

The Ultra96-V2 updates and refreshes the Ultra96 product that was released in 2018. Like Ultra96, the Ultra96-V2 is an Arm-based, Xilinx Zynq UltraScale+™ MPSoC development board based on the Linaro 96Boards Consumer Edition (CE) specification. Ultra96-V2 will be available in more countries around the world as it has been designed with a certified radio module from Microchip. Additionally, all components are updated to allow industrial temperature grade options. Additional power control and monitoring will be possible with the included Infineon Pmics.

Like Ultra96, the Ultra96-V2 boots from the provided Delkin 16 GB microSD card. Engineers have options of connecting to Ultra96-V2 through a Webserver using integrated wireless access point capability or to use the provided PetaLinux desktop environment which can be viewed on the integrated Mini DisplayPort video output. Multiple application examples and on-board development options are provided as examples.

Ultra96-V2 provides four user-controllable LEDs. Engineers may also interact with the board through the 96Boards-compatible low-speed and high-speed expansion connectors by adding peripheral accessories such as those included in the MikroE Click Mezzanine for 96Boards (available as an accessory).

Micron LPDDR4 memory provides 2 GB of RAM in a 512M x 32 configuration. Wireless options include 802.11b/g/n Wi-Fi and Bluetooth 5 Low Energy. The radio module is Agency Certified in over 75 countries. UARTs are accessible on a header as well as through the expansion connector. JTAG is available through a header. The convenient JTAG/UART Pod (available as an accessory) provides both JTAG and UART connections via USB. I2C is available through the expansion connector.

Two Microchip USB3320 USB 2.0 ULPI Transceivers and one Microchip USB5744 4-Port SS/HS USB Controller Hub enable multiple USB connections. Ultra96-V2 provides one upstream (device) and two downstream (host) USB 3.0 connections. A USB 2.0 downstream (host) interface is provided via the high-speed expansion.

The integrated power supply generates all on-board voltages from an external 12V supply (available as an accessory).

KIT INCLUDES

- Ultra96-V2 development board
- 16 GB microSD card + adapter
- Voucher for SDSoc license from Xilinx
- Quick-start instruction card

To purchase this kit, visit avnet.me/ultra96-v2



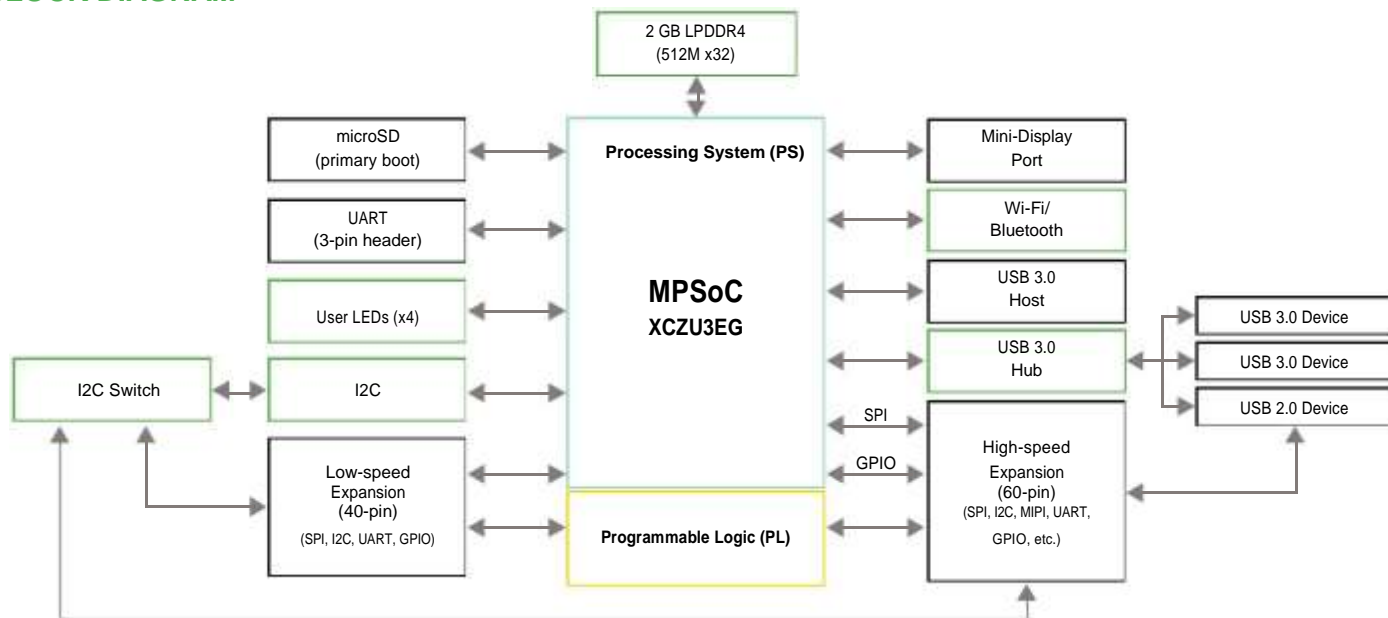
FEATURE LIST

- Xilinx Zynq UltraScale+ MPSoC ZU3EG A484 -
- Micron 2 GB (512M x32) LPDDR4 Memory --
- Delkin 16 GB microSD card + adapter --
- PetaLinux environment available for download --
- Microchip Wi-Fi / Bluetooth
- Mini DisplayPort (MiniDP or mDP) --1x
- USB 3.0 Type Micro-B upstream port
- 2x USB 3.0, 1x USB 2.0 Type A downstream
- ports --40-pin 96Boards Low-speed expansion
- header --60-pin 96Boards High-speed expansion
- header --85mm x 54mm form factor --Linaro
- 96Boards Consumer Edition compatible

TARGET APPS

- Artificial Intelligence
- Machine Learning
- IoT/Cloud connectivity for add-on sensors
- Embedded Computing
- Robotics
- Entry level Zynq UltraScale+ MPSoC development environment
- Training, prototyping and proof-of-concept demo platform
- Wireless design and demonstrations using Wi-Fi and Bluetooth

BLOCK DIAGRAM



FEATURED MANUFACTURERS

Amphenol

BOURNS

C&K

DELKIN DEVICES

dialog

IDT
Integrated Device Technology

infineon

MICROCHIP

Micron

nexperia

OSRAM
Opto Semiconductors

ON Semiconductor

samtec

ST
STMicroelectronics

SUNON

ETE

XILINX
Xilinx, Inc.

AVNET
AVNET Technology Center

PARTS

Part Number	Description
AES-ULTRA96-V2-G	Ultra96-V2 Zynq UltraScale+ ZU3EG Development Board

RELATED PARTS

Part Number	Description
AES-ACC-U96-PWR	External 96Boards compliant power supply kit (12V, 2A, US plug)
AES-ACC-U96-4APWR	External 96Boards/Ultra96 compliant power supply kit (12V, 4A, International plugs)
AES-ACC-U96-JTAG	USB-to-JTAG/UART pod for Ultra96
AES-ACC-U96-ME-MEZ	MikroElektronika 96Boards Click Mezzanine
AES-ACC-U96-ME-SK	MikroElektronika 96Boards Click Mezzanine bundle (mezzanine plus 3 Click boards)

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

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