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.

FEATURES

Interfaces

- Two 100-pin board-to-board MicroHeaders
- Xilinx PC4 header for download/debug
    - Accesses PL JTAG
- Twelve Digilent Pmod™ 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

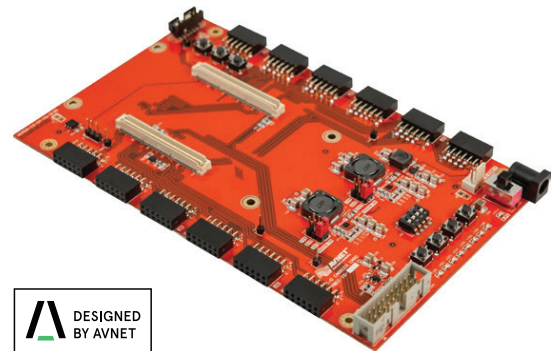### On-board Memory

- 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

To purchase this kit, visit www.microzed.org
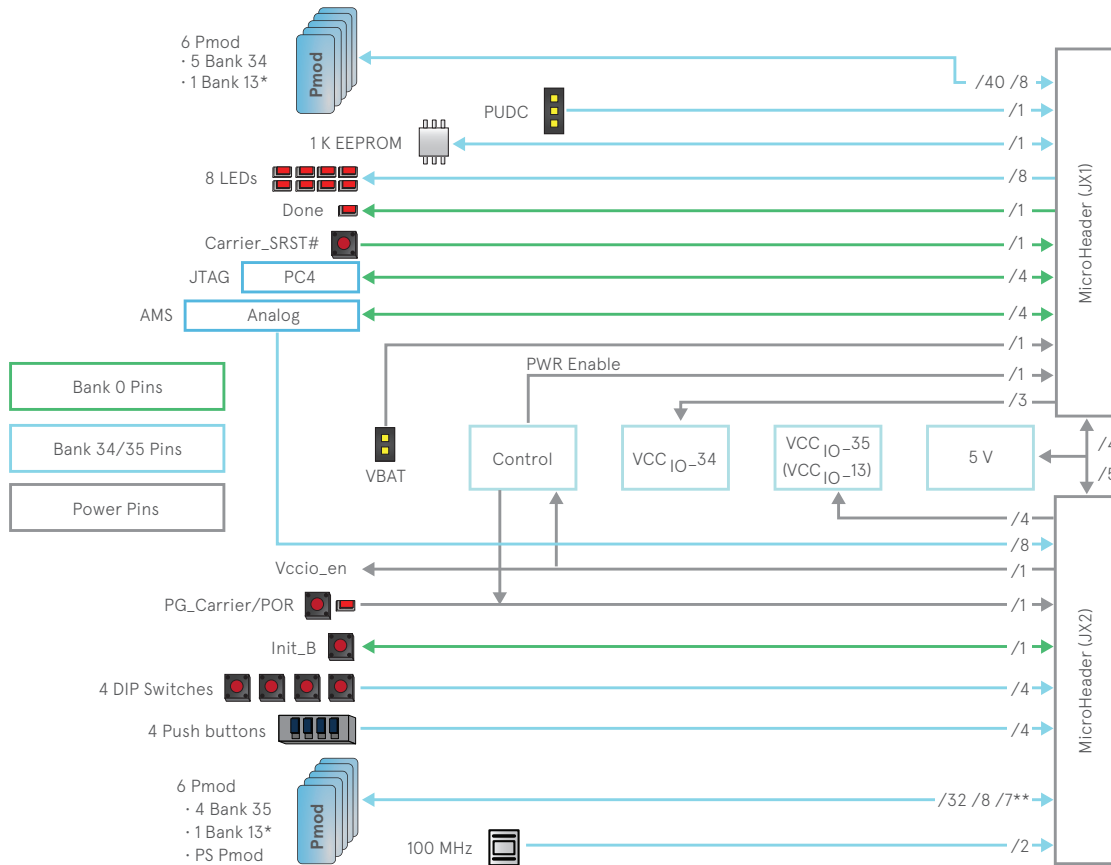
COMPATIBLE WITH

/MICROZED™

KIT INCLUDES

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

TARGET APPLICATIONS

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

BLOCK DIAGRAM

6 Pmod
· 5 Bank 34
· 1 Bank 13*

PUDC

1 K EEPROM

8 LEDs /8

Done /1

Carrier_SRST# /1

JTAG PC4 /4

AMS Analog /4

/40 /8
/1
/1

/1
/1
/3

Bank 0 Pins

Bank 34/35 Pins

Power Pins

VBAT

PWR Enable

Control   VCC$_{IO}$–34   VCC$_{IO}$–35 (VCC$_{IO}$–13)   5 V

MicroHeader (JX1)

/4
/5

/4
/8

Vccio_en /1

PG_Carrier/POR /1

Init_B /1

4 DIP Switches /4

4 Push buttons /4

6 Pmod
· 4 Bank 35
· 1 Bank 13*
· PS Pmod

/32 /8 /7**

100 MHz /2

MicroHeader (JX2)

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

PARTS

Part Number	Description	
AES-MBCC-IO-G	I/O Carrier Card	

RELATED PARTS

Part Number	Description	
AES-Z7MB-7Z010-G	MicroZed Evaluation Kit	
AES-Z7MB-7Z010-SOM-G	System-on-Module Version of MicroZed 7010	
AES-Z7MB-7Z020-SOM-G	System-on-Module Version of MicroZed 7020	

*For quantities greater than 100 call for quote

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