

MicroZed™ Industrial IoT Starter Kit



The Avnet MicroZed™ Industrial IoT Starter Kit supports designers' edge-to-cloud development of Internet-connected solutions and includes all the necessary building blocks for developing a production-ready, IoT-enabled, industrial processing system. The platform is based on Avnet's MicroZed system-on-module (SoM) with Zynq®-7000 All Programmable SoC from Xilinx and pluggable sensor solutions from Maxim Integrated and ST Microelectronics.

FEATURES

Production ready, MicroZed 7010 SOM

- Based on Xilinx Zynq-7000 SoC
 - Dual ARM® Cortex™-A9 processing system
 - FPGA logic

Expandable development platform

- R3 Arduino-compatible shield expansion slot
- Two 2x6 peripheral module expansion slots
- Additional user header providing access to SPI, I2C, UART, and GPIO on MicroZed

Linux enabled

- Eases application development
- Certified binary image

Connectivity

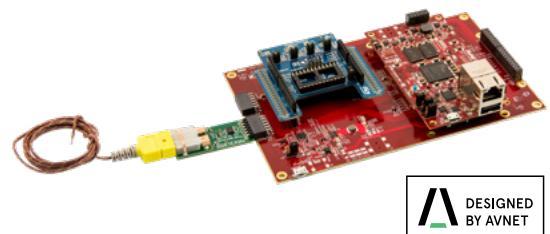
- 10/100/1000 Ethernet Port
- Optional WILINK8 WiFi/BLE add-on

Pluggable sensor options

- ST Microelectronics motion MEMS and environmental sensor shield
 - Connects to shield site
 - Six I2C based sensor solutions
 - 3-axis accelerometer + 3-axis gyroscope
 - 3-axis magnetometer
 - Humidity and temperature
 - Pressure
- Maxim Integrated thermocouple-to-digital peripheral module
 - Connects to 2x6 peripheral module
 - SPI-based interface
 - Able to measure temperatures from -270°C to +1800°C
 - Includes K-type thermocouple

To purchase this kit, visit

www.microzed.org



KIT INCLUDES

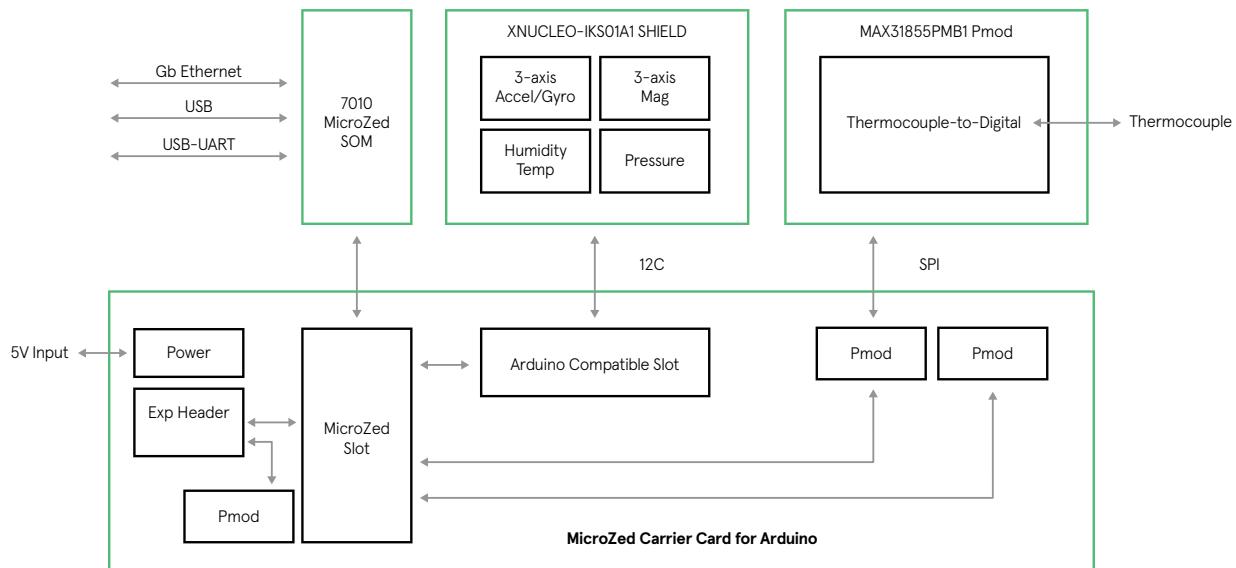
- MicroZed 7010 SOM¹
- MicroZed Carrier Card for Arduino™
- ST Microelectronics sensor shield
- Maxim Integrated thermocouple sensor peripheral module
- Ethernet cable
- (1) micro USB cable
- AC power adapter
- Quick start card

TARGET APPLICATIONS

- Factory Automation
- Building Automation
- Smart City
- Smart Agriculture
- Test and Measurement

1. The AES-Z7MB-IIOT-UP-G kit does not include the MicroZed 7010 SOM and is intended for developers that already have a MicroZed SOM or want to target the larger 7020 version.
2. Although not required for development, a JTAG programming cable is recommended for enhanced debugging and Zynq programming. See related parts for ordering information.

BLOCK DIAGRAM



FEATURED MANUFACTURERS



PARTS

Part Number	Description	Resale
AES-Z7MB-IIOT-AWS-G	MicroZed IIoT Starter Kit	\$299 USD

RELATED PARTS

Part Number	Description	Resale
210-299P-KIT	JTAG Programming/Download Cable (HS3)	\$56 USD
AES-Z7MB-7Z010-SOM-G	MicroZed 7010 SOM	\$165 USD @ 100 units
AES-Z7MB-7Z020-SOM-G	MicroZed 7020 SOM	\$197 USD @ 100 units
AES-Z7MB-7Z010-SOM-I-G	MicroZed 7010 SOM - Ind. Temp	\$201 USD @ 100 units
AES-Z7MB-7Z020-SOM-I-G	MicroZed 7020 SOM - Ind. Temp	\$245 USD @ 100 units
AES-PMOD-WLINK8-G	WiLink™ 8 Wi-Fi and BT/BLE Pmod Adaptor	\$34 USD
WL1837MODCOM8I	WiLink™ 8 Dual Band 2.4 and 5 GHz Wi-Fi® + Bluetooth® COM8 Evaluation Module	\$49 USD

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

CONTACT INFORMATION

North America
2211 S 47th Street
Phoenix, Arizona 85034
United States of America
eval.kits@avnet.com
1-800-585-1602

Europe (Silica)
Gruber Str. 60c
85586 Poing
Germany
marketing@silica.com
+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
XilinxAPAC@avnet.com
+65-6580-6000