

Avnet Now Offers ZUBoard 1CG:

Featuring AMD Zynq UltraScale+ MPSoC, with ISSI LPDDR4 DRAM and QSPI Flash



Description:

Now available is the **ZUBoard 1CG**, an Avnet-designed development board featuring the AMD ZU+ MPSoC ZU1CG. This board was designed to be both versatile and affordable for industrial applications requiring high performance, such as AI, machine learning, embedded processing & vision, and robotics. At its center is the AMD MPSoC, with a Dual-core Arm ® Cortex ® -A53 MPCore™ and Dual-core Arm Cortex-R5F MPCore. The ZUBoard 1CG features 8Gb [1GB] of ISSI LPDDR4 DRAM (IS43LQ32256EA-062B2LI) with two non-volatile boot options: an ISSI 256Mb (32MB) QSPI Flash (IS25WP256E-JLLE) or a microSD card slot.

The board also supports 10/100/1000 wired ethernet, USB 2.0, temperature and pressure sensors, and general purpose I/O.

Free software is available to download to quickly get a project running.





Target Applications:

- Artificial intelligence
- Machine learning
- Embedded Vision
- · Embedded processing
- Robotics

Markets:

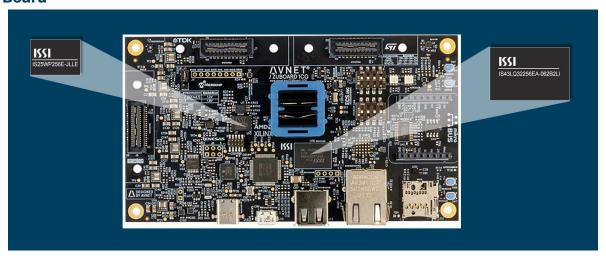
- Communications
- Healthcare
- Embedded Vision
- Home & Building Automation
- Industrial
- Lighting
- · Security & Surveillance
- IoT Design
- Electronic Component Engineering

Key Features:

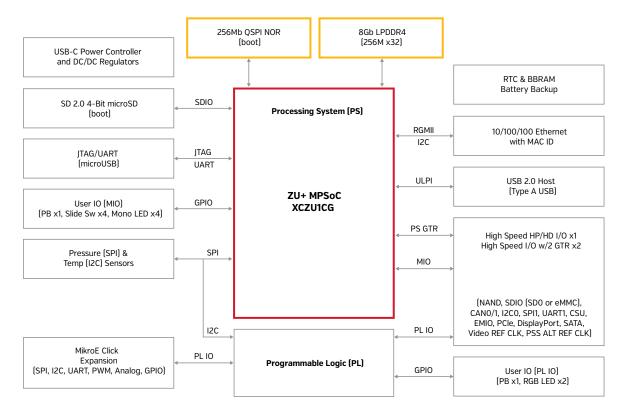
- AMD/Xilinx ZU+ MPSoC ZU1CG
 o Dual A53 APU and Dual R5 RPU
 o 256KB On-chip Memory
 o 81,900 FPGA Logic Cells
- ISSI 8Gb LPDDR4 with on-chip ECC: o IS43LQ32256EA-062B2LI
- Boot from ISSI 256Mb QSPI or microSD card:
 o IS25WP256E-ILLE (OSPI)
- · PetaLinux environment available for download
- Microchip 10/100/1000 Wired Ethernet PHY and MAC ID FFPROM
- Microchip USB 2.0 PHY
- Microchip USB-C input power control
- Dialog GreenPAK™ on/off controller and power sequencer
- TDK μPOL™ power modules
- · On-board JTAG and UART debug interface
- · STMicroelectronics Temperature and Pressure Sensors
- Battery-backed Real-Time Clock and FPGA Bitstream
 Security enabled with ECS and Custom Power
- Expansion with 3 SYZYGY and 1 Click, enabled by Samtec connectors
- · User RGB and Monochrome LEDs
- User Slide Switch and Push Button I/O

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View of Board



Block Diagram



Kit Includes:

- ZUBoard 1CG Quick-start card
- Free downloadable AMD-Xilinx Vitis and Vivado ML Standard Edition
- Free downloadable PetaLinux BSP and reference designs