

Avnet Product Brief

Xilinx® Kintex™-7 FPGA DSP Development Kit with High-Speed Analog



DESIGNED BY AVNET

Features

- >> Xilinx KC705 Development Board
 - >> FPGA: XC7K325T-2FFG900C
 - >> Onboard configuration circuitry
 - >> 128 MB Parallel (BPI) Flash
 - >> 256 MB Quad-SPI Flash
 - >> 10/100/1000 Tri-Speed Ethernet
 - >> SFP+ transceiver connector
 - >> GTX port (TX, RX) with four SMA connectors
 - >> USB to UART Bridge
 - >> PCI Express x8 Edge Connector
 - >> DDR3 SO-DIMM (2 GB)
 - >> BPI Linear Flash (128 MB)
 - >> SDIO Interface
 - >> I²C EEPROM (1 Kb)
 - >> 200 MHz oscillator (differential)
 - >> HDMI Output
 - >> 12 V wall adapter or ATX
- >> 4DSP FMC150 High-Speed ADC/DAC FMC Module
 - >> TI ADS62P49 dual 14-bit, 250 MSPS ADC
 - >> TI DAC3283 dual 16-bit, 800 MSPS, 2x/4x interpolation DAC
 - >> TI CDCE72010 clock synchronizer/jitter cleaner
 - >> External clock input option
 - >> 50 Ohm, transformer-coupled analog I/O
 - >> External trigger input

The Xilinx Kintex™-7 FPGA DSP Development Kit is comprised of two critical elements. The first is the Xilinx Kintex-7 FPGA KC705 base board. The KC705 features high-performance, serial connectivity and advanced memory interfacing, with the flexibility of the 28nm Kintex-7 field programmable gate array (FPGA) that delivers maximum power efficiency and up to 1200 GMACs of DSP processing bandwidth. The second component is the 4DSP FMC 150, an integrated high-speed FPGA Mezzanine Card (FMC) that interfaces with signals from the outside world. Together, these components create a development kit that combines the performance of Xilinx's 7 series FPGA with the high-speed data conversion of the FMC 150, enabling designers to focus on their application at the beginning of the design process. DSP designers will also benefit from intuitive MathWorks tools for system modeling, simulation and auto-code generation.

Kit Includes

- >> Xilinx KC705 Kintex-7 7K325T board
- >> 12 V power supply
- >> USB programming cable, Ethernet cable
- >> 4DSP FMC150 High-Speed ADC/DAC FMC Module
- >> ISE® Design Suite System Edition (device locked)
- >> Two MMCX RF coax cables
- >> Targeted reference designs

To purchase this kit, visit www.em.avnet.com/k7dspkit

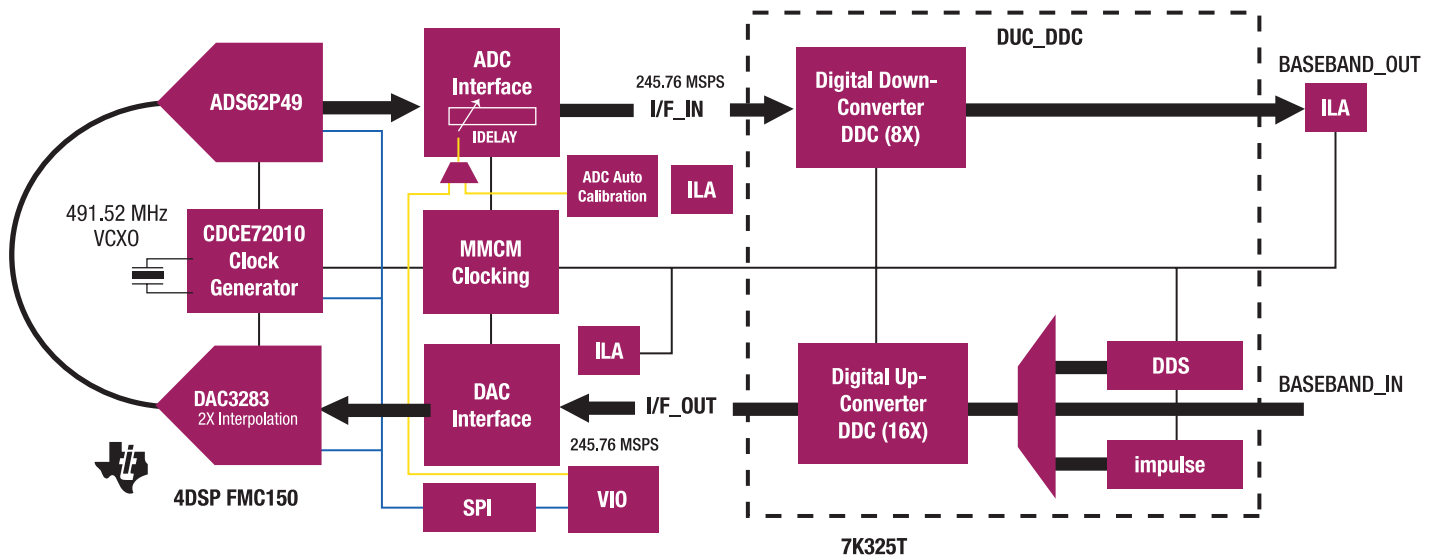
Target Applications

- >> Wireless communication infrastructure
- >> Aerospace and defense
- >> Test and measurement
- >> Medical imaging



Accelerating Your Success™

Xilinx Kintex™-7 FPGA DSP Development Kit: Targeted Reference Design



Featured Manufacturers



Ordering

Part Number	Hardware	Resale
AES-K7DSP-325T-G	Xilinx Kintex™-7 FPGA DSP Development Kit	\$3,995 USD

To purchase this kit, visit www.em.avnet.com/k7dspkit

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