MicroZed™ Carrier Card Kit for Arduino™

The MicroZed™ Carrier Card Kit for Arduino™ brings both Shield expansion and Peripheral Module expansion (2x6 pin connectors) to the MicroZed System-On-Module. The carrier card is ideal for building quick prototypes that leverage the large number of Arduino-compatible Shields.
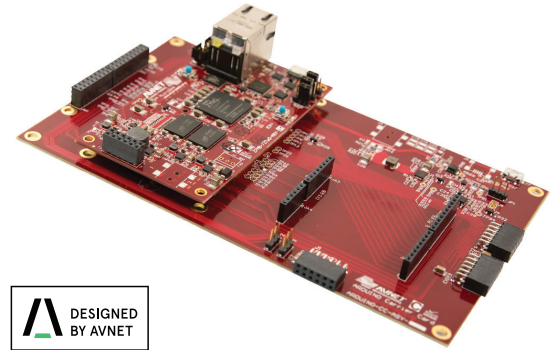
This low-cost platform facilitates:

- Expansion of platform functionality via a wide range of 3rd party Arduino™-compatible "Shields"
- Design partitioning to include ultra low-power MCU to offload and control the Apps Processor
- Power management and scheduling of the MicroZed board by an optional Microcontroller board
- 2x6 Peripheral expansion connectors for MicroZed as well as the optional MCU sub-system

FEATURES

- Carrier Card support for MicroZed SOMs
- Full Arduino-compatible Shield site with connection to MicroZed PL I/O
- Partial Arduino-compatible Shield site for connection to optional low-power MCU sub-system
    - Supports MCU ON/OFF control of MicroZed power
    - Enables offloading of MicroZed tasks to the low-power MCU
    - Facilitates low-power sensor hub functionality, autonomous from MicroZed application processor
- Adds two 2x6 peripheral module expansion interfaces to MicroZed
    - Supports interface for PS based SDIO/SPI
    - Supports interface for PL based I/O
- Adds one 2x6 peripheral module expansion interface to the low-power MCU connector
    - Supports interface for I2C/UART

To purchase this kit, visit
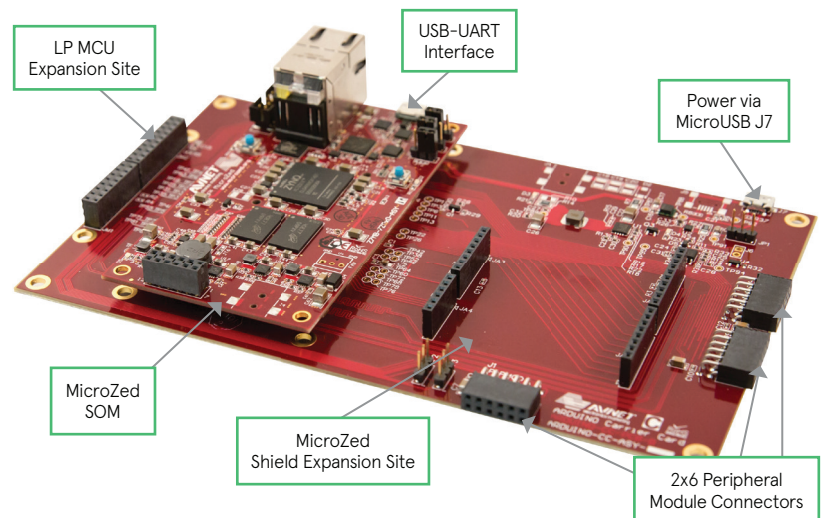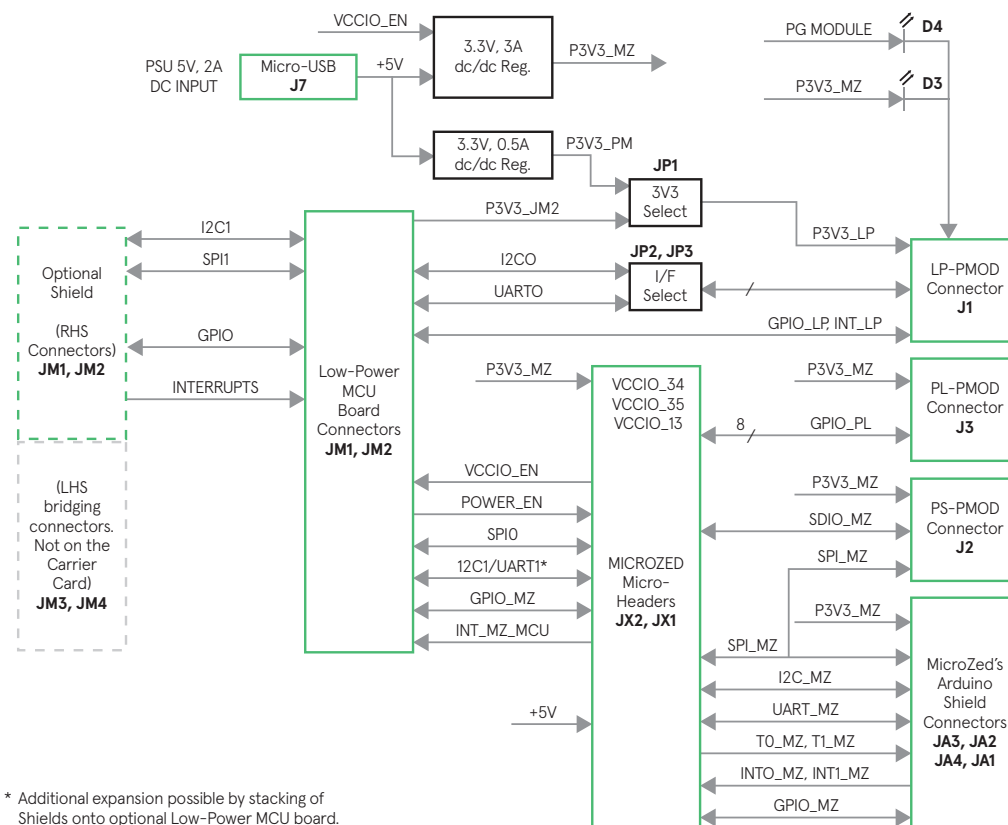www.microzed.org/product/arduino-cc

KIT INCLUDES

- MicroZed™ Carrier Card Kit for Arduino™
- MicroUSB Cable
- Downloadable Zynq-based Reference Design

TARGET APPLICATIONS

- MicroZed prototyping that leverages the ecosystem of Shield boards for Arduino
- MCU power and run control of MicroZed SOM

LP MCU Expansion Site

USB-UART Interface

Power via MicroUSB J7

MicroZed SOM

MicroZed Shield Expansion Site

2x6 Peripheral Module Connectors

BLOCK DIAGRAM

VCCIO_EN

PSU 5V, 2A DC INPUT — Micro-USB **J7** — +5V — 3.3V, 3A dc/dc Reg. — P3V3_MZ

PG MODULE — **D4**

P3V3_MZ — **D3**

3.3V, 0.5A dc/dc Reg. — P3V3_PM — **JP1** 3V3 Select

Optional Shield (RHS Connectors) **JM1, JM2**

I2C1
SPI1
GPIO
INTERRUPTS

Low-Power MCU Board Connectors **JM1, JM2**

P3V3_JM2

JP2, JP3 I/F Select

I2C0
UART0

P3V3_LP

GPIO_LP, INT_LP

LP-PMOD Connector **J1**

(LHS bridging connectors. Not on the Carrier Card) **JM3, JM4**

P3V3_MZ

VCCIO_EN
POWER_EN
SPI0
I2C1/UART1*
GPIO_MZ
INT_MZ_MCU

MICROZED Micro-Headers **JX2, JX1**
VCCIO_34
VCCIO_35
VCCIO_13

P3V3_MZ — PL-PMOD Connector **J3**

8 — GPIO_PL

P3V3_MZ
SDIO_MZ
SPI_MZ

PS-PMOD Connector **J2**

+5V

P3V3_MZ
SPI_MZ
I2C_MZ
UART_MZ
T0_MZ, T1_MZ
INT0_MZ, INT1_MZ
GPIO_MZ

MicroZed's Arduino Shield Connectors **JA3, JA2 JA4, JA1**

* Additional expansion possible by stacking of Shields onto optional Low-Power MCU board.

FEATURED MANUFACTURERS

XILINX
ALL PROGRAMMABLE™

PARTS

Part Number	Description	Resale
AES-ARDUINO-CC-G	MicroZed™ Carrier Card Kit for Arduino™	$89 USD

RELATED PARTS

Part Number	Description	Resale
AES-Z7MB-7Z010-G	Avnet MicroZed™ Evaluation Kit	$199 USD
FRDM-KL46Z	Freedom Development platform for Kinetis L series KL46	$19.56 USD
CENB1010A0500B04	AC/DC Power Supply 5V,2A	$7.99 USD

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