

Dual-Core or Quad-Core Intel® Xeon® Processor Single Board Computer



APPLICATIONS

The PP 66x/x71 is a PC-compatible very high performance, high functionality, CompactPCI® board supporting either the Dual-Core or Quad-Core Intel® Xeon® processor, utilizing 45nm process technology, and the Intel® 5520 chipset. The processor contains four or two CPU cores and 8 Mbytes shared last level cache. The PP 66x/x71 will operate in a left or right system slot, a peripheral slot or independently from the CompactPCI bus. High-performance networking is



provided by three Gigabit Ethernet links, and the board is compliant to PICMG® 2.16. An optional dual channel Ethernet module is also available for expanding the number of interconnects. Full system monitoring is provided by the PICMG 2.9 compliant IPMI interface. Many industry standard operating systems are supported. The PP 66x/x71 is suitable for a range of high-performance applications within the telecomms, security, telemetry, scientific and aerospace markets.

HIGHLIGHTS

- 2.13 GHz Quad-Core Intel® Xeon® processor L5518 or 2.0 GHz Dual-Core Intel® Xeon® processor L5508:
 - 45nm process technology
 - two execution threads per core
 - 1066 MHz Memory Bus
 - Intel® QuickPath Interconnect (Intel® QPI)
 - 8 Mbytes last level cache shared between cores
 - Intel® 64 architecture (64-bit computing)
 - no CPU fan needed; low power processor
- Up to 48 GBytes of DDR3-1066 ECC SDRAM
- PMC/XMC module site :
 - PMC site 64-bit; 133MHz PCI-X
 - XMC interface (up to x8 PCI Express™)
 - front panel I/O and optional rear panel Pn4 I/O
- Optional 8 port SAS/SATA300 hardware RAID controller
- 6 x SATA300 interfaces:
 - 4 interfaces via rear
 - optional on-board disk drive
 - SATA to EIDE interface for on-board CompactFlash™
- 3 x 10/100/1000Mbps Ethernet interfaces:
 - Dual Gigabit Packet Switching Backplane (PICMG 2.16)
- Graphics, keyboard and mouse interfaces on front panel
- 5 x Universal Serial Bus (USB 2.0) interfaces
- 2 x RS232 serial channel interfaces
- CompactPCI controller:
 - operates in left or right system controller slot
 - operates in peripheral slot
 - 32/64-bit at 33/66 MHz CompactPCI interface
- Option to bypass CompactPCI bus (Satellite Mode)
- IPMI (Intelligent Platform Management Interface):
 - PICMG 2.9 (System Management Specification)
- Watchdog timer and Long Duration Timer
- Support for Linux®, Windows® XP, Windows® XP Embedded, Windows® Server 2003, Windows® Server 2008, QNX®, VxWorks® and Solaris™
- Dual slot 6U CompactPCI board
- Optional dual 1 or 10 Gigabit Ethernet modules
- Optional dual slot Rear Transition Module available:
 - provides SAS/SATA connectors or PMC/XMC rear I/O
 - option for USB Flash Drive module
 - option for up to two 2.5" SATA300 disk drives

