ADVANCED**io**®

V3021
Dual Channel 10 Gigabit Ethernet FPGA AMC

Benefits

Provides 10 Gigabit Ethernet line-rate processing via its high performance architecture

Improves overall system performance by providing additional processing capabilities

Ideal for high bandwidth applications that require real time digital signal processing

Features

Single-width mid-size or full-size AdvancedMC

Available in a range of user-programmable Xilinx Virtex-5 FPGA options

High performance SDRAM and SRAM memory architecture

Two 10 Gigabit Ethernet SFP+ optical ports

10/100/1000BASE-T RJ-45 port

Fat pipe fabric for data exchange

Pigeon Point controller for maximum interoperability

Software in-system programming for field upgrades

Thermal sensors for monitoring card temperature

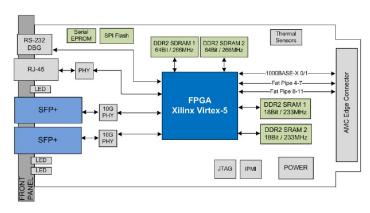RS-232 utility for fast application debugging

Overview

Available in single-width AdvancedMC form factor, this high performance packet processing module features dual 10 Gigabit Ethernet SFP+ optical ports and is available in a range of Xilinx Virtex-5 FPGA options providing scalable processing performance. Its memory architecture is based on multiple independent high-speed SDRAM and SRAM memory interfaces that enable advanced 10 Gigabit Ethernet network traffic processing. The V3021 supports PCI Express or XAUI fat pipes for data exchange. It comes standard with expressXG Development Framework, an advanced FPGA development infrastructure that gives programmers the advantage to develop their own high bandwidth applications rapidly and efficiently.

V3021
Dual Channel 10 Gigabit Ethernet FPGA AMC

> **> V3021 Dual Channel 10GbE FPGA AMC Module Architecture**

Technical Specifications

NETWORK INTERFACE
Two 10GBASE-SR or 10GBSASE-LR SFP+ optical ports
10/100/1000BASE-T RJ-45 port

FPGA DEVICE
Xilinx Virtex-5 LX110T, LX220T, LX330T or SX240T

MEMORY
2 banks of 0.5GB or 1GB 64-bit 266MHz DDR2 SDRAM
2 banks of 36Mb or 72Mb 233MHz DDR2 SRAM

FLASH
2 64Mb or 128Mb memory for storing a default configuration
image and a recovery image

FAT PIPE INTERFACE
PCI Express or XAUI on ports 4-7 and 8-11
Gigabit Ethernet on ports 0 and 1

EXTERNAL INTERFACE
RS-232 serial interface over mini-B type connector

THERMAL SENSORS
2 digital temperature sensors

COMPLIANCE
PICMG AMC.0 Specification R2.0
PICMG AMC.1 R1.0 Specification
PICMG MTCA.0 for MicroTCA R1.0
Pigeon Point IPMI
IEEE 802.3ae 2002 10GBASE LAN
FCC 47 CFR Part 15, Subpart B (USA)
EN 60950-1 (Europe)
RoHS Directive 2002/95EC

DIMENSIONS
181.5 mm x 73.5 mm single-width, mid-size or full-size

POWER REQUIREMENTS
Maximum 25W

TEMPERATURE
Operating: 0 to 50° C
Storage: -40° C to 85° C

FOR MORE INFORMATION ON OUR PRODUCTS:

www.advancedio.com
contactus@advancedio.com

Suite 601-3292 Production Way
Burnaby, BC V5A 4R4
Canada

Phone 604.331.1600
Fax 604.331.1800
Toll Free 1.877.331.7755

ADVANCEDio®