
**Summary**

The **ADM-AMC-5A2** is a high performance reconfigurable AMC board based on the Xilinx™ Virtex-5 LXT, SXT and FXT range of Platform FPGAs. Designed specifically for the AMC format (ATCA and uTCA systems), the ADM-AMC-5A2 provides PCI Express® connectivity via the backplane, 6 HD-SDI/ASI Video ports, 2 Gigabit Ethernet ports, and a separate DSP chip (TI 320C6415). On board battery provides back-up for encryption.

**Features**
**Applications:**

Broadcast, Medical/Bioinformatics, Telecoms, Military, Aerospace, High Performance Computing

**Target Devices:**

Xilinx Virtex-5 - LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T (FFG1738)

**Memory:**

**SDRAM** - 1 or 2 GByte in 4 independent banks of DDR-II (64M or 128M x 32-bits @ 333MHz)

**ZBT** - 8MBytes (1M x 72-bits) ZBT connected to the DSP

**FLASH** - 32MByte user Flash connected to the DSP

**FLASH** - Configuration Flash providing an initialisation design for automatic loading into the target FPGA.

**Front Connector I/O:**

4X HD-SDI/ASI Outputs

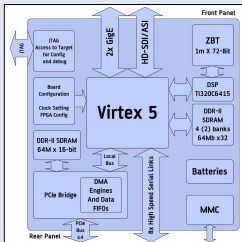
2X HD-SDI/ASI Inputs

2X Gigabit Ethernet Ports

RS-232 port

**Rear Connector I/O:**

8x High-Speed Serial Links to provide custom fast data transfer port



**Specification**

Product Name	ADM-AMC-5A2
Target Devices	Xilinx Virtex-5 - LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T (FFG1738)
Host I/F	PCIe
Interface	x4 PCI Express® Interface 2 x Gigabit Ethernet 8x High-Speed Serial Links from Target FPGA
Memory	<b>SDRAM</b> - 1 or 2 GByte in 4 independent banks of DDR-II (64M or 128M x 32-bits @ 333MHz) <b>ZBT</b> - 8MBytes (1M x 72-bits) ZBT connected to the DSP <b>FLASH</b> - 32MByte user Flash connected to the DSP <b>FLASH</b> - Configuration Flash providing an initialisation design for automatic loading into the target FPGA.
Front I/O	4X HD-SDI/ASI Outputs 2X HD-SDI/ASI Inputs 2x Gigabit Ethernet Ports RS-232 port
Rear I/O	8x High-Speed Serial Links to provide custom fast data transfer port
Special Functions	<b>DSP</b> : TI 320C6415T DSP chip with 8MBytes of ZBT memory <b>DS2432 EPROM</b> with SHA-1 engine
Clocks	Local bus programmable up to 80MHz Low-jitter reference clocks: 125MHz, 200MHz, 148.50MHz, 148.3516484MHz
Device Configuration	PCI Express® bus direct to SelectMAP port From Flash direct on power-up External JTAG connector
Software	Drivers for Windows, Linux and VxWorks
Battery	Single battery back-up for FPGA encryption keys
Environmental	<b>Temperature:</b> <b>Air cooled option (AC0)</b> Operating Temperature 0° to +55°C <b>Air cooled industrial option (AC1)</b> Operating Temperature -20° to +55°C  <b>EMC:</b> FCC 47CFR Part 2 EN55022 Equipment Class B

**Ordering Codes**
**ADM-AMC-5A2/z-y(m)**

Virtex-5 Device	z	LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T
Virtex-5 Speed	y	1, 2, 3
Memory	m	blank=1GByte, /2=2GBytes
Air cooled	c	blank = air cooled commercial, /AC1 = air cooled industrial