



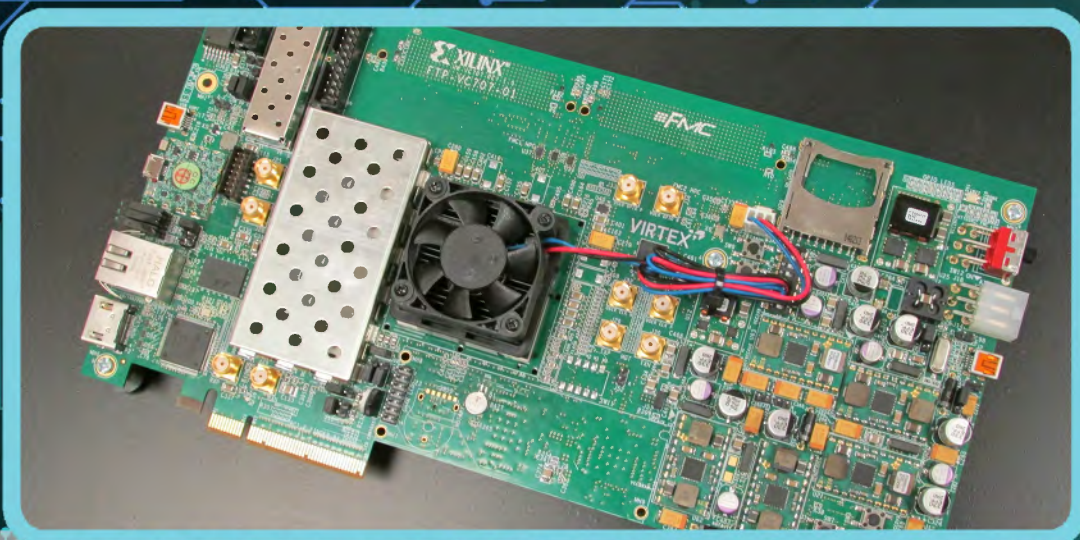
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## FTP-VC707-01

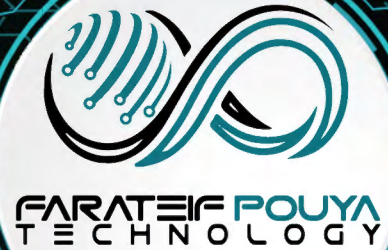
### Product Description

The Virtex®-7 FPGA FTP-VC707-01 Evaluation Kit is a full-featured, highly-flexible, high-speed serial base platform using the Virtex-7 XC7VX485T-2FFG1761I and includes basic components of hardware, design tools, IP, and pre-verified reference designs for system designs that demand high-performance, serial connectivity and advanced memory interfacing. The included pre-verified reference designs and industry-standard FPGA Mezzanine Connectors (FMC) allow scaling and customization with daughter cards.

This customized Evaluation Kit support wider operation temperature range than Xilinx VC707 Evaluation Kit. Because of changing the position of the FMC connectors to behind of board, even by using the daughter boards it doesn't occupy more space than actual size of the board. With the thanks of this changing, for PCIe application it doesn't need any customized PC case and users can use standard 4U cases even when using this board with daughter boards.







# FTP-VC707-01

## Clocking

- Fixed Oscillator with differential 200MHz output
- Programmable Oscillator with 156.250 MHz
- Differential SMA clock input
- Differential SMA GTX reference clock input

## Configuration

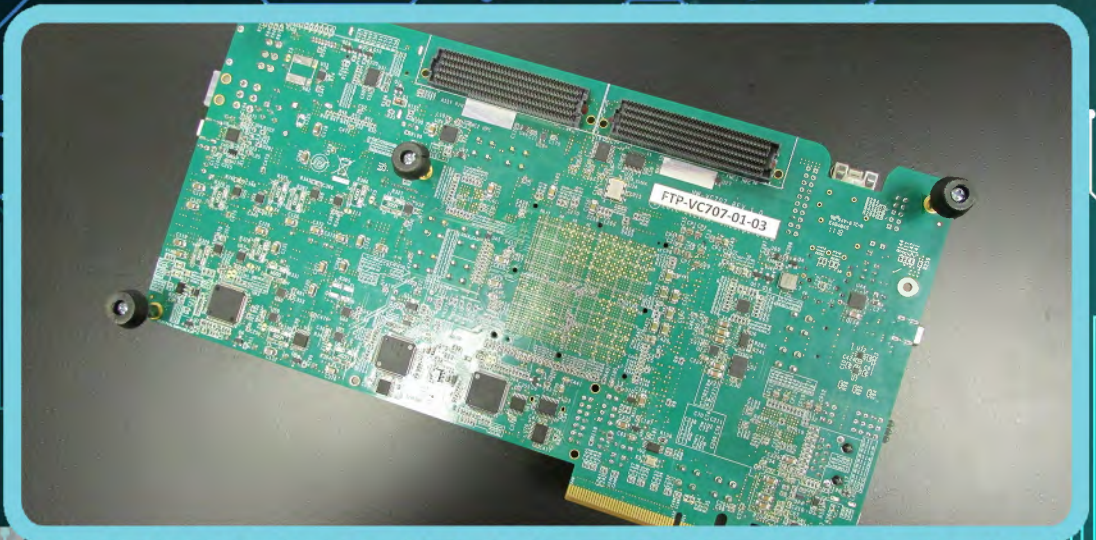
- Onboard JTAG configuration circuitry
- JTAG header
- 128MB (1024Mb) Linear BPI Flash
- 16MB (128Mb) Quad SPI Flash

## Expansion Connectors

- FMC1 – HPC (8 XCVR, 160 single ended or 80 differentials user-defined pins)
- FMC2 – HPC (8 XCVR, 116 single ended or 58 differentials user-defined pins)
- Vadj supports 1.8V
- IIC

## Communication & Networking

- Gigabit Ethernet GMII, RGMII and SGMII
- SFP+ transceiver connector
- GTX port (TX, RX) with four SMA connectors
- UART to USB Bridge
- PCI Express x8 gen2 Edge Connector (layout for Gen3)







## FTP-VC707-01

### Memory

- 1GB DDR3 SODIMM 800MHz / 1600Mbps
- 128MB (1024Mb) Linear BPI Flash for PCIe Configuration
- SD Card Slot
- 8Kb IIC EEPROM

### Control & I/O

- 5X Push Buttons
- 8X DIP Switches
- AMS FAN Header (2 I/O)

### Debug & Analog Input

- 8 GPIO Header
- Analog Mixed Signal (AMS) Port

### Power

- 12V wall adapter or ATX
- Voltage and Current measurement capability

### Display

- HDMI Video OUT
- 8X LEDs

