AMD

AMD Kintex™ 7 FPGA Connectivity Kit

by: AMD

**AMD**

The AMD Kintex™ 7 FPGA Connectivity Kit is a 20Gb/s platform for high-bandwidth and high-performance applications containing all the necessary hardware, tools and IP to power quickly through your evaluation and development of connectivity systems. This includes a 20Gb/s targeted reference design featuring PCI Express, a DMA IP core from Northwest Logic, 10GBase-R, AXI, and

Feedback

Image Zoom
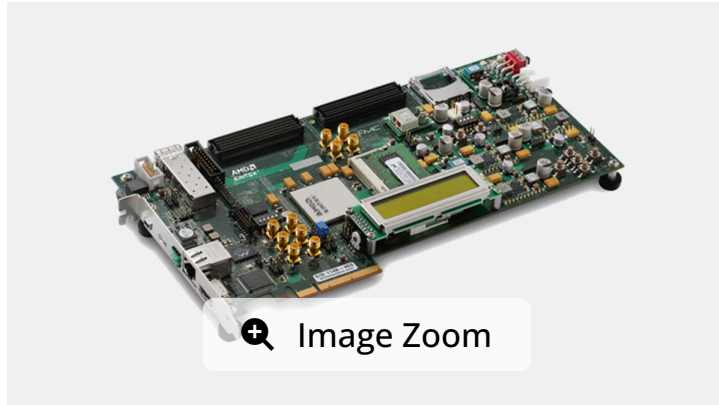
a Virtual FIFO memory controller interfacing to an external DDR3 memory. To control and monitor this design, the board includes a connectivity GUI built on Fedora Live OS which includes all the software drivers. Additionally, this board contains the relevant SFP+ FMC daughter card, cable and transceiver modules needed to utilize this design.

Part Number:

DK-K7-CONN-G

Device Support: Kintex 7

ON THIS PAGE ⌄

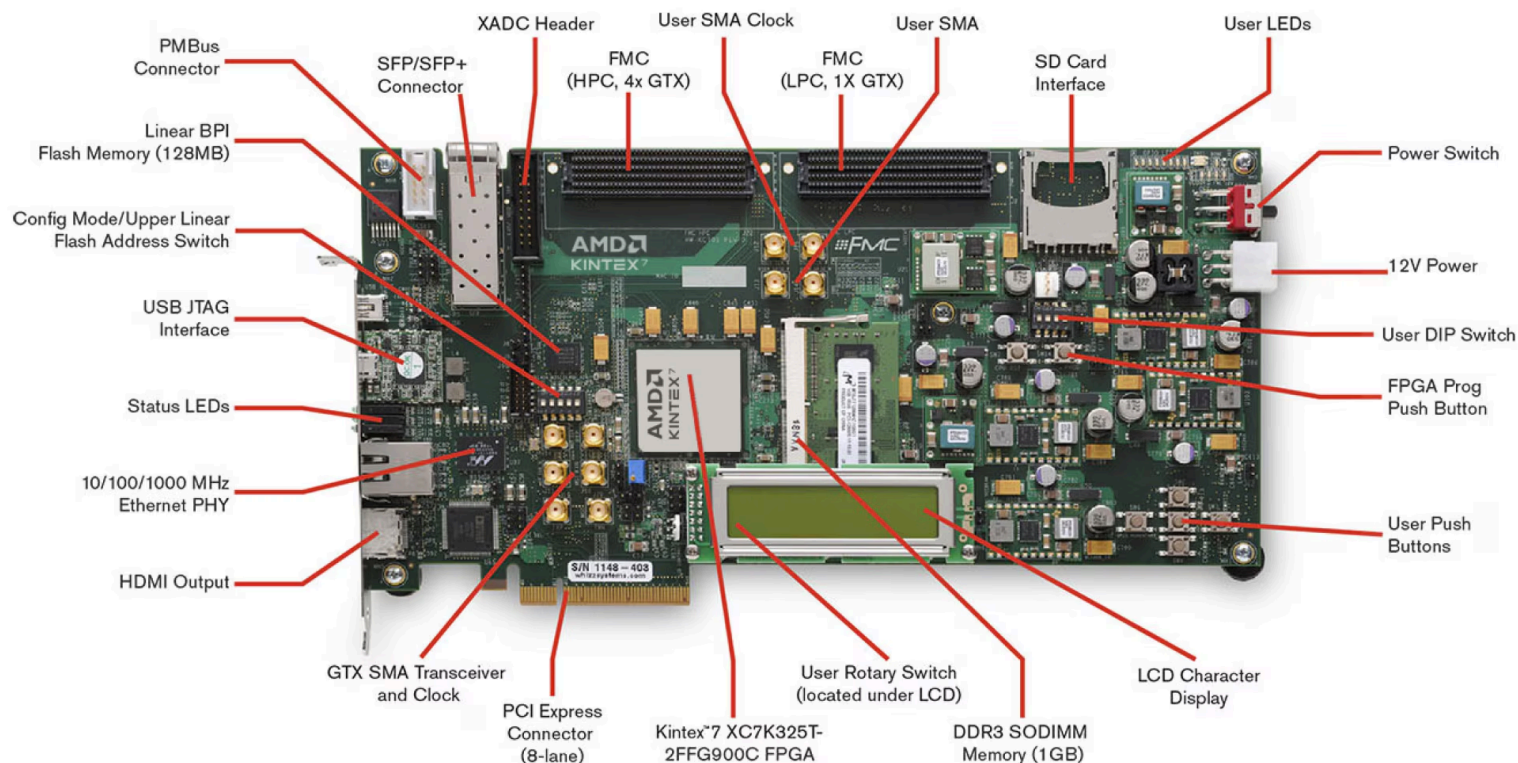Features & Devices   **Specifications**   What's Inside

Board Features

Featuring the Kintex 7 Connectivity Board

Communication & Networking

- GigE Ethernet GMII, RGMII and SGMII
- SFP / SFP+ cage
- GTX port (TX, RX) with four SMA connectors

Clocking

- Fixed Oscillator with differential 200MHz output used as the "system" clock for the FPGA
- Programmable Oscillator with

Display

- HDMI Video output
- External Phy/codec device driving an HDMI Connector
- 2x16 LCD display
- 8x LEDs

Expansion Connectors

- FMC-HPC (Partial Population) connector (4 GTX Transceiver, 116 single-ended, 58 differential, 4

- UART To USB Bridge
- PCI Express x8 edge connector

156.250 MHz as the default output - default frequency targeted for Ethernet applications but oscillator is programmable for many end uses

- Differential SMA clock input
- Differential SMA GTX reference clock input
- Jitter attenuated clock used to support CPRI/OBSAI applications that perform clock recovery from a user-supplied SFP/SFP+ module

LA & 24 HA) user defined signals)

- FMC-LPC connector (1 GTX Transceiver, 68 single-ended or 34 differential user defined signals)
- Vadj can support 1.8V, 2.5V, or 3.3V
- IIC

Configuration

Memory

Control & I/O

Power

- Onboard JTAG configuration circuitry to enable configuration over USB
- 128MB (1024Mb) Linear BPI Flash for PCIe® Configuration
- JTAG header provided for use with AMD download cables such as the Platform Cable USB II
- 16MB (128Mb) Quad SPI Flash

- 1GB DDR3 SODIMM 800MHz / 1600Mbps
- 128MB (1024Mb) Linear BPI Flash for PCIe Configuration
- 16MB (128Mb) Quad SPI Flash
- 8Kb IIC EEPROM
- SD Card Slot

- 5X Push Buttons
- 4X DIP Switches
- Diff Pair I/O (1 SMA pair)
- AMS FAN Header (2 I/O)
- 7 I/O pins available through LCD header

- 12V wall adapter or ATX
- Voltage and Current measurement capability of 2.5V, 1.5V, and 1.2V, 1.0V supplies (IIC path to FPGA)

Analog

- XADC header