

# Avnet Product Brief

## MicroZed™ Evaluation Kit



DESIGNED BY AVNET



MicroZed™ is a low-cost development board based on the 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
- >> Micro USB cable
- >> 4 GB µSD card
- >> Xilinx Vivado® Design Edition license voucher (device locked to 7Z010)
- >> Getting Started Card

To purchase MicroZed,  
visit [www.em.avnet.com/microzed](http://www.em.avnet.com/microzed) or [www.microzed.org](http://www.microzed.org)

## Features

- >> **SoC**
  - >> XC7Z010-1CLG400C
- >> **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)**
  - >> 100 User I/O (50 per connector)
  - >> Configurable as up to 48 LVDS pairs or 100 single-ended I/O
- >> **Other**
  - >> 2x6 Digilent Pmod® compatible interface providing 8 PS MIO connections for user I/O
  - >> Xilinx PC4 JTAG configuration port
  - >> PS JTAG pins accessible via Pmod
  - >> 33.33 MHz oscillator
  - >> User LED and push switch

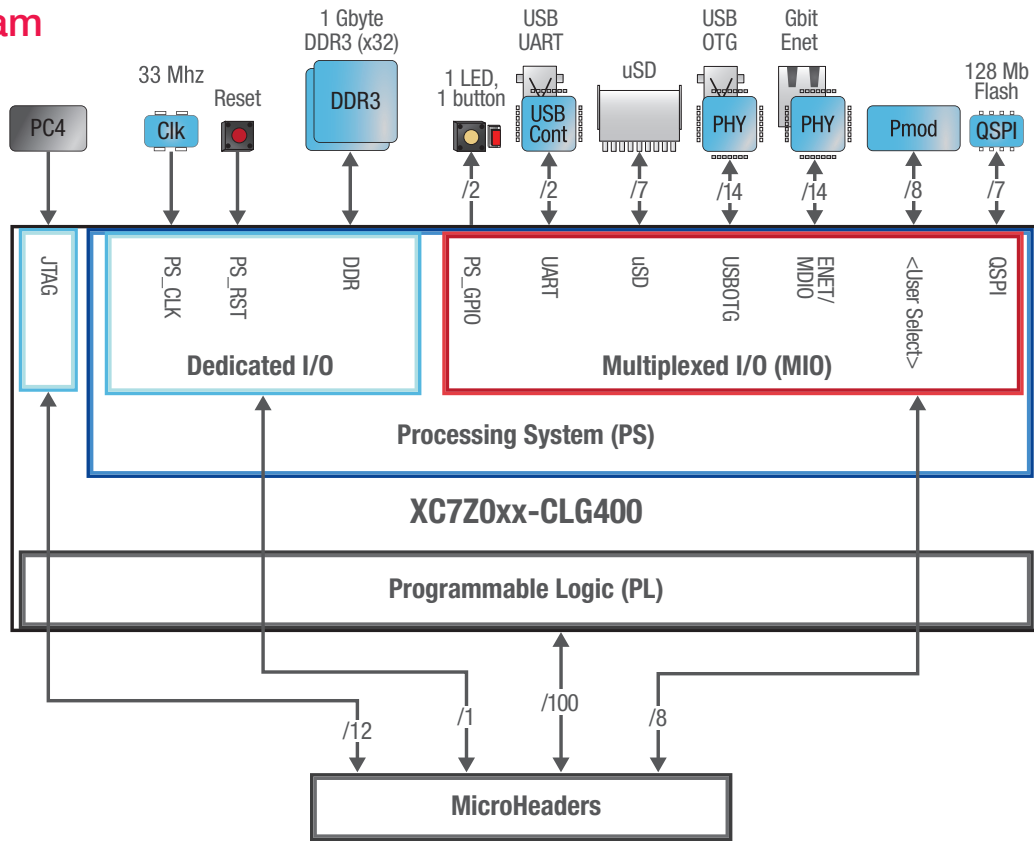
## Target Applications

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



Accelerating Your Success™

# Block Diagram



## Ordering

Part Number	Description	Resale
AES-Z7MB-7Z010-G	MicroZed Evaluation Kit	\$199 USD
<b>System-on-Module Parts</b>		
AES-Z7MB-7Z010-SOM-G	MicroZed 7010 SOM - Standard Version	\$192 USD (qty = 1-99)*
AES-Z7MB-7Z010-SOMCx-G	MicroZed 7010 SOM - Custom Version	Call for quote
AES-Z7MB-7Z020-SOM-G	MicroZed 7020 SOM - Standard Version	\$289 USD (qty = 1-99)*
AES-Z7MB-7Z020-SOMCx-G	MicroZed 7020 SOM - Custom Version	Call for quote

\*For quantities greater than 100 call for quote

To purchase MicroZed, visit [www.em.avnet.com/microzed](http://www.em.avnet.com/microzed) or [www.microzed.org](http://www.microzed.org)

## Contact Information

### North America

2211 South 47th Street  
Phoenix, Arizona 85034  
United States of America  
eval.kits@avnet.com  
+1-800-585-1602

### Europe

Gruber Str. 60c  
85586 Poing  
Germany  
marketing@silica.com  
+49-8121-77702

### Japan

Yebisu Garden Place Tower, 29F  
4-20-3 Ebisu, Shibuya-ku,  
Tokyo 150-6029 Japan  
eval-kits-jp@avnet.com  
+81-(0)3-5792-8210

### Asia

151 Lorong Chuan,  
#06-03 New Tech Park  
Singapore 556741  
XilinxAPAC@avnet.com  
+65-6580-6000

