

Intel® Atom™ Processor 3U Single Board Computer



APPLICATIONS

The TP A41/30x is a PC-compatible low power, high functionality, 3U CompactPCI® board supporting the 1.6 GHz Intel® Atom™ processor Z530. It utilizes the Intel® System Controller Hub US15W to support up to 2 Gbytes of DDR2 SDRAM. This board can support a PMC/XMC site and features a variety of interfaces including four Serial ATA300 channels, dual Gigabit Ethernet, RS232/422, USB, CANbus and HD audio. The

TP A41/30x is a commercial air-cooled board, suitable for a range of environments within industrial control, transportation, security, telemetry, scientific and medical applications. Options to operate in temperatures ranging from -40°C to +85°C are available. Ruggedized conduction-cooled and ruggedized air-cooled versions are planned. To simplify the board's integration many industry standard operating systems are supported.

HIGHLIGHTS

- 1.6 GHz Intel® Atom™ processor:
 - 512 Kbytes L2 cache
 - Intel® Hyper-Threading Technology supports 2 execution threads
 - Intel® Virtualization Technology
- up to 2 Gbytes of soldered DDR2-533 SDRAM
- Single/dual 3U CompactPCI slot configurations available
- PMC/XMC module interface, on optional second slot board with front and rear user I/O:
 - 32 bit, 33/66MHz PCI/PCI-X operation
 - XMC module interface (x1 PCI Express®)
- 2 x 10/100/1000Mbps Ethernet interfaces
- 4 x Serial ATA300 channels:
 - 2 channels accessed via J2
 - 1 channel used for SATA300 hard drive on optional second slot boards
 - 1 channel used for CompactFlash® on optional second slot boards (including front loading CompactFlash)
- CompactFlash® site(s) on single and/or dual slot board
- High definition stereo audio
- Analog graphics interface, front or rear
- 2 x serial channel interfaces
- 5 x USB 2.0 interfaces
- High speed CANbus controller
- CompactPCI controller:
 - operates in the system slot or in a peripheral slot
 - PICMG 2.1 R2.0 (Hot-Swap Specification)
 - 32-bit, 33/66 MHz CompactPCI interface
 - option to bypass CompactPCI bus (Satellite Mode)
- IPMI (Intelligent Platform Management Interface):
 - PICMG 2.9 (System Management Specification)
- Watchdog and long duration timer
- Extended temperature versions available:
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series, includes humidity sealant)
- Ruggedized versions planned:
 - conduction cooled and air cooled
- Support for Linux®, Windows® XP, Windows® XP Embedded, QNX® and VxWorks®

