

Intel® Core™ 2 Duo VME x86 Processor Blade



Product Datasheet - Preliminary

PDSi's **Intel-based VME x86 Processor Blade** (VM86-N1) is a robust, high-performance general purpose compute platform for use in VME systems. This VME board is the latest addition to PDSi's family of computing solutions built around Intel's Core 2 Duo processor. Featuring the server-grade Intel 5100 chipset, this single-wide blade supports up to 4GB of ECC memory. It offers a convenient, pin-compatible replacement for legacy 7750-based systems while offering upgraded technology, higher performance, more memory and an extended product lifecycle.

The VM86-N1 blade includes dual gigabit Ethernet ports and dual USB 2.0 ports for high-speed front communication links, and the VGA port gives access to high resolution graphics capability. A PMC site provides I/O expansion capability, and there is an optional onboard Flash drive. Legacy application support includes front-mounted PS/2, dual serial ports, as well as a rear floppy interface. Rear I/O interfaces are pin-compatible with existing 7750-based RTMs.



PDSi gives telecom, aerospace, and military OEMs the ability to deploy and upgrade high-reliability VME solutions using this powerful compute blade based on the latest Intel technology. Extended availability from PDSi is assured as key components are supported by embedded roadmaps. PDSi can also provide customization, turnkey integration and support of VME systems, as well as extended warranty and repair services.

Key Features



- Low power, high performance VME compute
 - Intel SL9400 Core 2 Duo 1.86 GHz
 - Intel 5100 MCH
- Up to 4GB Registered ECC DDR2 533/667 Memory
- 1 PMC expansion site
- VGA graphics up to 2048 x 1536 resolution
- 2 x 10/100/1000 Ethernet links
- 2 x USB 2.0
- 2 x RS 232 serial
- Optional USB Flash drive up to 8GB
- Rear 7750-compatible floppy and PMC interfaces
- PS/2 keyboard/mouse port
- Extended availability assured

Trusted Platforms for Critical Systems

PDSi's computing platforms are trusted by OEMs and ISVs across the globe to deliver mission critical solutions.

Target industries using PDSi products include:

- Military
- Aerospace
- Telecom
- Datacom / Networking
- Industrial
- Imaging



Processors	Intel Core 2 Duo, SL9400 <ul style="list-style-type: none"> o 1.86 GHz, 1067 FS o Low power requirement
Chipset	Intel 5100 MCH <ul style="list-style-type: none"> o Server-grade
Memory	1 SORDIMM socket Up to 4GB DDR2 533/667 MHz ECC Registered Memory
Storage	Optional USB Flash drive up to 8GB
PMC	1 PMC mezzanine site with rear I/O pass-through <ul style="list-style-type: none"> o PCI 32-bit/33 MHz
Graphics	ATI Radeon E2400 graphics controller, up to 2048 x 1536 resolution at 24 bit color depth. VGA front port.
Compliance	VME-64X (ANSI/VITA 1.1-1997) RoHS Directive 2002/95/EC Designed for FCC/UL/CE

Front Panel

Ethernet	2 - Gigabit Ethernet RJ-45
USB	2 - USB 2.0 Type A
VGA	1 – HD-15 D-sub
Serial	2 – micro-DB9
PS/2	Keyboard/mouse 6-pin DIN
LEDs	Reset, Power, HD, Booting
Sys Reset	Button

Rear I/O (7750-compatible pinouts)

Floppy	Rear Floppy port
IDE	IDE connection
PMC	I/O pass-through from Pn4 connector(s)

VME

Bridge	Tundra Tsi148 PCI-x to VME, 64 bit interface
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Power

Low power design, 30W typical

Operating Systems

Linux, Windows (XP, Server2003)

Form Factor/Dimensions

6U board , single wide
160mm(D) x 233mm(H), 20.3mm(W)

Temperature

Operation : -5 to 55 degC

Humidity

5% - 90% non-condensing

Ordering Guide

VM86 - N2 - X - 0 - X - 0

<i>USB Flash Storage</i>	
0	none
1	1 GB
2	2 GB
3	4 GB
4	8 GB
<i>Memory</i>	
A	2GB DDR2 ECC Reg (667 MHz) SORDIMM
B	4GB DDR2 ECC Reg (667 MHz) SORDIMM

