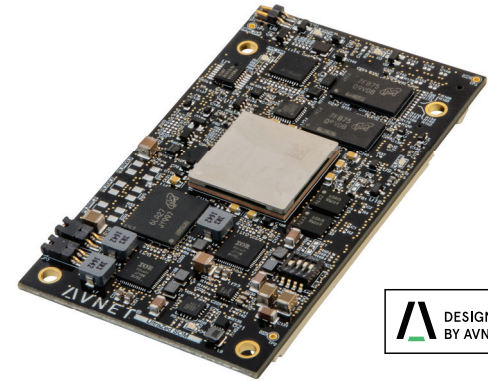# UltraZed-EG™ SOM

**AVNET®**
Reach Further™

UltraZed-EG™ SOM is a highly flexible, rugged, System-On-Module (SOM) based on the Xilinx Zynq® UltraScale+™ MPSoC. Designed in a small form factor, the UltraZed-EG SOM packages all the necessary functions such as system memory, Ethernet, USB, and configuration memory needed for an embedded processing system. The UltraZed-EG provides easy access to 180 user I/O pins, 26 PS MIO pins, and 4 high-speed PS GTR transceivers along with 4 GTR reference clock inputs through three I/O connectors on the backside of the module.

Designers can simply design their own carrier card, plug-in UltraZed-EG SOM, and start their application development with a proven Zynq UltraScale+ MPSoC sub-system. Available with the Zynq UltraScale+ MPSoC XCZU3EG-SFVA625 device, the UltraZed-EG SOM enables designers to build high-performance systems with confidence and ease. By simply plugging the off-the-shelf UltraZed-EG SOM into an application specific carrier card, system bring-up and debug time can be cut in half, while overall system cost can be reduced by 20% or more verses a standard chip-down design.

**DESIGNED BY AVNET**

## KIT INCLUDES

- UltraZed-EG SOM

## TARGET APPLICATIONS

- Embedded system-on-module (SOM)
- Embedded vision
- Test & measurement
- Motor control
- Industrial automation

## FEATURES

- Xilinx Zynq UltraScale+ MPSoC device
  - XCZU3EG-1SFVA625
  - XCZU2EG-1SFVA625
  - XCZU3CG-1SFVA625
  - XCZU2CG-1SFVA625
- DDR4 SDRAM (2GB, in x32 configuration)
- Dual QSPI Flash (64MB)
- I2C EEPROM (2Kb)
- eMMC Flash (8GB, in x8 configuration)
- USB 2.0 ULPI PHY
- Gigabit Ethernet PHY
- I2C 8-bit I/O expander
- 2-channel I2C switch/mux
- PS reference clock input
- On-board voltage regulators
- Power-On Reset (POR) circuit
- 4-position boot mode DIP switch
- Linux BSP and reference designs

- 3 JX connectors, providing the following:
  - 180 user PL I/O pins
  - 26 user PS MIO pins (one full MIO bank)
  - 4 PS GTR transceivers
  - 4 PS GTR transceivers (support SATA 3.0, USB 3.0, PCIe Gen2, and DisplayPort interfaces)
  - PS JTAG interface
  - PL SYSMON interface
  - USB 2.0 connector interface
  - Gigabit Ethernet RJ45 connector interface
  - PMBus interface
  - SOM PS VBATT battery input
  - Carrier Card I2C interface
  - SOM Reset input
  - Carrier Card interrupt input
  - Carrier Card Reset output
  - Power Good output
  - SOM to Carrier Card ground pins
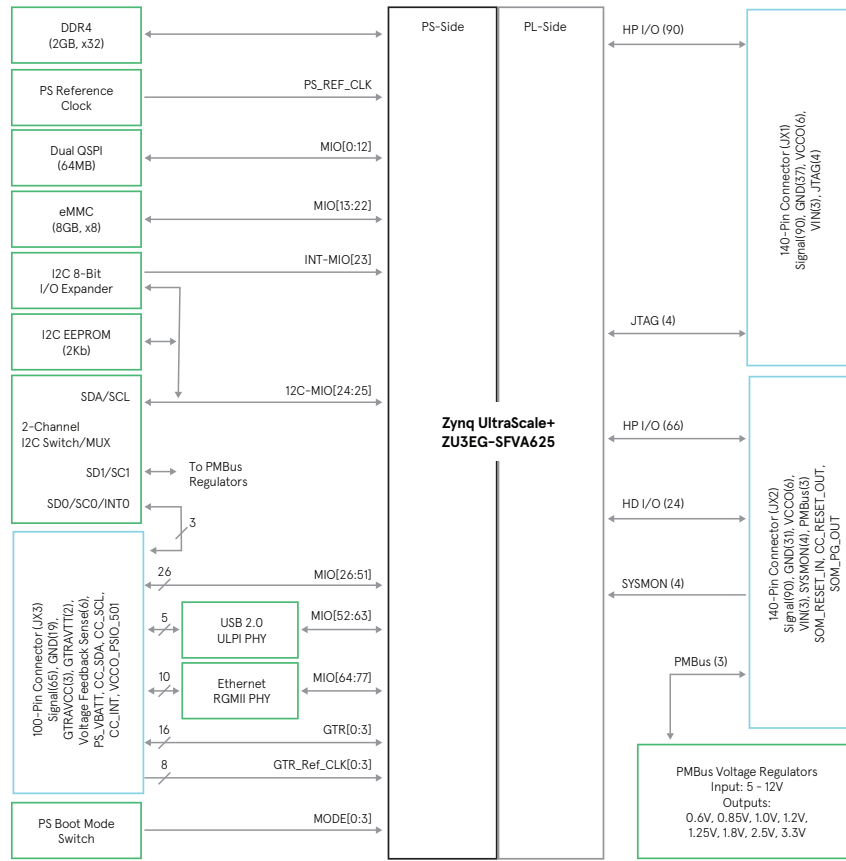  - SOM input voltages and output sense pins

**/ULTRAZED™**

## BLOCK DIAGRAM



## FEATURED MANUFACTURERS

XILINX ALL PROGRAMMABLE    MICRON    Infineon    maxim integrated    MICROCHIP    TE connectivity

## PARTS

| Part Number | Description | Resale |
|---|---|---|
| AES-ZU3EG-1-SOM-G | UltraZed-EG SOM (Extended Temp) | $485 USD |
| AES-ZU3EG-1-SOM-I-G | UltraZed-EG SOM (Industrial Temp) | $535 USD |

## RELATED PARTS

| Part Number | Description | Resale |
|---|---|---|
| AES-ZU-IOCC-G | UltraZed IO Carrier Card | $499 USD |

**Countries Available for Purchase:** Americas, EMEA, Asia, Japan

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