



PRODUCT FAMILY FEATURES

High-Performance

- Intel® Core 2 Duo 1.86 GHz processor
- Up to 4 GBytes DDRII ECC SDRAM
- Up to 8 GBytes DDRII ECC SoDIMM Expansion
- Error Detection/Correction: 8-bit ECC to main memory provides single error correction and double error detection.
- CompactFlash™ Type I or II Socket
- Vita 41 compliant: Dual Gigabit Ethernet off P0

Software Support

- Linux®
- Microsoft Windows®

VME Interface

- 2eSST
- Tundra Tsi148 VME64 interface
- Injectors/Ejectors: VME64 and traditional VME available

LV1

Core 2 Duo 6U VMEbus Computer

OVERVIEW

The Themis® LV1™ Computer is a high-performance 6U VMEbus computer designed with the Intel® Core™ 2 Duo processor. Ideal for compute-intensive embedded, storage and commercial applications as well as a wide range of military and aerospace applications, The LV1 is designed for customers who require the low-power Intel Core 2 Duo processor to provide efficiency and high performance for demanding applications.

The LV1 base configuration includes three Gigabit Ethernet ports, three SATA ports, and four USB 2.0 ports. Two on-board XMC/PMC slots allow for expansion using a wide variety of PMC and XMC cards. Two expansion sites provide a wide variety of configurations options for users. The LV1 single slot configuration enables workstation levels of performance in a VME form-factor. The LV1 computer and its two-slot XMC expansion board are fully RoHS compliant. The LV1 has extensive I/O and is offered in several configurations providing the capability to meet the requirements of a wide variety of applications.

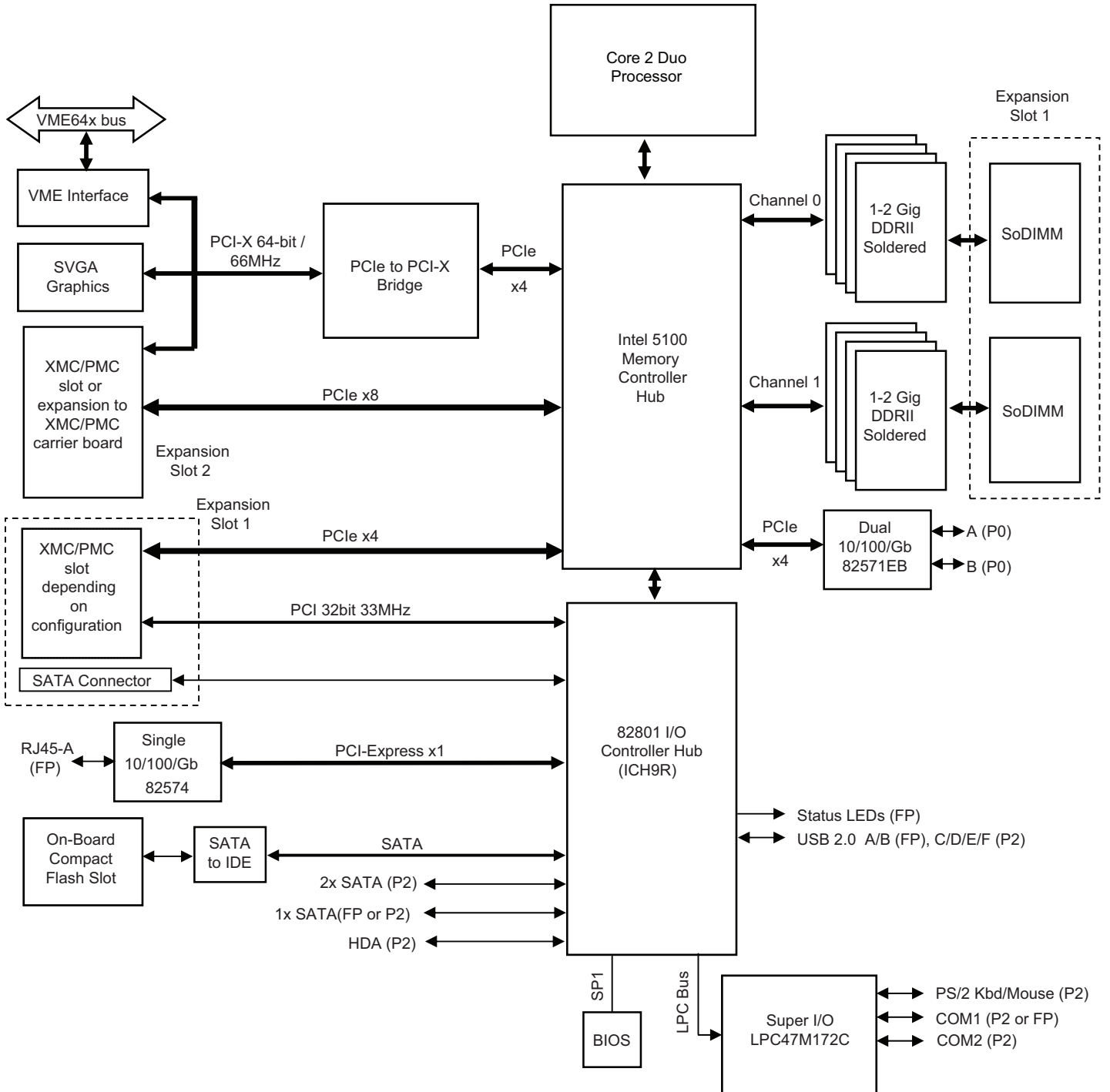


Figure 1: LV1 Block Diagram

TECHNICAL SPECIFICATIONS

General

PARAMETER	DESCRIPTION
Processor	Intel® Core 2 Duo 1.86 GHz processor
Memory	<ul style="list-style-type: none"> • Up to 4 GBytes DDRII ECC SDRAM • Up to 8 GBytes DDRII ECC SoDIMM Expansion

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 and Mouse		USB: Front Panel and P2 PS/2: P2
VGA Graphics	1	Front Panel and P2
Audio Port	1	AC'97 on P2

On-Board Expansion

PARAMETER	OPTIONS
Expansion Slot 1	<ul style="list-style-type: none"> • SoDIMM memory expansion up to 8G • XMC/PMC slot • 2.5 inch SATA hard drive • 2GbE to FP
Expansion Slot 2	<ul style="list-style-type: none"> • XMC/PMC slot • Connection to PMC/XMC carrier card • 2GbE to FP

Environmental

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

Mechanical

PARAMETER	NON-OPERATING
Cooling Scheme	Air Cooled
Dimensions (HxD)	6U 6.299" (160mm) x 9.173" (233mm)

General

PARAMETER	NON-OPERATING
CompactFlash	Type I or Type II socket
Standards	Vita 41 compliant - Dual Gigabit Ethernets off P0
VME Interface	<ul style="list-style-type: none"> • 2eSST • Tundra Tsi148 VME64 interface • Injectors/Ejectors: VME64 and traditional VME available

THEMIS SBC SOLUTIONS

Themis Single-Board Computers are designed to provide the highest levels of configuration flexibility, performance and reliability. Themis engineers use their expertise in the design of embedded systems solutions to reduce the risk, and costs, of failure caused by demanding environmental conditions that include extreme temperature or vibration. From rugged, screw-down memory modules to unique processor module/heat sink designs, Themis provides the high level of system integrity that demanding applications require. Themis BLCs provide increased resiliency to all environmental extremes - including shock, vibration, and temperatures, that cause many other embedded systems to fail.

THEMIS VALUE

Themis provides systems manufacturers and end-users with the most modern, best of breed computing resources available. Package and performance scale from small form factor embedded servers to bladed servers. We listen, understand, and work closely with our customers to optimize computing solutions that are easy to integrate, inexpensive to own and operate, and that achieve the right balance between standard commercial technology, rugged environments, and optimize space, weight, and performance.



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