



KPM

Dynatem introduces High-Performance,
Low-Power Pentium-M 2.0GHz CPU with
PCI-Express capabilities in an embedded
custom form-factor

PRESS RELEASE

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Features:

- **Low-power Intel Pentium-M processor at 2.0GHz with E7520 & 6300ESB**
- **Custom single board design with PCI-Express operation**
- **ATi Technologies M26 (Mobility Radeon X700 like) graphics on the PCI-Express bus with 128MB of dedicated on-board memory**
- **Up to 8 GB of DDR-266 SDRAM with ECC at 2.1 GB/s**
- **One PMC site (supporting PMC-X 133 MHz transfers)**
- **16-bit Audio in /out interface**
- **Three COM ports and three USB 2.0 ports**
- **An IDE interface**
- **One GbE LAN port on PCI-Express bus**
- **A combined mouse/keyboard PS/2 port**

Mission Viejo, California, January 26, 2006---- Dynatem is introducing the Intel Pentium-M 2.0 /E7520 chipset based KPM-S1 single-board computer (SBC). The KPM-S1 offers the highest-performance embedded x86 Pentium-M processor. It is ideal for this custom embedded application combining the highest performance with the lowest possible power consumption available today. The high-speed E7520 & 6300ESB chipset supports a PCI-Express expansion bus that can fully utilize a Gb Ethernet port available on the KPM-S1 with no data transfer bottleneck. A Gb Ethernet port, three RS232/485 COM ports, and a combined mouse/keyboard port are all accessible on-board.

Additional I/O routed includes IDE, LVDS interface to connect to a high-resolution LCD, three USB 2.0 ports, PMC I/O (routed in compliance with PICMG 2.3 R1.0 for the PCI-X slot), and a variety of standard PC I/O made available with an on-board Super I/O device (PS/2 Mouse/Keyboard, FDC, three RS232/422/485 ports, and a touch screen interface). One PMC expansion sites (supporting 64-bit PCI-X at 133MHz) permit I/O tailored to users' application requirements.

The Intel Pentium-M processor utilizes a new micro architecture to meet the current and future demands of high-performance, low-power embedded computing, making it ideal for communications and industrial automation applications. The KPM-S1 supports Pentium-M processors at 2.0GHz with a front-side bus speed of 533MHz and 2M of L2 cache. The 2.0GHz processor operates up to a temperature of 71° C, ambient.

The KPM's E7520 Memory Controller Hub includes a DRAM controller (the KPM-S1 has two DIMM sockets capable of handling up to 4GB of DDR-266 SDRAM each (8 GB total) and a memory bandwidth of 2.1 GB/s), PCI bus arbitration logic and interfaces, RTC, standard PC timers, Ultra DMA, and interrupt logic.

The embedded ATi Technologies M26 processor offers integrated Mobility Radeon X700 like, high-performance graphics that can support LCD panel QXGA resolutions up to 2048 x 1536 at 60Hz. It has its own 128MB of dedicated graphics memory (SGRAM DDR3-500MHz). The KPM routes the graphics interface directly to an LVDS connected LCD flat-panel display. The 6700 PXH connected to the E7520 supports PCI-X transfer rates of 133MHz (64-bit) for one on-board PMC site.

The 6300ESB I/O Controller Hub supports Ultra ATA 100/66/33 IDE protocol (the IDE interface is routed to connector for external custom solid-state memory drive, three USB 2.0 interfaces, one 16-bit audio in /out interface, two COM ports, and a touch screen interface.

Dynatem offers board support packages for such popular operating systems as VxWorks, Windows NT, Windows XP, Linux, Solaris, QNX, and RTX. Support for other operating systems can be quoted upon request.

Pricing for the KPM-S1 is confidential and undisclosed . Other customized versions can be quoted upon request.

Dynatem manufactures and integrates systems based on 3U and 6U Compact PCI, VME, and custom form-factor single board computers (SBCs). Dynatem is located at 23263 Madero, Suite C, Mission Viejo, CA 92691. For additional information, call (949) 855-3235, fax (949) 770-3481, e-mail sales@dynatem.com or visit our website at www.dynatem.com.

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