

/ AUBOARD 15P FPGA DEV BOARD

AVNET®

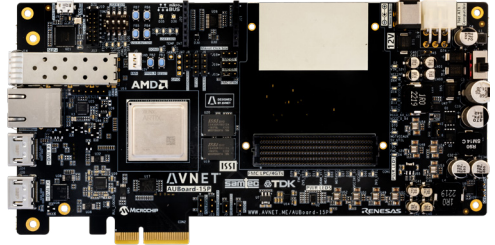
The AUBoard 15P provides the flexibility and versatility for engineers to experiment with and learn the AMD Artix UltraScale+™ architecture. The feature rich AU15P device features 170K programmable logic cells and 12 GTH multi-gigabit transceivers as well as 576 DSP slices and 7.6 Mb of on-chip RAM. The board also features 2GB of ISSI DDR4 and non-volatile configuration and boot from the 512Mb of ISSI QSPI Flash. A Microchip PHY enables the 10/100 Ethernet interface. A microUSB port provides on-board JTAG/UART access. A Renesas clock generator and ECS crystal oscillators provide clocking to the AU15P device, GTH transceivers, JTAG, and communication interfaces. All 12 GTH transceivers are brought out to SFP+ 10 GbE Ethernet (1), HDMI 2.0 Rx & Tx (3), and PCIe end point (4) interfaces and FMC (4) I/O expansion. A combination of slide switches, push buttons, and LEDs (red and RGB) allow user interaction with the board. A temperature sensor from STMicroelectronics adds environmental data to the system. Additionally, 80 FPGA I/Os are exposed through the Samtec connectors for FMC LPC high-speed expansion and one Click Board™ site. The board is powered from a 60W power supply and Renesas and TDK power devices. Whether you want to explore bare metal, RTOS, or Linux software, the AUBoard 15P will give you a solid base foundation to experiment.

Features

- AMD Xilinx Artix UltraScale+ 15P FPGA
 - 170K logic cells
 - 12 GTH transceivers
 - 7.6 Mb on-chip memory
 - 576 DSP slices
- ISSI 2GB DDR4 memory
- ISSI 512Mb QSPI Flash memory (configuration and boot)
- PetaLinux BSP available for download
- Microchip 10/100 MII wired Ethernet PHY and MAC ID EEPROM
- Renesas and TDK power devices
- On-board JTAG and UART debug interface
- STMicroelectronics temperature sensor
- Expansion with 1 Click site and FMC LPC enabled by Samtec connectors
 - 4x GTH transceivers on the FMC
- User RGB and monochrome LEDs
- User slide and push button switches
 - o HDMI 2.0 Rx & Tx
 - o SFP+ 10Gb Ethernet
 - o PCIe Gen. 4 x4 end point interface

For more information visit: avnet.me/auboard-15p

To purchase this kit: avnet.me/auboard-15p-pdp



DESIGNED
BY AVNET

Kit includes

- AUBoard 15P
- Quick start card
- Power supply
- PCIe power cable dongle

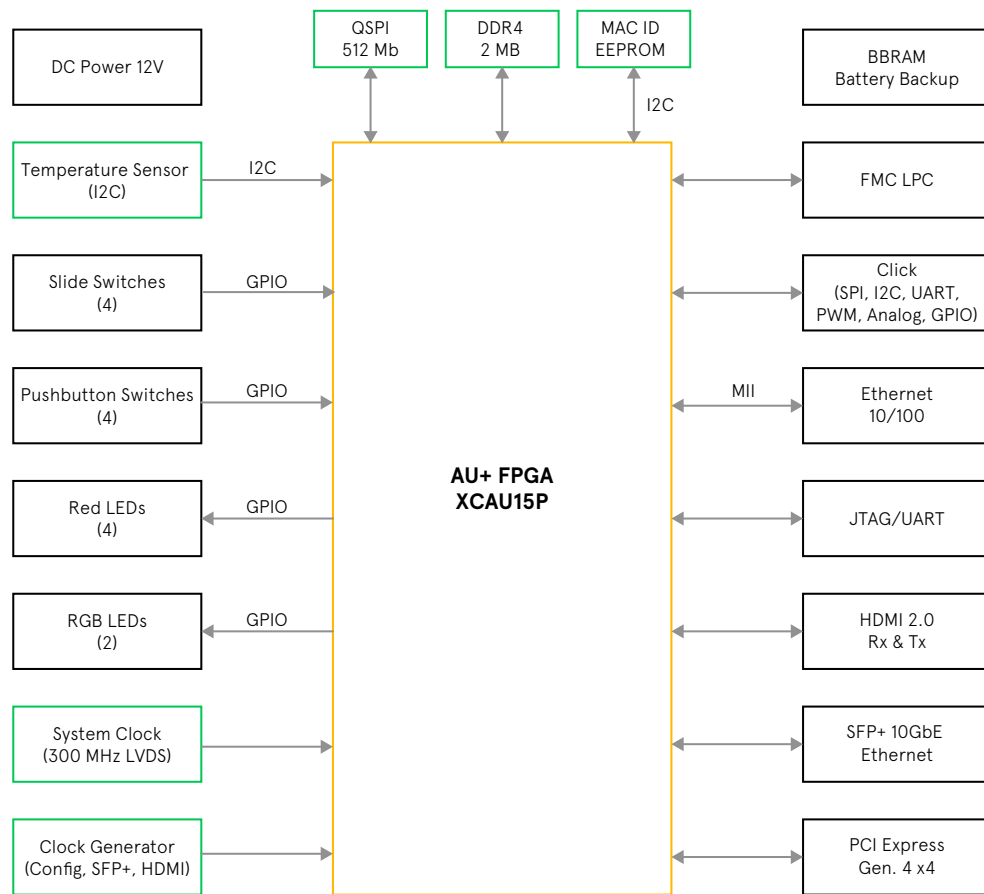
Target apps

- Embedded vision
- Embedded processing
- Wired communications
- Prototyping & experimentation
- Industrial networking

Markets

- Healthcare & Medical
- Home & Building Automation
- Industrial

Block diagram



Featured manufacturers



Parts

Part number	Description	Price and availability
AES-AUB-15P-DK-G	AUBoard 15P FPGA Dev Board with AMD AU+ FPGA	avnet.me/auboard-15p-pdp

Related parts

Part number	Description	Price and availability
XCAU15P-2FFVB676E	AMD Artix UltraScale+ FPGA	TBD
TE60A1203N01	AC/DC Power Supply, 12V out, 60W, 2.5 x 5.5mm barrel	avnet.me/SLPower-12V-60W-barrel-pdp

Countries available for purchase: Americas, EMEA, Asia, Japan

Contact information

North America
2211 S 47th Street
Phoenix, Arizona 85034
United States of America
1-800-585-1602

Europe (Silica)
Gruber Str. 60c
85586 Poing
Germany
+49-8121-77702

Europe (EBV)
Im Technologypark 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
amd-xilinxapac@avnet.com
+65-6580-6000

1.800.332.8638 / avnet.com

Copyright © 2024 Avnet, Inc. AVNET and the AVNET logo are registered trademarks of Avnet, Inc. All other brands are the property of their respective owners.
FY24_1344_AUBoard_15P_Product_Brief_al