# **Avnet** Product Brief

# I/O Carrier Card





The I/O Carrier Card supports the MicroZed™ Evaluation Kit and System-on-Module (SOM), providing easy access to the full 108 user I/O available from the MicroZed SOM. Two 100-pin MicroHeaders on the carrier card mate with the MicroZed, connecting over 80 of the MicroZed Programmable Logic (PL) I/O to 12 Digilent Pmod™ compatible interfaces. The remaining MicroZed I/O are connected to various I/O Carrier Card features, including push button switches, DIP switches, LEDs, EEPROM, Xilinx XADC, and clock oscillator. The I/O Carrier Card also generates the necessary power rails for MicroZed, providing 5 V to the MicroZed core, user selectable bank voltages for the PL I/O, and the necessary voltages for the XADC. The I/O Carrier Card speeds prototype and evaluation of MicroZed and provides an excellent starting point for creating your own MicroZed carrier card.

### Kit Includes

- >> I/O Carrier Card
- >> 5 V @ 3 A AC/DC Power Supply
- Getting Started Card

For more information and to purchase the carrier card, visit www.MicroZed.org

### **Features**

- >> Interfaces
  - » Two 100-pin board-to-board MicroHeaders
  - >> Xilinx PC4 header for download/debug
    - > Accesses PL JTAG
  - >> Twelve Digilent Pmod<sup>™</sup> compatible interfaces
    - > Access to 80 user I/O
    - > One connected to PS MIO
    - > Two connected to Bank 13 (supported with 7Z020 MicroZed only)
  - >> Reset push button
  - >> 4 User push buttons
  - >> 2 Configuration push buttons
  - » 8 User LEDs
  - >> 4 User DIP switches
  - >> 2 Status LEDs
  - >> Xilinx AMS Header
- >> On-board Oscillator
  - >> 100 MHz
- >> On-board Memory
  - >> 1 KB 1-wire EEPROM
- >> Power
  - >> Internal
    - > 5 V connection to MicroZed and XADC
    - > Two 1.8/2.5/3.3 V @ 2 A Regulators for MicroZed VCCIO
    - > Filtered 1.8 V @ 0.2 A Regulator for XADC
    - > 1.25 V @ 0.2 A Regulator for XADC
  - >> Input
    - > 5 V Barrel jack input

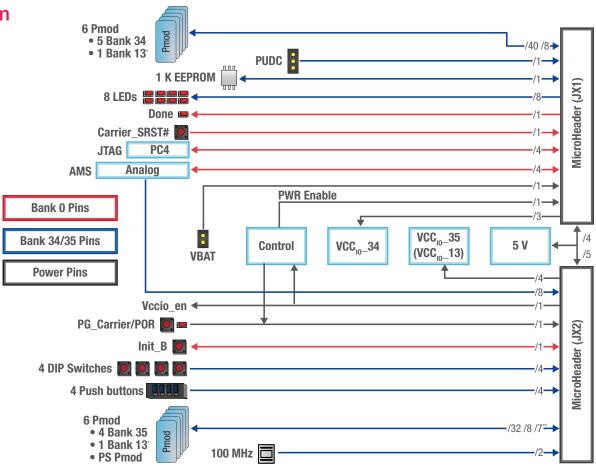
## **Target Applications**

- >> General MicroZed evaluation and prototyping
- Embedded system-on-module (SOM) applications
- >> Test & measurement





### **Block Diagram**



\*Bank 13 I/O only supported by the 7Z020 version of MicroZed "Bank 13 Pmod only has 7 I/O Pins

# **Ordering**

Part Number	Description	Resale
AES-MBCC-IO-G	I/O Carrier Card	\$149 USD

**Associated Parts** 

AES-Z7MB-7Z010-G MicroZed Evaluation Kit \$199 USD
AES-Z7MB-7Z010-SOM-G System-on-Module Version of MicroZed 7010 \$192 USD (qt

AES-Z7MB-7Z010-SOM-G System-on-Module Version of MicroZed 7010  $$192 \text{ USD (qty} = 1-99)^*$$ AES-Z7MB-7Z020-SOM-G System-on-Module Version of MicroZed 7020  $$289 \text{ USD (qty} = 1-99)^*$$ 

For more information and to purchase the carrier card, visit www.MicroZed.org

\*For quantities greater than 100 call for quote

### **Contact Information**

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