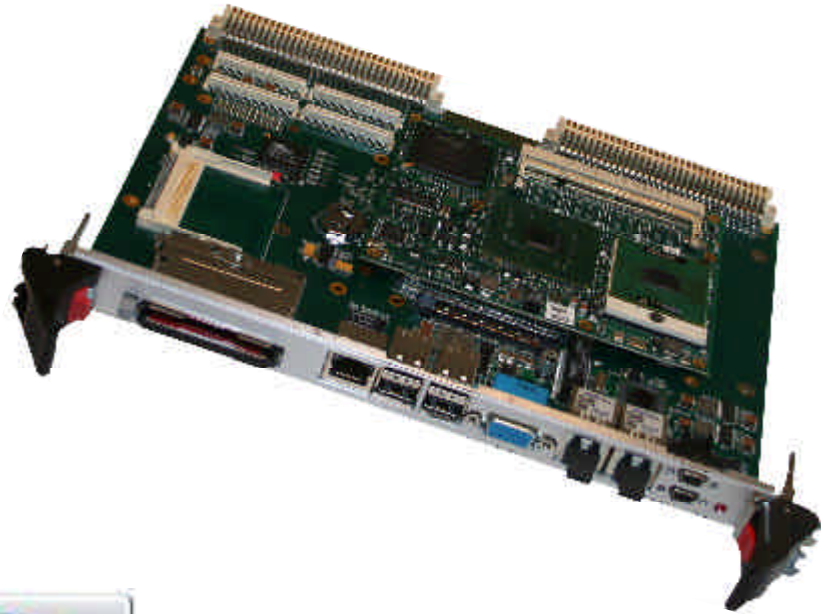


”Oden” VME board

**VME Pentium M up
to 2.13 GHz**

533 MHz FSB

DDR2 Memory

20x PCI Express

VITA 31.1

VME 320 Interface

First of a new breed of VME boards

RVME1200 “Oden” is first of a new breed of VME boards, the first VME board that made the shift to PCI Express technology. Oden have the fastest memory access speed of any VME board as it uses 533MHz front side bus and DDR2 memory technology. Apart from having the fastest on-board interconnections, it also has an expansion connector with PCI Express x16 giving 4 GB/s in each direction. Naturally the Oden board comes with the latest 2eSST VME interface. RVME1200 have three Gbit Ethernet interface of which two can be Fiber in front or rear as VITA 31.1. As all this technology is available in the commercial market good software support already exists. All things considered, this board is truly an industry first providing the best and the fastest technology in the market.

RVME1200

Express lines, have 533 MHz front side bus and Intel GMA900 graphic core. This is a very good architecture for computer intensive application that need high speed interfaces.

VME 2eSST

In line with the rest of the board it use the most modern VME interface on the market, Tsi148, supporting 2eSST and gives a VME through put of 320 MB/s. a nice feature is full compatibility with all earlier VME standards and have good software support.

10/100/1000 Ethernet

The RVME1200 has a total of three 10/100/1000 Ethernet controllers. One is always available in front via RJ45, two other are either fiber via front or accessible via VI-TA31.1

SVGA onboard

Graphics is generated by Intel I915 with GMA900 core (40% faster than I855 with GMA900). It has a 333 MHz core, fast DirectX9 and native 16:9 format. This will support QXGA (2036x1536 @85Hz). The board also uses Dynamic Video Memory Technology (DVMT) 3 that support up to 128MB. It also supports OpenGL 1.4

PMC/XMC site

There is one on-board PMC/XMC site on the baseboard. Default build is PCI interface but a build option is XMC

with PCI Express interface. The rear I/O is routed to P2 connector. Three more PMC sites can be added using PMCspan, giving a total of 4 PMCs in two VME slots.

PCI Express expansion

Oden have a possibility for a 4 GB/s fully duplex expansion. The connector might be used for adding high speed graphic or other data intensive functionality to the baseboard. This is a 16 times PCI Express interface that allows for expansion on to a second slot. The interface is from a signal point of view the same as the x16 PCI Express interface found in the latest commercial servers and workstations, which allows for easily hardware and software development to this interface.

PMC Span

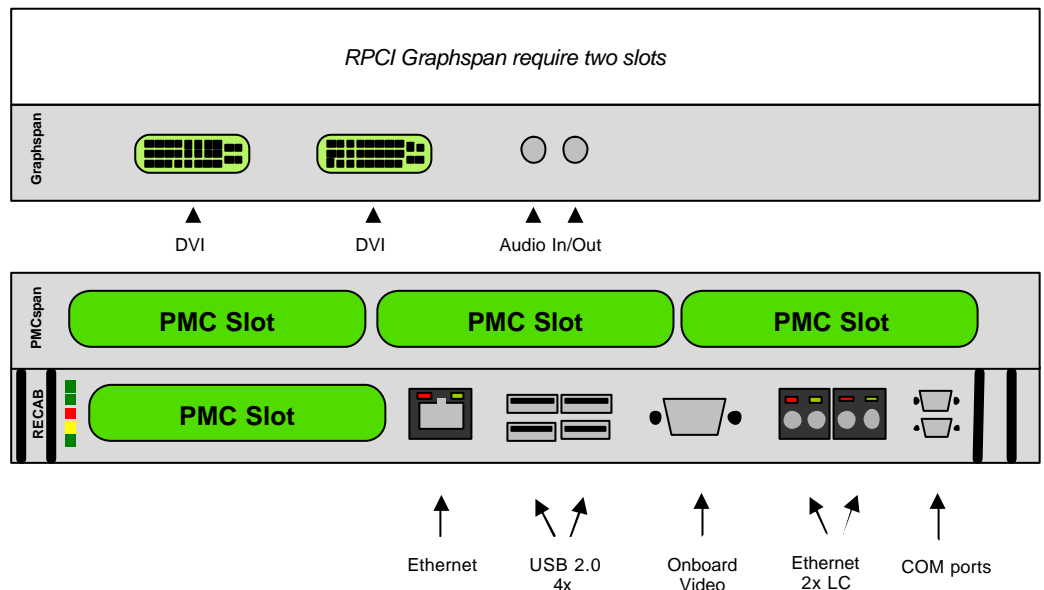
Oden has the ability to add 3 more PMC/XMC in a second slot to the baseboard. It's by default PCI interface but has a build option to convert to PCI Express interface via XMC standard. All three sites have front and rear I/O.

USB

For maximum flexibility Oden has four USB 2.0 connections in the front.

CompactFlash

There is an option for adding a CF card as mass memory or boot memory. The unit is connected to the IDE bus of the system.



Processor
<p>Intel Pentium M processor in Micro-FCBGA 479-pin package 2x 32KB L1 cache and 2MByte L2 cache, 533MHz processor system bus. All board versions are passive cooled with a heatsink within 4HP height. Forced air cooling at a specific flow rate is required</p>
Memory
<ul style="list-style-type: none"> - 533MHz front side bus, Intel 915GM chipset - Up to 1,5 GB 533MHz DDR2 SDRAM - Socket for CompactFlash Type II module - Connector for onboard 1.8" HDD support - 1 MB Firmware Hub (FWH) for BIOS - 8 KB for storing CMOS data when operating without battery
Video
<p>VGA Video Controller integrated in Intel 915GM. Graphic core GMA900 providing 2048x1536 x 8bit/85Hz resolution, max. shared memory 64MB</p>
PMC
<p>One 64-bit / 33MHz PMC slot Pn1-Pn4, rear I/O Pn3 to P2. 3.3 V PCI voltage or one XMC.</p>
Ethernet
<p>Up to 3 x 10/100/1000 MB/s Gigabit Ethernet ports based on Broadcom XXX Ethernet controller. 1 x RJ45 on front and two fiber ports front or VITA31.1 via rear I/O</p>
General I/O
<ul style="list-style-type: none"> - Two 16C550 compatible UARTs (COM1/2) - Keyboard and mouse interface on rear - Four USB 2.0 interfaces with up to 480 Mbit/sec, all front - Floppy disk controller on rear
Power
<p>5V: typ.16-18 W / max. 27 W +12V required, -12V required</p>

Front Panel Population
<p>COM1/2: RJ-45 (RS232, RS422, RS485) VGA: 15-pin D-Sub SVGA connector Ethernet: 1 x RJ-45, 2 x fiber build option USB: 4 x 4-pin connectors PMC: opening for PMC front panel LED: 2 x LAN activity (yellow) and speed (green) One blue control LED for hot swap 8-LED-field for BIOS POST code or general purpose Reset: reset button, guarded Micro switch: for hot swap</p>
Connectors Onboard
<ul style="list-style-type: none"> - One SATA connection - Two IDE supporting Ultra DMA, one 44 pin/2mm for onboard 1.8 IDE HDD or Flash - CompactFlash type II socket - 1x200-pin SODIMM connectors - 4x 64-pin PMC interface
Compliance to standards
<p>VITA: ANSI/VITA 1.1-1997 (R2003) ANSI/VITA 1.5-2003 ANSI/VITA 31.1-2003 ANSI/VITA 39-2003</p> <p>Designed to meet or exceed: - Safety: UL 1950, UL 94, CSA 22.2 No 950, EN 60950, IEC 950 - EMI/EMC: EN 55022 / EN 55024, EN 50081-1 / EN 6100-6-2</p>
General
<p>Dimensions: 233 x 160 x 20.5 mm, 6U, 4HP Weight: 350g MTBF: 140 000 h @ 30 C / 86 F (Bellcore Issue 6)</p>
Environmental
<p>Operating temp.: 0 C to +60 C standard Storage temp.: -55 C to +95 C Climatic Humidity: non condensing 93% at 40 C (acc. to IEC 60068-2-78) Altitude: 15,240 m (50,000 ft.)</p>