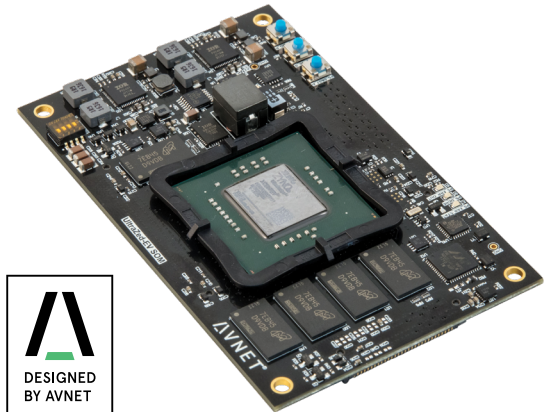


UltraZed-EV™ SOM is a high performance, full-featured, System-On-Module (SOM) based on the Xilinx Zynq® UltraScale+™ MPSoC EV family of devices. Designed in a small form factor, the UltraZed-EV SOM on-board dual system memory, high-speed transceivers, Ethernet, USB, and configuration memory provides an ideal platform for embedded video processing systems. The UltraZed-EV provides easy access to 152 user I/O pins, 26 PS MIO pins, 4 high-speed PS GTR transceivers along with 4 GTR reference clock inputs, and 16 PL high-speed GTH transceivers along with 8 GTH 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-EV SOM, and start their application development with a proven Zynq UltraScale+MPSoC sub-system. Available with the Zynq UltraScale+ MPSoC XCZU7EV-FBVB900 device, the UltraZed-EV SOM enables designers to build multimedia, automotive ADAS, surveillance, and other embedded vision applications with confidence and ease. The MPSoC EV device with its integrated H.264 / H.265 video codec unit is capable of simultaneous encode and decode up to 4Kx2K (60fps).

## FEATURES

- Xilinx XCZU7EV-1FBVB900 device (SOM also supports 4EV, 5EV, 4EG, 5EG, or 7EG device in the FBVB900 package)
- PS DDR4 SDRAM (4GB, in x64 configuration)
- PL DDR4 SDRAM (1GB, in x16 configuration)
- 300 MHz LVDS system clock
- Dual QSPI Flash (64MB)
- I2C EEPROM (2Kb)
- eMMC Flash (8GB, x8)
- 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
- Small 4-position boot mode DIP switch
- 3 JX connectors, providing the following:
  - 152 user PL I/O pins
  - 26 user PS MIO pins (one full MIO bank)
  - 4 PS GTR transceivers (support SATA 3.0, USB 3.0, PCIe Gen2, and DisplayPort interfaces)
  - 4 PS GTR reference clock inputs
  - 16 PL GTH transceivers
  - 8 PL GTH reference clock inputs
  - 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 Reset output
  - Carrier Card interrupt input
  - Power Good output, input voltages, and output sense pins



## KIT INCLUDES

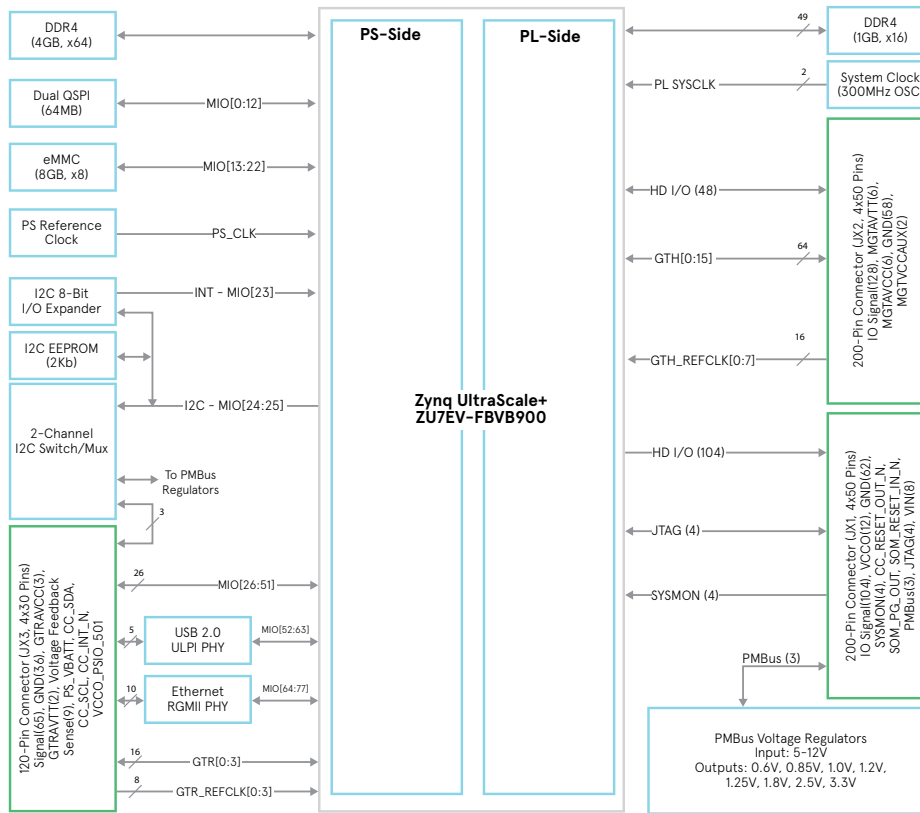
- UltraZed-EV SOM

## TARGET APPLICATIONS

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

To purchase this kit, visit [www.ultrazed.org/product/ultrazed-EV](http://www.ultrazed.org/product/ultrazed-EV)

## BLOCK DIAGRAM



## FEATURED MANUFACTURERS



## PARTS

Part Number	Description	Resale
AES-ZU7EV-1-SOM-G	UltraZed-EV SOM (Extended Temp)	\$999 USD
AES-ZU7EV-1-SOM-I-G	UltraZed-EV SOM (Industrial Temp)	\$1,199 USD

## RELATED PARTS

Part Number	Description	Resale
AES-ZUEV-CC-G	UltraZed-EV Carrier Card	\$649 USD

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

## CONTACT INFORMATION

**North America**  
2211 S 47<sup>th</sup> 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

**Europe (EBV)**  
Im Technologiepark 2-8  
85586 Poing  
Germany  
http://ebv.com/contact

**Japan**  
Yebisu Garden Place Tower, 23F  
4-20-3 Ebisu, Shibuya-ku  
Tokyo 150-6023 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