

### 8K/4K Video Development Platform Part Numbers : TB-KU-060-ACDC8K

### **Product Outline**

An ideal tool for developing 8K and 4k video products

#### Featuring

• Xilinx<sup>®</sup> Kintex <sup>®</sup> UltraScale<sup>™</sup> XCKU060-2FFVA1517

#### Memory

- 4 GB DDR4 SDRAM on board
- 2 controllers, 64-bit bus-width
- · Maximum theoretical throughput: 215 Gbps

#### Interfaces

- 7 FMC interfaces (see FMC Slot Capabilities)
- 4 SFP+ interfaces
- UART over USB support
- JTAG 10-pin interface
- PMOD connector (12 position)
- Miscellaneous
- 16 User Selectable Header Inputs
- 16 general purpose DIP Switches
- 8 general purpose push-button switches
- 16 general purpose LEDs (8 red, 8 green)

#### Clocks

- 200MHz DDR4 Clock
- 148.5MHz image processing clock
- 156.25MHz SFP+ clock
- PLL for user customizable clocks

#### Configuration

JTAG download or via onboard dual Quad SPI flash

#### Power

- External 12V DC power supply (included)
- Fan for FPGA cooling

#### **Board Dimensions**

• 280mm x 200mm (approx. 11" x 8")



### Features

- Xilinx<sup>®</sup> Kintex <sup>®</sup> UltraScale<sup>™</sup> XCKU060-2FFVA1517
- 7 FMC Interfaces
- 4 GB DDR4 SDRAM
- Flexible clocking architecture
- Compatible with FMC Specification (VITA 57.1)\*
- Proven operation with inrevium HDMI4K, 12G-SDI, DP1.2, V-by-One<sup>®</sup>, MIPI, and Zyng FMCs
- 4 SFP+ interfaces
- Targeted at, but not restricted to video developments
- \* Verify your target FMC with us prior to ordering



# **FMC Slot Capabilities**

	GTH	STANDARD IO		
	060	LPC BK A (PINS)	VADJ (V)	FMC CARD EXAMPLE(S)
FMC0	0	72	1.8,2.5,3.3	TB-7Z-020-EMC
FMC1	8	72	1.8	TB-FMCH-DP2 TB-FMCH-12GSDI
FMC2	8	12	1.8	TB-FMCH-VBY1-AD
FMC3	8	72	1.8	TB-FMCH-DP2 TB-FMCH-12GSDI
FMC4	4	12	1.8	
FMC5	0	12	1.8	TB-FMCH-VBY1-AD
FMC6	4	12	1.8	

## **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 may be netlist encrypted)

### Sales – Ordering Enquiries

For additional information, questions or request for quotation visit: www.fidus.com

# Customize your TB-KU-060-ACDC8K

Speak with our Design Services Group on how to accelerate your custom design: <u>design@fidus.com</u>

# **About Fidus**

Fidus Systems, founded in 2001, specializes in leading-edge electronic product development with offices in Ottawa and Waterloo Ontario, and San Jose, California. Our hardware, software, FPGA and signal integrity teams architect, design and deliver next-generation products for clients in emerging technology markets. We build long-term relationships by consistently exceeding expectations.

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