6U VME — Mono Sharc Board

Key Features

- Provides parallelism and high throughput
- High performance DSP for communications infrastructure and multiprocessing applications
- The SHARC Processor's balanced architecture utilizes characteristics of RISC, VLIW, and DSP to provide a flexible, "all software" approach that adds capacity while reducing costs

Mono Sharc Board

Design

The CORNET's 6U VME Mono SHARC DSP Board (C14056) offers a commercial-off-the-shelf (COTS) digital signal processing solution for system designers. It is ideal for low-power real-time signal processing applications used in advanced radar or sonar equipment.

The VME Mono SHARC DSP Board has an Analog Devices 32-bitan ADSP-21062 SHARC™ processor running at 40 MIPS. The processor is equipped with a 32-bit IEEE floating-point computation unit and a 4 Mbit on-chip SRAM. The SHARC processor can be coupled to additional processor nodes via the SHARC Link Ports available through the VME P0.

Other features of this board include one front-panel accessible RS-232 serial port and two 10/100Base-T Ethernet ports for external communications; 4M x 8-bit (4 MB) of FLASH for firmware boot-up; and 64kB DPRAM and 2 x 2MB (4 MB) of SRAM for storage.

The board users can use the Analog Devices Visual DSP++development tool and ADZS-HPUSB-ICE / ADZS-USB-ICE emulators offered by Analog Devices for on-board software development. Developers can conveniently use the on-board JTAG interface and the front panel reset switch for extensive testing and debugging.

CORNET TECHNOLOGY

Specifications (6U VME — Mono Sharc Board)

Board Specifications

Processor: Analog Devices ADSP-21062 SHARC processor at 40 MIPS

120 MFLOP peak performance, 80 MFLOPS sustained performance

Memory: Flash : 4GB

SRAM: 2 x 2MB (4MB)

Processor's On-chip

Memory: 4Mb

DPRAM : 64KB

Front Panel I/O :

One DB-9 RS-232 serial port

Two RJ45 10/100 Base-T Ethernet port

Backplane : 6 link port

Buses & Bridge:
- Sharc procesor; SHARC bus
- PCI bus (PC19056)
- VME Bus: VME64x interface through Universe II

Status LED: 12 LEDs for status indication

Mechanical

Form factor: 6U, 4TE

Dimensions: 233.4 mm x 160 mm x 20 mm

Power

Supply: +5V and +3.3V from VME backplane

Consumption: 26W max

Environment

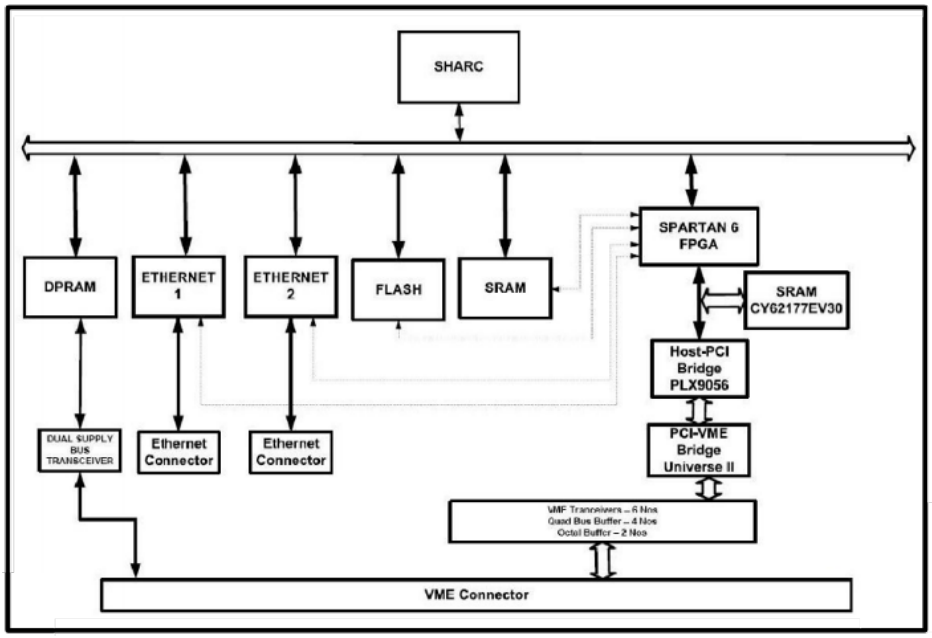
Cooling: Convection Air Cooling

Operating Temp: -20° C to 55°C

Storage Temp: -40° C to 85°C

Humidity: Humidity: 5-95% at room temperature

Non-condensing



Block Diagram

ISO-9001:2015 Registered

Product is Subject to U.S. Export Laws

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