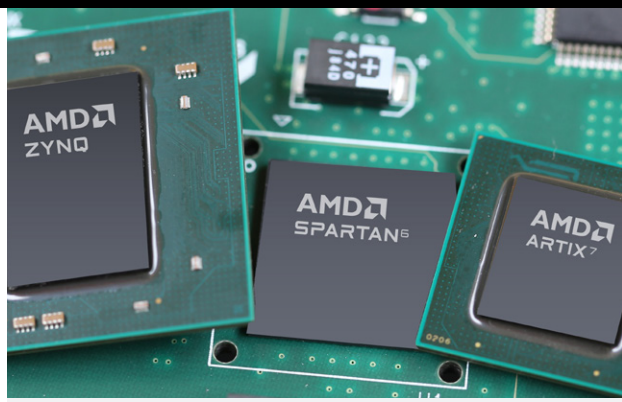
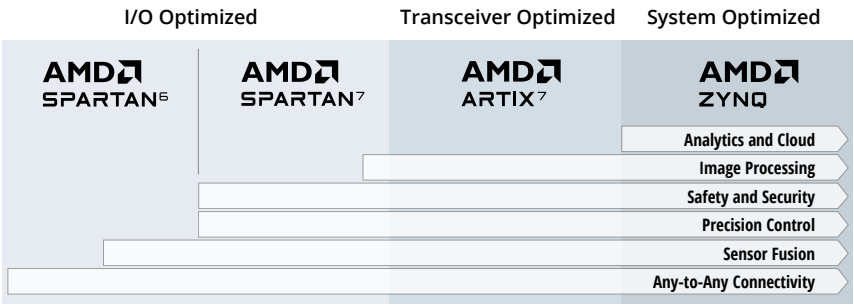
Cost-Optimized Portfolio



AMD DELIVERS A COMPREHENSIVE ALL PROGRAMMABLE COST-OPTIMIZED PORTFOLIO

The AMD All Programmable Cost-Optimized Portfolio is comprised of four families: Spartan™ 6 FPGAs for I/O optimization, Spartan™ 7 FPGAs for I/O optimization with the highest performance-per-watt, Artix™ 7 FPGAs for transceiver optimization and highest DSP bandwidth, and Zynq™ 7000 All Programmable SoCs (Artix 7 Based Fabric) for system optimization with scalable processor integration.



AMD All Programmable Cost-Optimized Portfolio

ENABLING CRITICAL FUNCTIONALITY ACROSS A WIDE RANGE OF APPLICATIONS

Any-to-Any Connectivity
Flexible I/O densities and standards support to connect any media to any machine over any network

Sensor Fusion
Scalable integration of any digital or analog sensor for data acquisition, aggregation, and pre-processing

Safety & Security
Multi-level safety & security features ranging from isolation design flow to processor-driven secure boot

Precision Control
Hardware acceleration and massive parallelism for real-time, highly synchronized connected control

Image Processing
Highest DSP-to-logic mix for video and image quality enhancements and waveform processing

Analytics and Cloud Connectivity
ARM®-based processing and hardware offloading for secure, real-time edge-to-cloud intelligence

A PORTFOLIO OPTIMIZED FOR COST, BANDWIDTH, POWER, AND INTEGRATION

Spartan 6 FPGA
I/O Optimized for connectivity

I/O Optimized
- High I/O-to-logic & -package ratios
- 800Mb/s DDR3 interface
- 1,080Mb/s LVDS I/O

Power Reduction Techniques
- Suspend and low power modes
- User-based shutdown/wakeup
- Voltage scaling

Cost-Optimized
- Hardened DDR controller, PCIe®
- Wire-bond packaging
- Optimized for 2 PCB layers

Spartan 7 FPGA
I/O Optimized for Highest Performance/Watt Connectivity

I/O Optimized
- Up to 400 I/O at 100K logic cells
- 800Mb/s DDR3, 1.25Gbs LVDS
- The only 28nm 8x8mm packages

Highest Spartan Performance/Watt
- Half the power of Spartan 6
- Power binning, voltage scaling
- Best-in-Class QoR with Vivado™ Design Tools

Cost-Optimized
- Lowest cost 7 series family
- Integrated analog mixed signal
- Optimized for 2 PCB layers

Artix 7 FPGA
Transceiver-Optimized for High Bandwidth Applications

Transceiver-Optimized
- High I/O-to-logic & -package ratios
- 800Mb/s DDR3 interface
- 1,080Mb/s LVDS I/O

Best Signal Processing Performance
- Highest DSP-to-logic ratios
- Best-in-class DSP FMAX at 628MHz
- Wide, efficient 25x18 multipliers

Cost-Optimized
- Integrated PCIe Gen2
- Integrated analog mixed signal
- Low-cost 10x10 packages

Zynq 7000 All Programmable SoCs (Artix 7 FPGA-Based Fabric)
System-Optimized for Scalable Processor Integration

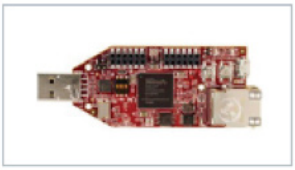
System-Optimized
- Scalable, ARM-based platform
- Single or Dual ARM Cortex™-A9
- Scalable FPGA logic densities

Comprehensive Ecosystem
- Extensive OS support
- Familiar embedded tools
- Breadth of boards & kits

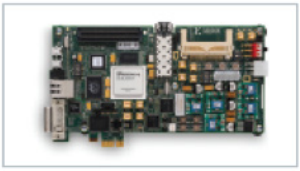
Cost-Optimized
- Portfolio's highest integration
- Low-cost entry to ARM SoCs
- SW & HW field-upgradeable

Take the NEXT Step

See the full selection of boards and kits targeting cost-sensitive applications.

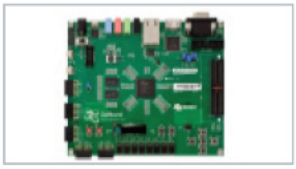


Avnet Spartan 6 Lx9 FPGA Microboard



Spartan 6 FPGA SP605 Evaluation Kit

Zynq 7000 All Programmable SoC Zedboard



Zynq 7000 All Programmable SoC ZC702 Evaluation Kit

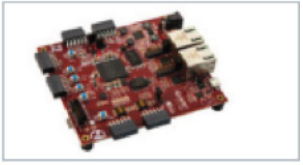
Ted Spartan 6 FPGA Consumer Video Kit 2.0

Artix 7 35T Arty FPGA Evaluation Kit

Zynq 7000 All Programmable SoC Video and Imaging Kit

Zynq 7000 All Programmable SoC ZC702 Evaluation Kit

Microzed Evaluation Board



Avnet Artix 7 50T FPGA Evaluation Kit

Diligent Nexys™4 Artix 7 FPGA Board

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