



LV1 VME64 Computer

Based on the low voltage Intel Core 2 Duo Processor

Preliminary Product Brief

Themis Computer's LV1™ is a 6U VMEbus computer based on the Intel® Core™ 2 Duo processor. Operating system support includes Solaris® 10 as well as Windows® and Linux®. The LV1 single slot configuration enables workstation levels of performance in a VME form-factor.

Two on-board XMC/PMC slots allow for expansion using a wide variety of PMC and XMC cards.

The LV1 is offered in several configurations providing the capability to meet the needs of a wide variety of applications.

LV1 Features and Specifications

- Processor: Intel® Core 2 Duo 1.86 GHz processor
- Memory: Up to 4 GBytes DDRII SDRAM soldered on board
- Memory: up to 8 GBytes with SoDIMM Expansion
- Error Detection/Correction: 8-bit ECC to main memory provides single error correction & double error detection.
- CompactFlash™ Type 1 or 2 Socket
- Vita 41 compliant: Dual Gigabit Ethernet off P0

Operating System Support

- Solaris® 10
- Linux®
- Microsoft Windows®

VME Interface

- 2eSST Compatible
- Tundra Tsi-148 VME64 interface
- Injectors/Ejectors: VME64 and traditional VME available

On-Board Expansion

- Expansion Slot 1:
 - SoDIMM memory expansion up to 8G **or**
 - XMC/PMC slot **or**
 - 2.5 inch SATA Hard Drive **or**
 - 2 x GbE to FP
- Expansion Slot 2:
 - XMC/PMC Slot **or**
 - Connection to PMC/XMC carrier card **or**
 - 2 GbE to FP

Power and Mechanical

- Cooling: 20 CFM at 10,000 Ft
- Dimensions (HxD): 6U 6.299" (160mm) x 9.173" (233mm)

On-Board I/O

See accompanying Table

Front Panel (FP) and VME P2 (P2) Connector I/O

I/O	Quantity	Access
Gb Ethernet	3	One on Front Panel, Two on P0 (Vita 41)
USB	4	2 USB on Front Panel, 2 USB on P2
Serial Ports	2	COM1: Front Panel or P2 COM2: P2
SATA II	3	One FP or P2, Two P2 Only
Keyboard & Mouse		USB: Front Panel & P2 PS/2: P2
VGA Graphics	1	Front Panel and P2
Audio Port	1	AC'97 on P2

Environmental

Parameter	Operating	Non-Operating
Temperature Range	-5 to +55°C	-40 to 95°C
Humidity (non-condensing)	0 to 95%	
Shock	30G @ 40mS	30G @ 40mS
Vibration (10-2000Hz)	0.90G (rms)	2.97G (rms)

THEMIS



