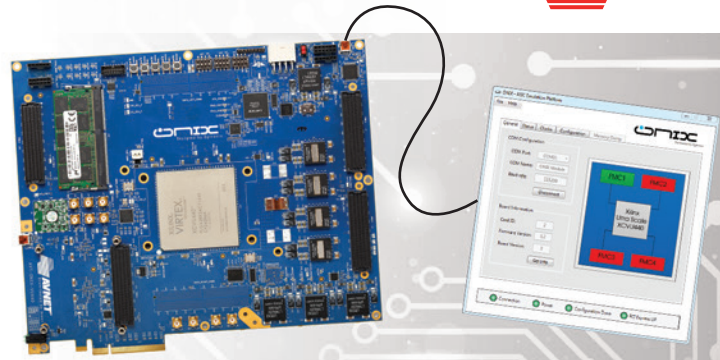


# ONIX-VU440



## Kit Includes

- Hardware
  - ONIX Virtex UltraScale 440 Board
  - USB A-mini-B Cables (2)
  - 12V Power Supply (US/UK/ Euro AC cords)
- Software Tools
  - Xilinx Vivado: Design Edition (Device locked to XCVU0440)
  - ONIX Dashboard

## Target Apps

- ASIC Emulation/Validation
- Rapid prototyping

ONIX-VU440 is based on Xilinx UltraScale™ XCVU440 FPGA, currently the largest FPGA available in the industry. The module board is designed for Rapid prototyping and ASIC Emulation, to provide the best available solution for users' requirements.

The flexible and scalable design of ONIX-VU440 supports three modes of operation, including:

- A "desktop" Standalone Mode
- PCIe plug-in card
- Mezzanine Module mode of operation while plugged on the Host Board.

ONIX package includes management SW that enables:

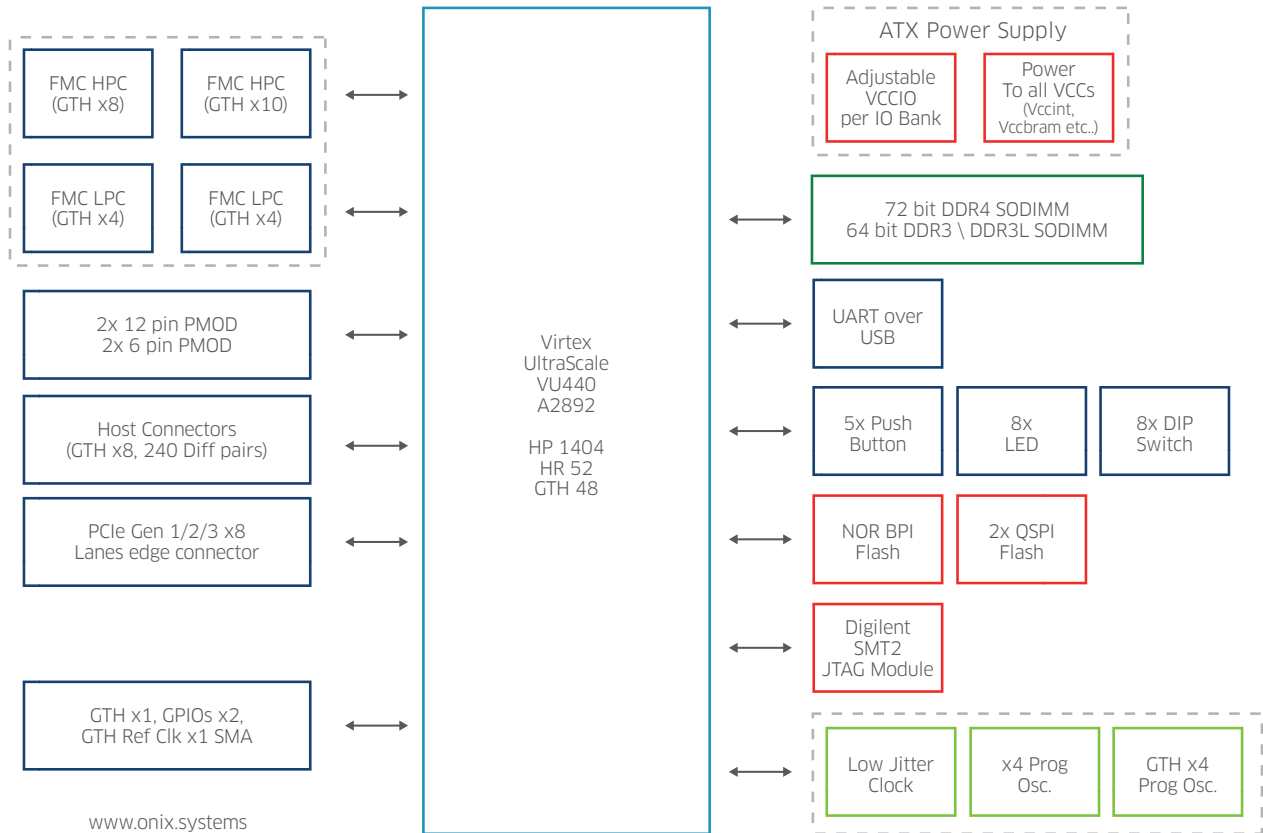
- Easy access to board features like programmable PLLs/Oscillators
- Flash Programming
- Low-level SoC debug
- Memory Dump and Upload

## Features

- Xilinx XCVU440FLGA2892
- Connectivity
  - PCIe Gen. 1/2/3 x1/x4/x8 lanes
  - x4 FMC
  - x4 PMOD
  - SMAs
  - UART over USB
  - JTAG
- DDR Memory
  - DDR4 x72 bit
  - DDR3 \ DDR3L x64 bit
  - LPDDR2 \ 3 (Optional)
- Advanced clock generation
  - On-Board programmable PLL 1kHz up to 800MHz
  - x4 programmable clocks
  - x4 programmable clocks for the GTH transceivers
- FPGA Programming and Debug
  - Via JTAG connector or Digilent USB module
  - Up to 2 configuration files storage in flash
  - Fast remote configuration (via USB)
  - Low-level SoC debug
  - Memory Dump and Upload
- x4 PMOD sockets for off-the-shelf modules
- General purpose x8 DIP switches
- General purpose x8 LEDs
- General purpose x4 push buttons
- Power Supplies
  - 12V Power Supply
  - Standard ATX supply
- Power management providing:
  - Per bank voltage control
  - Power Monitoring
  - Reverse polarity and current protection

To purchase this kit, contact [ONIX@avnet.com](mailto:ONIX@avnet.com) or visit [www.em.avnet.com/ONIX-VU440](http://www.em.avnet.com/ONIX-VU440)

## Block Diagram



## Featured Manufacturers



## Parts

Part Number	Description	Price
AVT-ONIX-VU440-1-G	ONIX Module XCVU440-1 Device	Contact your local Avnet office
AVT-ONIX-VU440-2-G	ONIX Module XCVU440-2 Device	Contact your local Avnet office

## Related Products

Part Number	Description	Price
AVT-ONIX-HOST-3U-G	ONIX HOST Board	Contact your local Avnet office
AVT-ONIX-DDR3-G	ONIX DDR3\L adaptor	Contact your local Avnet office

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

Contact Information	North America	Europe	Japan	Asia
	2211 South 47th Street Phoenix, Arizona 85034 United States of America eval.kits@avnet.com 1-800-585-1602	Gruber Str. 60c 85586 Poing Germany marketing@silica.com +49-8121-77702	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	151 Lorong Chuan, #06-03 New Tech Park Singapore 556741 XilinxAPAC@avnet.com +65-6580-6000