/ MICROZED

AVNET®

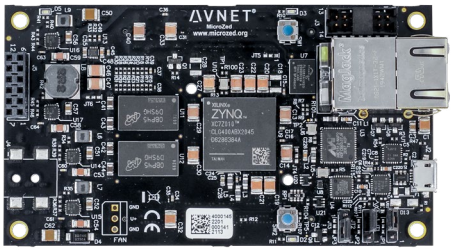
MicroZed™ is a low-cost development board based on the AMD-Xilinx Zynq®-7000 All Programmable SoC. Its unique design allows it to be used as both a stand-alone evaluation board for basic SoC experimentation or combined with a carrier card as an embeddable system-on-module (SOM). MicroZed contains two I/O headers that provide connection to two I/O banks on the programmable logic (PL) side of the Zynq®-7000 AP SoC device. In stand-alone mode, these 100 PL I/O are inactive. When plugged into a carrier card, the I/O are accessible in a manner defined by the carrier card design. Thus designers can start with MicroZed in stand-alone mode as a learning platform and then easily expand its functionality as a SOM through the addition of an off-the-shelf or custom designed carrier card. This combined stand-alone/SOM approach can quickly move a design idea from concept to production, making MicroZed the ideal platform for SoC based applications.

Kit includes

- MicroZed board

Target apps

- General Zynq®-7000 AP SoC evaluation and prototyping
- Embedded system-on-module (SOM) applications
- Embedded vision
- Test & measurement
- Motor control
- Software-defined radio
- Industrial Networking
- Industrial IoT



DESIGNED BY AVNET

Features

SoC

- XC7Z010-1CLG400C or
- XC7Z020-1CLG400C

Memory

- 1 GB of DDR3 SDRAM
- 128 Mb of QSPI Flash
- Micro SD card interface

Communications

- 10/100/1000 Ethernet
- USB 2.0
- USB-UART

User I/O (via dual board-to-board connectors)

- 7Z010 Version
  - 108 User I/O (100 PL, 8 PS MIO)
  - PL I/O configurable as up to 48 LVDS pairs or 100 single-ended I/O
- 7Z020 Version
  - 123 User I/O (115 PL, 8 PS MIO)
  - PL I/O configurable as up to 55 LVDS pairs or 115 single-ended I/O

Other

- 2x6 Digilent Pmod® compatible interface providing 8 PS MIO connections for user I/O
- AMD-Xilinx PC4 JTAG configuration port
- PS JTAG pins accessible via Pmod or I/O headers
- 33.33 MHz oscillator
- User LED and push button

For more information, visit: avnet.me/microzed

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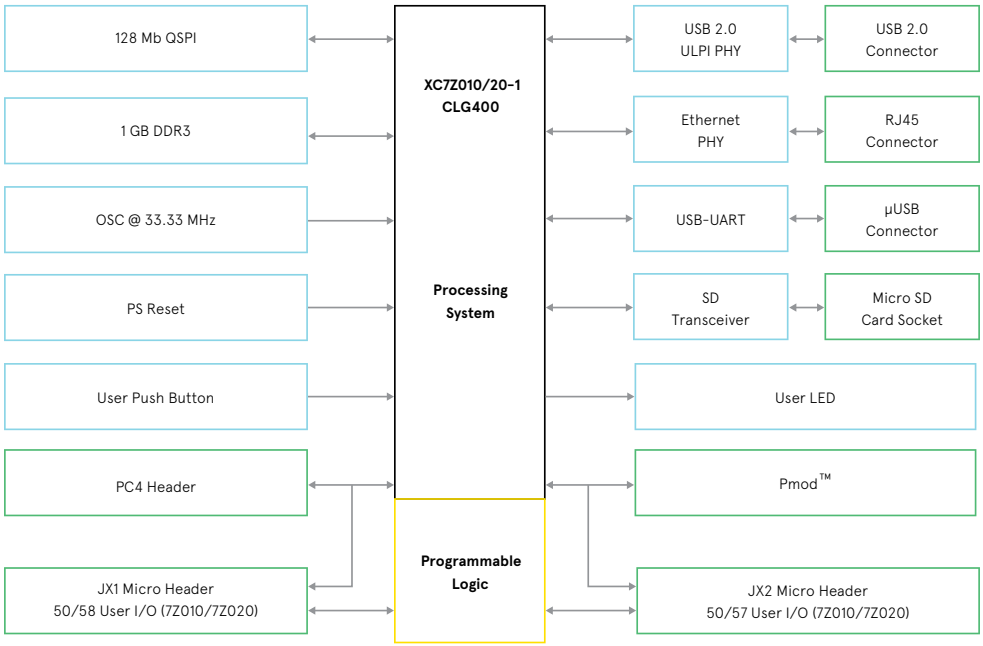
Block diagram



Featured manufacturers

AMD
XILINX

Parts

Part number	Description	Price and availability
AES-Z7MB-7Z010-SOM-G/ REV-H	MicroZed 7Z010 SOM, C Grade	avnet.me/microzed
AES-Z7MB-7Z010-SOM-I-G/ REV-H	MicroZed 7Z010 SOM, I Grade	avnet.me/microzed
AES-Z7MB-7Z020-SOM-G/ REV-H	MicroZed 7Z020 SOM, C Grade	avnet.me/microzed
AES-Z7MB-7Z020-SOM-I-G/ REV-H	MicroZed 7Z020 SOM, I Grade	avnet.me/microzed

Related parts

Part number	Description	Price and availability
AES-MBCC-IO-G	MicroZed IO Carrier Card	avnet.me/mz-io-cc
AES-MBCC-FMC-G	MicroZed FMC Carrier Card	avnet.me/mz-fmc-cc
AES-ARDUINO-CC-G	MicroZed Arduino Carrier Card	avnet.me/mz-arduino-cc

Countries available for purchase: Americas, EMEA, Asia, Japan

Contact information

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