Zynq®-7000 SoC and
Zynq® UltraScale+™ MPSoC Systems Guide
FROM CONCEPT TO PRODUCTION
Design it or Buy it?

Avnet’s Ready-made SoC Modules Can Shorten Your Development Cycle

Today’s quick time-to-market demands are forcing you to rethink how you design, build and deploy your products. Sometimes it’s faster, less costly, and lower risk to incorporate an off-the-shelf solution instead of designing from the beginning. Avnet’s System-On-Module (SOM) and Single-Board Computer (SBC) solutions for the Xilinx Zynq®-7000 SoC and Zynq UltraScale+ MPSoC SoC can reduce development times by more than four months, allowing you to focus your efforts on adding differentiating features and unique capabilities.

Avnet’s SoC Modules Offer the Following Benefits:
- Reduce risk by building your application upon a known working system
- Get running quickly with example designs, tutorials, and board support packages
- Start software development immediately

With over fifteen years of experience building SOM products, we’ve helped many companies attain a jump start on their products and get to market faster. Contact us today to get started!

Custom SOM Offerings
Customize the module with Avnet Design Services – an Avnet Company with extensive experience designing and customizing single board computer platforms. Email us at customize@avnet.com to explore the options.

Avnet’s Zynq-7000 SOC and Zynq UltraScale+ MPSoC SOM Solutions

<table>
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1: Zynq: PL IO / PS MIO
2: Resale based on 1 piece – call for volume pricing
3: Industrial Grade also available
4: Custom versions also available in the ZU2EG, ZU2CG, and ZU3CG.
5: Custom versions also available in the ZU4EV, ZU4EG, ZU5EV, ZU5EG, and ZU7EG.

Pmod is a registered trademark of Digilent
System-on-Module Carrier Cards

Avnet-designed carrier cards pair with Avnet SOMs to create complete development systems. With a mix of on-board peripherals and expansion ports, these development systems make proof-of-concept designs possible. When you’re ready to design your own custom carrier card, contact a local Avnet FAE to obtain the carrier card Altium source files to jump-start your design!

**PicoZed Carrier Card V2**: A platform containing all the necessary interfaces and I/O expansion required for the PicoZed family of SOMs.  
[avnet.me/pz-fmc-v2-cc](http://avnet.me/pz-fmc-v2-cc)

**FMC Carrier Card**: Accelerate complex prototyping by interconnecting a MicroZed SOM with industry standard FMC Modules.  
[avnet.me/mz-fmc-cc](http://avnet.me/mz-fmc-cc)

**Arduino Carrier Card**: Ideal for building quick prototypes that leverage the large number of Arduino-compatible Shields.  
[avnet.me/mz-arduino-cc](http://avnet.me/mz-arduino-cc)

**I/O Carrier Card**: Easy access to the MicroZed SOM’s user I/O via 12 Pmods.  
[avnet.me/mz-io-cc](http://avnet.me/mz-io-cc)

**Breakout Carrier Card**: The simplest, least expensive way to enable the PL I/Os on the MicroZed SOM.  
[avnet.me/mz-breakout-cc](http://avnet.me/mz-breakout-cc)

**PCIe Carrier Card**: Most cost effective PCIe solution for a MPSoC, along with one PMOD and one FMC LPC slot.  
[avnet.me/ultrazed-pcie](http://avnet.me/ultrazed-pcie)

**I/O Carrier Card**: High level of connectivity between an UltraZed-EG SOM with 13 PMOD and 1 Arduino standard connections.  
[avnet.me/ultrazed-iocc](http://avnet.me/ultrazed-iocc)

**Carrier Card**: Bring your video designs to reality with interconnection between many video standards and the UltraZed-EV SOM.  
[avnet.me/ultrazed-ev-cc](http://avnet.me/ultrazed-ev-cc)
UltraZed-EV™

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 highspeed 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. These connectors provide USB 2.0, USB 3.0, PCIe Gen2, DisplayPort, SATA 3.0, FMC-HPC and more! 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).

### PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Resale</th>
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<td>AES-ZU7EV-1-SOM-G</td>
<td>UltraZed-EV SOM (Commercial Temp)</td>
<td>$999 USD</td>
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<tr>
<td>AES-ZU7EV-1-SOM-I-G</td>
<td>UltraZed-EV SOM (Industrial Temp)</td>
<td>$1,199 USD</td>
<td>CALL</td>
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</table>

*Contact your local Avnet sales office for pricing on higher quantities

### FEATURES

**MPSoC**
- Xilinx XCZU7EV-1FBVB900 device (SOM also supports 4EV, 5EV, 4EG, 5EG, or 7EG device in the FBVB900 package)
- Other options are available with MOQ=100

**Memory**
- PS DDR4 SDRAM (4GB, in x64 configuration)
- PL DDR4 SDRAM (1GB, in x16 configuration)
- Dual QSPI Flash (64MB)
- I2C EEPROM (2Kb)
- eMMC Flash (8GB, x8)

**Communications**
- USB 2.0 ULPI PHY
- Ethernet PHY
- USB 3.0 Capable

**Other**
- On-board voltage regulators
- PS reference clock input

**User I/O (via three board-to-board connectors)**
- Three JX connectors, providing
- PS JTAG interface
- PL SYSMON interface
- Gigabit Ethernet RJ45 connector interface
- PMBus interface
- Power Good output, input voltages, and output sense pins

**Software**
- Linux BSP and reference designs

**Mechanical**
- 4 inches x 2.5 inches (102 x 63.5 mm)

Additional information and downloadable documentation for UltraZed-EV can be obtained at avnet.me/ultrazed-ev
UltraZed-EG™

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 versus a standard chip-down design.

PARTS

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<tr>
<th>Part Number</th>
<th>Description</th>
<th>Resale 1-99</th>
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<td>AES-ZU3EG-1-SOM-G</td>
<td>UltraZed-EG SOM (Commercial Temp)</td>
<td>$485 USD</td>
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<td>AES-ZU3EG-1-SOM-I</td>
<td>UltraZed-EG SOM (Industrial Temp)</td>
<td>$535 USD</td>
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</tbody>
</table>

*Contact your local Avnet sales office for pricing on higher quantities

FEATURES

MPSoC
- Xilinx XCZU3EG-1SFVA625 device
- Other options are available with MOQ=100

Memory
- DDR4 SDRAM (2GB, in x32 configuration)
- Dual QSPI Flash (64MB)
- I2C EEPROM (2Kb)
- eMMC Flash (8GB, in x8 configuration)

Communications
- USB 2.0 ULPI PHY
- Ethernet PHY
- USB 3.0 Capable

Other
- PS reference clock input
- On-board voltage regulators
- Power-On Reset (POR) circuit
- 4-position boot mode slide switch
- Heatsink included

User I/O (via three board-to-board connectors)
- 3 JX micro-header connectors (2 x 140-pin, 1 x 100-pin) providing the following connections to the Carrier Cards
- 180 user PL I/O pins
- 26 user PS MIO pins (one full MIO bank)
- 4 PS GTR transceivers
- 4 PS GTR reference clock inputs
- PS JTAG interface
- PL SYSMON interface
- USB 2.0 connector interface
- PMBus interface
- Carrier Card 12C interface
- SOM Reset input
- Carrier Card interrupt input
- Carrier Card Reset output
- Power Good output

Software
- Linux BSP and reference designs

Mechanical
- 3.5 inches x 2 inches (89 x 51 mm)

Additional information and downloadable documentation for UltraZed can be obtained at avnet.me/ultrazed-eg
PicoZed™

PicoZed™ is a highly flexible, rugged SOM that is based on the Xilinx Zynq-7000 SoC. It offers designers the flexibility to migrate between the 7010, 7015, 7020, and 7030 Zynq-7000 SoC devices in a pin-compatible footprint. The PicoZed module contains the common functions required to support the core of most SoC designs, including memory, configuration, Ethernet, USB, clocks, and power. It provides easy access to over 100 user I/O pins through three I/O connectors on the backside of the module. These connectors also support access to dedicated interfaces for Ethernet, USB, JTAG, power and other control signals, as well as the GTP/GTX transceivers on the 7015/7030 models. The transceiver based 7015 and 7030 versions of PicoZed are a superset of the 7010/7020 version, adding four high-speed serial transceiver ports to the I/O connectors. Designers can simply design their own carrier card, plug-in PicoZed, and start their application development with a proven Zynq-7000 SoC sub-system.

Industrial Temperature PicoZed SOMs are built with components supporting temperatures of -40 to +85°C. Due to the configurability of the Zynq device, the user must perform final temperature testing validation.

PARTS

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<tr>
<th>Part Number</th>
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<tr>
<td>AES-Z7PZ-7Z010-SOM-G/REV-E</td>
<td>7010 PicoZed SOM</td>
<td>$178 USD</td>
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<tr>
<td>AES-Z7PZ-7Z010-SOM-I-G/REV-E</td>
<td>7010 PicoZed SOM (Industrial Temp)</td>
<td>$217 USD</td>
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<td>AES-Z7PZ-7Z015-SOM-I-G/REV-E</td>
<td>7015 PicoZed SOM (Industrial Temp)</td>
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<td>AES-Z7PZ-7Z020-SOM-I-G/REV-E</td>
<td>7020 PicoZed SOM</td>
<td>$213 USD</td>
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<td>AES-Z7PZ-7Z020-SOM-I-G/REV-E</td>
<td>7020 PicoZed SOM (Industrial Temp)</td>
<td>$265 USD</td>
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<td>AES-Z7PZ-7Z030-SOM-I-G/REV-E</td>
<td>7030 PicoZed SOM (Industrial Temp)</td>
<td>$375 USD</td>
<td>CALL</td>
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*Contact your local Avnet sales office for pricing on higher quantities*

Additional information and downloadable documentation for PicoZed can be obtained at avnet.me/picozed.

FEATURES

**SoC options**
- XC7Z010-1CLG400
- XC7Z015-1CLG485
- XC7Z020-1CLG400
- XC7Z030-1SBG485

**Memory**
- 1 GB of DDR3L SDRAM
- 8 GB eMMC
- 128 Mb of QSPI Flash

**Communications**
- 10/100/1000 Ethernet PHY
- USB 2.0 OTG PHY

**User I/O (via three board-to-board connectors)**
- 7Z010 Version
  - 113 User I/O (100 PL, 13 PS MIO)
  - PL I/O configurable as up to 48 LVDS pairs or 100 single-ended I/O
- 7Z015 Version
  - 148 User I/O (135 PL, 13 PS MIO)
  - PL I/O configurable as up to 65 LVDS pairs or 135 single-ended I/O
  - 4 GTP Transceivers
- 7Z020 Version
  - 138 User I/O (125 PL, 13 PS MIO)
  - PL I/O configurable as up to 60 LVDS pairs or 125 single-ended I/O
- 7Z030 Version
  - 148 User I/O (135 PL, 13 PS MIO)
  - PL I/O configurable as up to 65 LVDS pairs or 135 single-ended I/O
  - 4 GTX Transceivers

**Other**
- JTAG configuration port accessible via I/O connectors
- PS JTAG pins accessible via I/O connectors
- 33.33 MHz oscillator

**Software**
- Linux BSP and reference designs

**Mechanical**
- 4 inches x 2.25 inches (102 mm x 57 mm)
MicroZed™ is a low-cost SOM that is based on the Xilinx Zynq®-7000 SoC. In addition to the Zynq-7000 SoC, the module contains the common functions and interfaces required to support the core of most SoC designs, including memory, configuration, Ethernet, USB, and clocks. On the bottom side of the module, MicroZed contains two 100-pin I/O headers that provide connection to two I/O banks on the programmable logic (PL) side of the Zynq-7000 SoC device. When plugged onto a user designed baseboard or carrier card, these 100-pin connectors provide connectivity between the Zynq-7000 SoC PL I/Os and the user circuits on the carrier card. MicroZed also includes on-board power regulation that supports 5 V input with an option to support 12 V input.

Industrial Temperature MicroZed SOMs are built with components supporting temperatures of -40 to +85°C, with the exception of the use of the microSD card connector. Due to the configurability of the Zynq device, the user must perform final temperature testing validation.

PARTS

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<td>7Z010 MicroZed SOM</td>
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<td>AES-Z7MB-7Z010-SOM-I-G/REV-G</td>
<td>7Z010 MicroZed SOM (Industrial Temp)</td>
<td>$217 USD</td>
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<td>7Z020 MicroZed SOM</td>
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<td>AES-Z7MB-7Z020-SOM-I-G/REV-G</td>
<td>7Z020 MicroZed SOM (Industrial Temp)</td>
<td>$265 USD</td>
<td>CALL</td>
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*Contact your local Avnet sales office for pricing on higher quantities

FEATURES

SoC
- XC7Z010-1CLG400 or
- XC7Z020-1CLG400

Memory
- 1 GB of DDR3 SDRAM
- 128 Mb of QSPI Flash
- MicroSD card interface

Communications
- 10/100/1000 Ethernet
- USB 2.0 OTG
- USB-UART

User I/O (via dual board-to-board connectors)
- 7Z010 Version
  - 108 User I/O (100 PL, 8 PS MIO)
  - PL I/O configurable as up to 48 LVDS pairs or 100 single-ended I/O
- 7Z020 Version
  - 123 User I/O (115 PL, 8 PS MIO)
  - PL I/O configurable as up to 55 LVDS pairs or 115 single-ended I/O

Other
- 2x6 Digilent Pmod® compatible interface providing 8 PS MIO connections for user I/O
- Xilinx PC4 JTAG configuration port
- PS JTAG pins accessible via Pmod or I/O headers
- 33.33 MHz oscillator
- User LED and push button

Software
- Linux BSP and reference designs

Mechanical
- 4 inches x 2.25 inches (102 mm x 57 mm)

Additional information and downloadable documentation for MicroZed can be obtained at avnet.me/microzed.
Ultra96™-V2

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 single board computer based on the Linaro 96Boards Consumer Edition (CE) specification. Ultra96-V2 is available in more countries around the world as it has been designed with a certified radio module from Microchip. Additionally, Ultra96-V2 is available in both commercial and industrial temperature grade options. Additional power control and monitoring is 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 Linux Matchbox windows 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.

An IDT VersaClock 6E clock generator provides timing for USB 3.0, USB 2.0, DisplayPort, and the Xilinx MPSoC primary clock input.

The integrated Infineon programmable power regulators generate all on-board voltages from an external 12V supply (available as an accessory) as well as providing access to power telemetry through PMBus connectivity.

### FEATURES

**MPSoC**
- Xilinx Zynq UltraScale+ MPSoC ZU3EG A484

**Memory**
- Micron 2 GB (512M x32) LPDDR4 Memory
- Delkin 16 GB microSD card + adapter
- Embedded Linux available via download

**Communications and UI**
- 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

**User I/O**
- 40-pin 96Boards Low-speed expansion header
- 60-pin 96Boards High-speed expansion header

**Other**
- IDT programmable LVDS and Single-ended clocks
- Infineon and ON Semiconductor voltage regulators
- Linaro 96Boards Consumer Edition compatible

**Mechanical**
- 85mm x 54mm form factor

### PARTS

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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>AES-ULTRA96-V2-G</td>
<td>ZU3EG Single Board Computer (Commercial Temp)</td>
<td>$249 USD</td>
<td>CALL</td>
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<tr>
<td>AES-ULTRA96-V2-I-G</td>
<td>ZU3EG Single Board Computer (Industrial Temp)</td>
<td>$399 USD</td>
<td>CALL</td>
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*Contact your local Avnet sales office for pricing on higher quantities

To purchase this kit, visit [avnet.me/ultra96v2](http://avnet.me/ultra96v2)
Expand the Ultra96-V2 with Click Mezzanine Card and 700+ Click boards!

Plugs into Avnet’s Ultra96 Single Board Computer, giving access to 700+ Click boards™ from MikroElektronika!

Add-on boards for evaluating, prototyping and developing with sensors, communication modules, actuators, displays, and a host of other products and technologies.

96Boards Click Mezzanine
- Provides two MikroBUS sites
- Compatible with 96Boards LS Expansion

96Boards Click Mezzanine Starter Kit
- Includes Mezzanine, plus 3 click boards
  - USB UART
    Uses Microchip MCP2221
  - 2x16 Character LCD
    Uses Microchip controller
  - 6DoF inertial measurement unit
    Uses ST Micro LSM6DSL

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<td>96Boards Click Mezzanine</td>
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<td>AES-ACC-U96-ME-SK</td>
<td>96Boards Click Mezzanine Starter Kit</td>
<td>$49 USD</td>
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*Contact your local Avnet sales office for pricing on higher quantities

To purchase visit Avnet.me/ClickMezzanine
## Development Kits, Carrier Cards and Accessories

### ULTRAZED-EV™

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<td>AES-ZU7EV-1-SK-G</td>
<td>UltraZed-EV Starter Kit</td>
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<td>AES-ZUEV-CC-G</td>
<td>UltraZed-EV Carrier Card</td>
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<td>AES-ZU-IOCC-G</td>
<td>UltraZed-EG IO Carrier Card</td>
<td>$499</td>
<td>avnet.me/ultrazed-iocc</td>
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<tr>
<td>AES-ZU-PCIECC-G</td>
<td>UltraZed-EG PCIe Carrier Card</td>
<td>$499</td>
<td>avnet.me/ultrazed-pcie</td>
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### ULTRA96-V2™

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</tr>
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<tbody>
<tr>
<td>AES-ACC-U96-JTAG</td>
<td>UART / JTAG cable</td>
<td>$39</td>
<td>avnet.me/ultra96jtag</td>
</tr>
<tr>
<td>AES-ACC-U96-4APWR</td>
<td>4A Power Supply</td>
<td>$19.99</td>
<td>avnet.me/96Board4APower</td>
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<tr>
<td>AES-ACC-U96-ME-MEZ</td>
<td>96Boards Click Mezzanine</td>
<td>$16</td>
<td>avnet.me/ClickMezzanine</td>
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<tr>
<td>AES-ACC-U96-ME-SK</td>
<td>96Boards Click Mezzanine Starter Kit</td>
<td>$49</td>
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### MICROZED™

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<tbody>
<tr>
<td>AES-Z7MB-7Z010-G</td>
<td>MicroZed Development Kit</td>
<td>$199</td>
<td>avnet.me/microzed</td>
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<tr>
<td>AES-MBCC-IO-G</td>
<td>I/O Carrier Card</td>
<td>$149</td>
<td>avnet.me/mz-io-cc</td>
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<tr>
<td>AES-MBCC-FMC-G</td>
<td>FMC Carrier Card</td>
<td>$175</td>
<td>avnet.me/mz-fmc-cc</td>
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<tr>
<td>AES-ARDUINO-CC-G</td>
<td>Arduino Carrier Card</td>
<td>$89</td>
<td>avnet.me/mz-arduino-cc</td>
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<tr>
<td>AES-MBCC-BRK-G</td>
<td>Breakout Carrier Card</td>
<td>$59</td>
<td>avnet.me/mz-breakout-cc</td>
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### PICOZED™

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<tbody>
<tr>
<td>AES-PZCC-FMC-V2-G</td>
<td>PicoZed Carrier Card V2</td>
<td>$349</td>
<td>avnet.me/pz-fmc-v2-cc</td>
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### FMC

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<tbody>
<tr>
<td>AES-FMC-NETW1-G</td>
<td>Network FMC Module</td>
<td>$149 USD</td>
<td>avnet.me/fmc-network1</td>
</tr>
<tr>
<td>AES-FMC-ISMN2-G</td>
<td>ISM Networking FMC v2 Module</td>
<td>$250 USD</td>
<td>avnet.me/fmc-ismnet2</td>
</tr>
<tr>
<td>AES-FMC-MULTICAM4-G</td>
<td>Multicamera FMC Module</td>
<td>$299 USD</td>
<td>avnet.me/fmc-multicam</td>
</tr>
<tr>
<td>AES-FMC-MC4-AR0231AT-G</td>
<td>Quad AR0231AT Camera FMC Bundle</td>
<td>$1,699 USD</td>
<td>avnet.me/fmc-quad-cam</td>
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<tr>
<td>AES-FMC-HDMI-CAM-G</td>
<td>HDMI I/O FMC Module</td>
<td>$250 USD</td>
<td>avnet.me/fmc-hdmi-cam</td>
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### OTHER KITS AND ACCESSORIES

<table>
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<tr>
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<tbody>
<tr>
<td>AES-MINIZED-72007-G</td>
<td>MiniZed Z7007S Starter Kit</td>
<td>$89 USD</td>
<td>avnet.me/minized</td>
</tr>
<tr>
<td>AES-Z7EV-72020-G</td>
<td>ZedBoard</td>
<td>$449 USD</td>
<td>avnet.me/zedboard-dev-kit</td>
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<tr>
<td>AES-PMOD-TPM20-SLB9670-G</td>
<td>Infineon TPM v2.0 Peripheral Module</td>
<td>$29.95 USD</td>
<td>avnet.me/tpm2.0</td>
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<tr>
<td>AES-CAM-ON-P1300C-G</td>
<td>ON Python 1300C Camera Module</td>
<td>$499 USD</td>
<td>avnet.me/python1300</td>
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<tr>
<td>AES-PMOD-TDM114-G</td>
<td>TDNext 1.26Mpixel Pmod Camera Kit</td>
<td>$69 USD</td>
<td>avnet.me/tdnext</td>
</tr>
<tr>
<td>AES-PMOD-MUR-1DX-G</td>
<td>Murata 1DX Ble WiFi Bluetooth Pmod WiFi/BLE Module</td>
<td>$59 USD</td>
<td>avnet.me/pmod_1dx</td>
</tr>
<tr>
<td>210-299P-KIT</td>
<td>JTAG HS3 Programming Cable</td>
<td>$59 USD</td>
<td>avnet.me/jtaghs3</td>
</tr>
</tbody>
</table>

### Support

Our community-based site is dedicated to helping you jump-start your Xilinx Zynq®-7000 All Programmable SoCs and UltraScale+ MPSoC projects. You’ll find reference designs, documentation and training material supporting the platforms and solutions presented here. We hope you’ll sign-on, join the community and get started today!

### Reference Designs

Reference Designs and tutorials available on product pages on the community based site.

### Forums

Ideas, questions and solutions from community members.

### Training and Videos

Learn how to create your own designs or see what others have done. You’ll find introductory courses, advanced topics, architectural overviews and links to other resources.
Avnet Zynq UltraScale+ RFSoC Development Kit

Explore the Xilinx Zynq® UltraScale+™ RFSoC from antenna to digital using tools from MathWorks and industry-leading RF components from Qorvo.

Connect to RFSoC gigasample data converters and perform analysis natively in MATLAB® and Simulink® using Avnet’s RFSoC Explorer®. Prototype over-the-air transmission with the Qorvo 2x2 LTE Band-3 1.8 GHz RF front-end card.

For more information visit Avnet.com/rfsockit

Control the RFSoC and Qorvo RF front end with RFSoC Explorer

For more information, please contact your regional branch. avnet.me/avnet-locations