Dual TMS320C40 Processor VME Board

General Information

Model 4269 is a Dual TMS320C40 engine with enough horsepower to tackle many demanding applications. It incorporates two Texas Instruments TMS320C40s in a standard 6U single slot VMEbus board with a complete VMEbus slave interface.

Shared Global SRAM Memory

A total of 2 to 4 Mbytes of shared global SRAM is accessible by both C40s and the VMEbus by addressing the space allocated for the desired SRAM. This resource simplifies all applications by minimizing the data moves required by less powerful architectures.

Local SRAM Memory

A private 1 or 2 Mbyte Local SRAM for each C40 maximizes the use of its dual bus architecture and its ability to conduct data and program cycles in parallel on the two busses. These zero-wait state SRAMs are ideal for storing program code or tables, while the global bus processes the data.

Local EPROM Memory

Each C40 is equipped with a user-programmable 32 kB EPROM memory on its local bus. Ideal for embedded systems which self-boot from power up, these memories can also be used for system firmware.

Features

- 100 MFLOPS peak processing power
- Up to 4 MB global SRAM shared by both C40s
- Up to 2 MB local SRAM for each C40
- 32k x 8 boot EPROM for each C40
- Support Software: Pentek SwiftNet, TI Code Composer

Ordering Information

Model	Description
4269	Dual TMS320C40 Processor Board for VMEbus, 40 MHz clock

Options:

-001	2 MB Global SRAM per processor
-002	2 MB Local SRAM per processor
-015	50 MHz clock

Specifications

Processors
Two TMS320C40s, 40 or 50 MHz clock

Local SRAM
Size: 1 MB (256k x 32) or, optionally, 2 MB per processor
Access: C40 local bus only
Access time: zero wait state

Global SRAM
Size: 1 MB (256k x 32) or, optionally, 2 MB per processor
Access: both sections of global SRAM are accessible from both C40s and VMEbus
Access time: zero wait state from the global bus of the associated C40; one wait state from the global bus of the other C40

EPROM
Size: 32 kB (32k x 8) for each C40
Access: C40 local bus only
Access time: three wait states

VMEbus Interface
VME compliance: slave device, A32 D32 I(1-7)
Memory model: A16 for control registers A24/A32 for global SRAM
A16 base address: set by jumpers, on any 64 byte boundary
A24/A32 base address: set by A16 registers, on any 2 MB boundary
Interrupts: generates interrupts on levels 1 to 7

Power: 4.5 A at +5 V dc

Size: standard 6U VMEbus board, single slot; board 160 mm (6.3 in.) x 233.5 mm (9.2 in.), panel 0.8 in. wide

Block Diagram, Model 4269