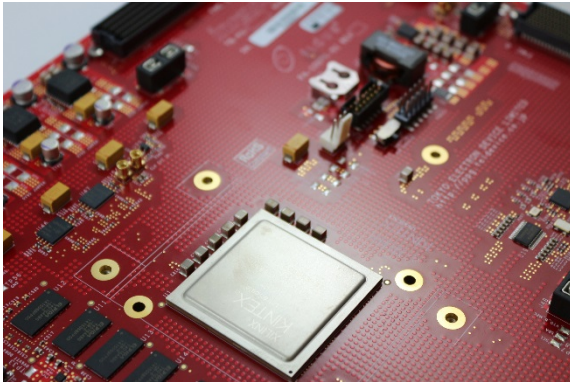


Kintex® UltraScale® “Quattro” Development Platform

December, 2016 PN: TB-KU-115-QUATTRO

Available Now

Ideal for defense, video, and comms developments



Features

- Kintex UltraScale XCKU115-2FFVA1517
- Four (4) FMC Interfaces
- 4 GB DDR4 SDRAM
- Flexible clocking architecture, featuring
 - Multiple clocks
 - Programmable clock generator, Quad PLL
- Onboard Zynq for system management and processing
- SFP+ interface
- General purpose LEDs and switches
- Proven operation with inrevium HDM14K, 12G-SDI, DP1.2, V-by-One®, MIPI, and Zynq FMCs
- Compatible with FMC Specification (VITA 57.1)¹

FMC Slot Capabilities

	IO ASSIGNMENTS				VADJ (V)
	GTH	LA	HA		
FMC0	DP[9:0]_M2C DP[9:0]_C2M	LA[33:0]	HA[4:0]		1.8,2.5,3.3
FMC1	DP[9:0]_M2C ³ DP[9:0]_C2M ³	LA[33:0]	N/A		1.5, 1.8 (common VADJ)
FMC2	DP[9:0]_M2C DP[9:0]_C2M	LA[18:0] LA[23:19] ²	N/A		
FMC3	DP[9:0]_M2C DP[9:0]_C2M	LA[33:0]	N/A		

¹ Verify your target FMC with us prior to ordering

² Single ended support only

³ Due to the SLR split, 10 GTHs are available but only 8 can be grouped

Product Outline

Featuring

- Xilinx® Kintex® UltraScale™ XCKU115-2FFVA1517
- Xilinx® Zynq® XC7Z010-2CLG225I

FPGA Subsystem

- Four (4) FMC interfaces (see table)
- 16.375Gbps transceivers (see table)
- Memory
 - 4 GB DDR4 SDRAM on board
 - 2 controllers, 64 bit bus-width
 - Maximum theoretical throughput: 215 Gbps
- Clocking, onboard
 - Si5338 programmable clock generator
 - Si5347 quad PLL (jitter filtering and re-transmission)
 - 156.25MHz SFP+ oscillator
 - 200MHz DDR4 clock
 - SMA's, including, CLKin, CLKout, SyncIn, SyncOut

- SFP+ interface
- UART-over-USB support
- Miscellaneous, general purpose
 - 8 DIP Switches, 4 push-button switches
 - 8 User Selectable Header Inputs
 - 8 LEDs (4 red, 4 green)
- JTAG over USB, JTAG header, Dual Quad SPI Flash

Zynq ARM®-based Subsystem

- CLI, Micro USB (UART-over-USB)
- JTAG, DAP 14-pin header
- uSD interface
- 8 general purpose LEDs (3 red, 5 green)
- 4 general purpose DIP switches

Power

- External 12VDC power supply (included)

Board Dimensions

- 280mm x 200mm (approx. 11" x 8")

Available References

Included IP

- DDR4 Memory Controller
- Chip2Chip Interface Block

Design Package *(available under license)*

- Schematics, PCB Layout, Artwork, Bill of Materials

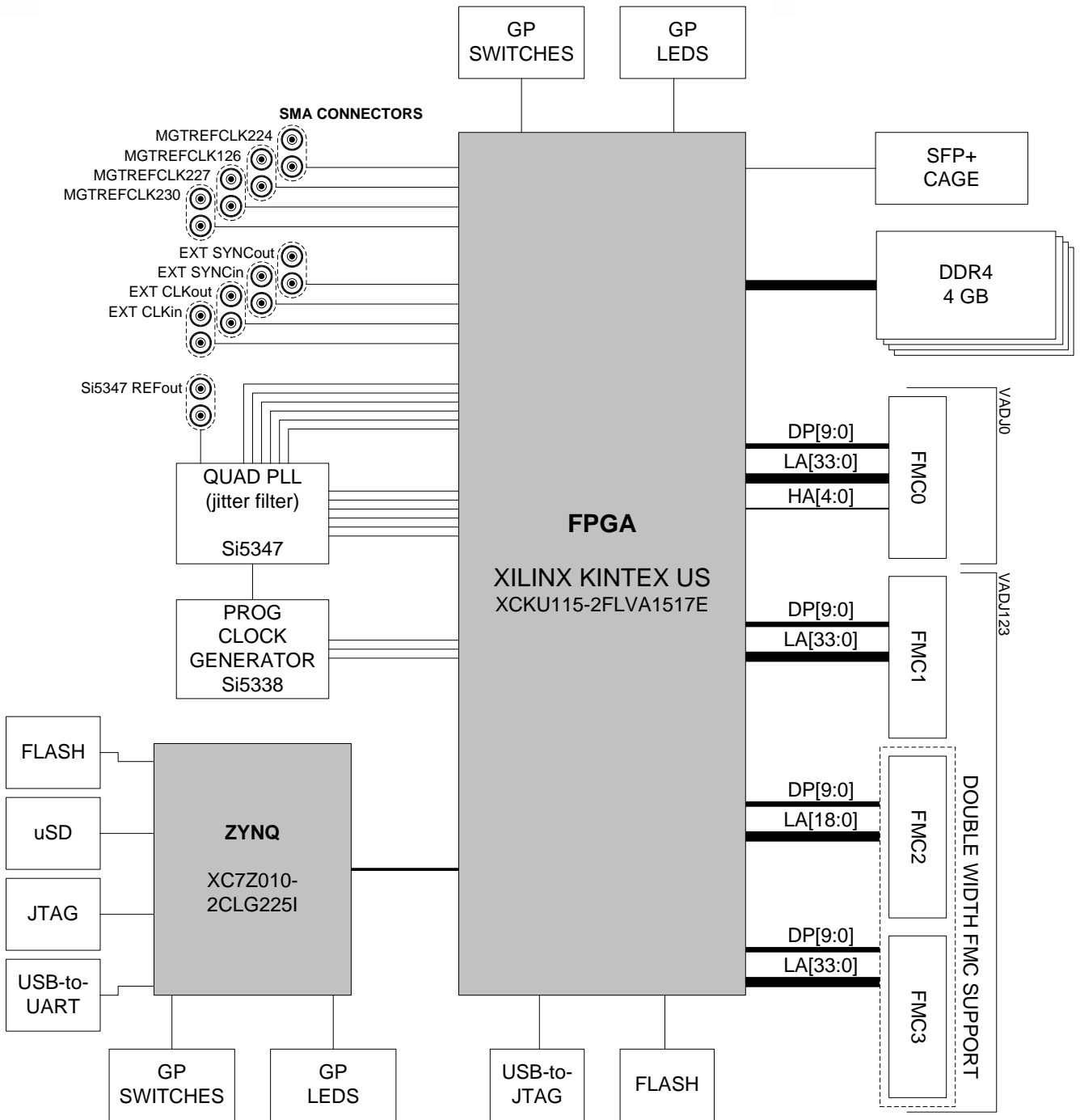
FPGA Reference Designs

- Downloadable .bit file examples
- Licensable source (some blocks netlist encrypted)

For inquiries/orders: products@us.inrevium.com or contact your local distributor

Distributor:
Contact:
Phone:
Email:

Figure 1: Block Diagram



For Inquiries or Orders: Email – products@us.inrevium.com

Part Numbers : TB-KU-115-QUATTRO

