

# VeriTiger®-V13P

VeriTiger®-V13P is a pretty agile and easy bring-up prototyping system from HyperSilicon, using Xilinx Virtex UltraScale+ XCVU13P FPGA. VeriTigerV13P delivers high performance, fast running speed and flexible scalability to accelerate software development, system verification and validation. Through the Protowizard® software to manage prototyping runtime resource and Semu® software to deliver highest debug productivity, VeriTiger-V13P can significantly reduce the digital IC development time.



## Hardware

### FPGA Information

- ▣ Xilinx Virtex UltraScale+ XCVU13P FPGA
- ▣ 22.8 Million Equivalent ASIC Gates
- ▣ 3780K System Logic Cells
- ▣ FPGA Memory 454.5Mb (Block RAM 94.5Mb+Ultra RAM 360Mb)
- ▣ 12288 DSP Slices

### Clock Resources

- ▣ 4 Programmable Differential Clocks
- ▣ 2 Clocks at 20MHz
- ▣ 2 SI5338 MMCX Differential Clock Inputs
- ▣ 1 SI5338 MMCX Differential Clock Output
- ▣ Direct Connect-to FPGA Differential Clocks Offered By 2 Pairs of MMCX
- ▣ 3 Transceiver Refclks at 100MHz
- ▣ 1 Multi-FPGA Shared and Global Programmable Differential ZCLK Clocks

### Connector Resources

- ▣ 8 HSPI2-MGT Connectors, Offering 64 Lanes GTY Channel
- ▣ 2 QSFP Interfaces, Offering 8 Lanes GTY Channel
- ▣ 6 HSPI2-DQS Connectors
- ▣ 3 HSPI2-CAC Connectors, Supporting 3 DDR3/DDR4
- ▣ 2 HSPI2-LVDS Connectors, Offering 47 LVDS Differential Pairs
- ▣ 1 HSPI2-SEND Connector
- ▣ 616 High-performance I/Os in total in HSPI2 Connectors
- ▣ 4 Independent Buttons, 2 Four-digit DIP Switch, 8 User-defined LED Lights

### Platform Parameters

- ▣ Dimensions: L223mm, W340mm, H91mm
- ▣ Weight: 3.0 Kg
- ▣ Max Power Consumption: 120W

# Software

## System Monitoring

- Monitor Voltage and Current
- Monitor FPGA Temperature
- Monitor Daughter Cards States
- Auto Fan Speed Adjustment and Support Mute Mode

## Support Multiple Loading Modes

- USB-JTAG Mode
- Ethernet-Selected Map Mode
- SDCard Configuration

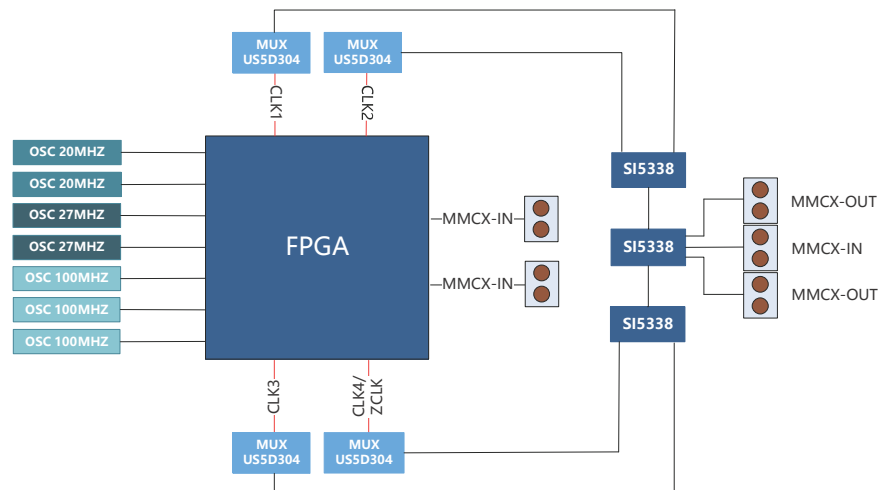
## Deep Debug

- Support Virtual Pins for Debug Signal Capturing
- Support Deep Debug, Waveform Trigger and Display
- Semu® Software to Deliver Highest Debug Productivity

## Resources Management

- Support Suits Management
- Support Hardware Self-test

# Clock Architecture



# I/O Architecture

