Can I deliver basic server-level features and enhanced I/O bandwidth on a desktop-level budget?

Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E Product Brief

Yes. With the affordable Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E.

Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E

With the outstanding performance available from the Intel® Pentium® 4 processor, businesses accept that a uniprocessor system is adequate for running many entry-level server applications. But they also recognize that the typical uniprocessor system, made for the desktop, cannot deliver the level of data protection, I/O bandwidth, and manageability that is required for servers and network appliances. In response, Intel offers the Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E—for uniprocessor server systems without compromise.

Multipurpose Server Board

Based on the Intel® Pentium® 4 processor featuring Hyper-Threading Technology[1], the Intel Entry Server Board SE7210TP1-E delivers power and reliability to growing businesses. Its Server System Infrastructure (SSI) design includes support for essential server features such as Error-Correcting Code memory and Serial ATA RAID.

1U Rack-Optimized Platform

To deliver a 1U uniprocessor platform capable of supporting high-speed Intel Pentium 4 processors, Intel has combined a 1U-optimized derivative of the Server Board SE7210TP1-E with the Intel® Entry Server Chassis SR1325-E (chassis not sold separately) to create the Intel Entry Server Platform SR1325TP1-E.

For applications requiring SCSI-based storage or tape drives, an option for integrated single-channel Ultra320 SCSI is available.

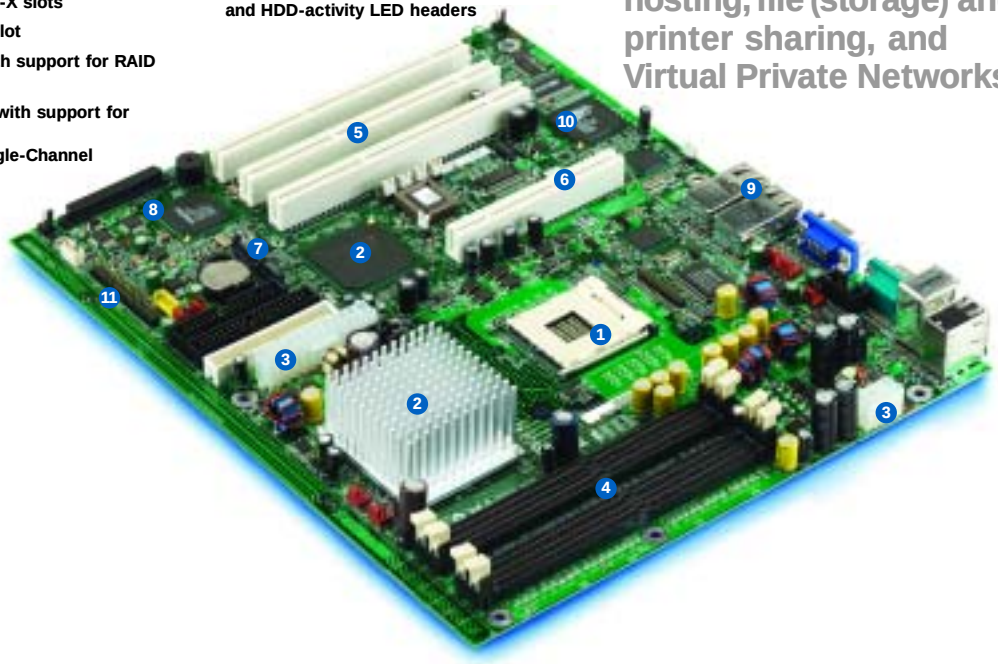
The Intel Entry Server Board SE7210TP1-E and Intel Entry Server Platform SR1325TP1-E deliver an ideal combination of power and cost-effectiveness for entry-level server and appliance applications.

Features	Benefits
Support for one Intel® Pentium® 4 processor featuring Hyper-Threading Technology[1] and a system bus of up to 800 MHz	Excellent performance for entry-level server applications
Intel® E7210 chipset with Intel® Performance Acceleration Technology	Enterprise chipset capabilities, including reduced latency for quick response
Two integrated server network connections (one Intel® PRO/1000 and one Intel® PRO/100+ Server Network Connection)	Speed and added reliability with options for separate subnets, teaming, and fail-over
Multiple data buses, including PCI-X support and a Communication Streaming Architecture (CSA) port	Support for high-bandwidth server adapters and a dedicated port for superior Gigabit Ethernet network data flow
Support for up to 4 GB of Error-Correcting Code (ECC) DDR PC2100/PC2700/PC3200[2] SDRAM memory through four DIMM sockets	High availability and data integrity through ECC, memory capacity to support demanding applications
Two integrated Serial ATA ports with support for RAID levels 0 and 1	Advanced data protection with up to 150 MB/sec throughput per drive using Serial ATA hard drives
Option for integrated Ultra320 SCSI with support for RAID levels 0 and 1. Zero-Channel RAID adapters are also supported *(this applies only to the Intel® Entry Server Board SE7210TP1-E and not the Intel® Entry Server Platform SR1325TP1-E)*	High-performance storage with option to automatically stripe or mirror data
Three 64-bit/66MHz PCI-X adapter slots and one 32-bit/33MHz PCI slot *(this applies only to the Intel® Entry Server Board SE7210TP1-E; the Intel® Entry Server Platform SR1325TP1-E features a single PCI-X slot)*	High-bandwidth adapter card data throughput
Integrated ATI RAGE* XL SVGA PCI video controller	High-quality video without the need for a video-adapter card
Intel® Server Management 5.8	Proactive monitoring and remote server management for maximum availability
Three-year limited warranty	Peace of mind

Intel® Entry Server Board SE7210TP1-E

1. Support for one Intel® Pentium® 4 processor with a system bus of up to 800 MHz
2. Intel® E7210 chipset with Intel® Performance Acceleration Technology
3. SSI power connectors for either an EPS12V or ATX12V power supply
4. Up to 4 GB of ECC DDR PC2100/PC2700/PC3200 unbuffered SDRAM
5. Three 64-bit/66MHz PCI-X slots
6. One 32-bit/33MHz PCI slot
7. Two Serial ATA ports with support for RAID levels 0 and 1
8. Optional Ultra320 SCSI with support for RAID levels 0 and 1
   - Adaptec* AIC-7901 Single-Channel SCSI controller
9. Two Intel® PRO Network Connections
   - One Intel® PRO/1000 Server Network Connection
   - One Intel® PRO/100+ Server Network Connection
10. Integrated graphics
    - ATI* RAGE* XL SVGA video controller with 8 MB of memory
11. SSI front-panel connector, including LAN- and HDD-activity LED headers

The Intel Entry Server Board SE7210TP1-E is ideal for entry-level pedestal and rack server solutions, including Web hosting, file (storage) and printer sharing, and Virtual Private Networks.



Intel® Entry Server Platform SR1325TP1-E

1. **Integrated Intel Entry Server Board SE7210TP1-E** *(with single PCI-X adapter slot)*
2. **Special ducting, baffling, and heat sink to ensure adequate cooling of high-speed Intel Pentium 4 processors**
3. **Five system fans and two power-supply fans for cooling**
4. **SSI-compliant front panel with hard-drive, network-activity, and system-fault LEDs**
5. **PCI-X riser card supporting one adapter** *(included)*
6. **Two fixed hard-drive bays**
7. **Bay for Slimline CD and floppy drive, or a third hard drive** *(The CD/floppy bracket is included. A separate mounting kit accessory is required for installing a third hard drive)*

The Intel Pentium 4 processor supporting Hyper-Threading Technology[1] delivers exceptional and affordable performance to entry-level servers and appliances.

The Boxed Intel® Entry Server Board SE7210TP1-E

The hardware, software, and documentation you need to build entry-level servers quickly.

Included for easy integration:

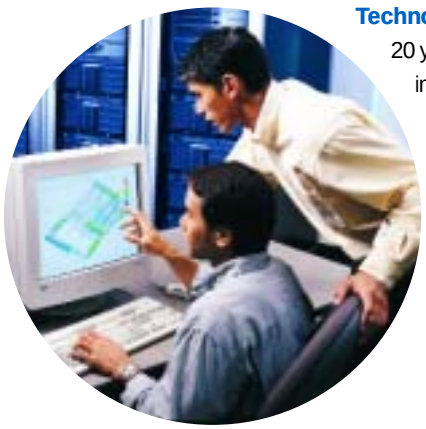
1. **One Intel® Entry Server Board SE7210TP1-E**
2. **Quick Start User Guide**
3. **CD-ROM with software drivers, configuration tools, and technical product information**
4. **CD-ROM with Intel® Server Management software**
5. **Two Serial ATA cables**
6. **One terminated SCSI cable** *(with Ultra320 SCSI option only)*
7. **One floppy-drive cable**
8. **One ATA/66/100 hard-drive cable**
9. **ATX 2.01–compliant I/O shield**
10. **Configuration label, stickers, and back-panel label**

The Intel® Entry Server Platform SR1325TP1-E

Included components:

1. **One Intel® Entry Server Chassis SR1325-E** *(not sold separately)*
2. **One Intel® Entry Server Board SE7210TP1-E** *(with single PCI-X adapter slot)*
3. **One 1U heat sink** *(installation required)*
4. **CD-ROM with software drivers, configuration tools, and technical product information**
5. **CD-ROM with Intel Server Management software**
6. **Two Serial ATA cables**
7. **One floppy-drive cable**
8. **One ATA/66/100 hard-drive cable**
9. **Slimline CD-ROM/floppy mounting bracket and interface board**
10. **Configuration label, stickers, and back-panel label** *(not shown)*

Deliver the most advanced server technology with world-class customer support. With Intel, you can.



Technology leadership. Take advantage of Intel's 20 years of experience designing and engineering industry-leading server building blocks. Intel Server Management and the Intel® SMaRT tool are Intel extras that contribute tremendously to server uptime, customer peace of mind, and lower ownership costs.

With Intel, you can give your customers access to the latest server technologies, exceptional quality, and highly responsive technical support.

Unsurpassed quality. Intel spends 10,000+ hours testing and validating every piece of an Intel server stack. Uncompromising quality standards translate into higher reliability, fewer repairs, and greater customer satisfaction.

World-class technical support. Intel offers 24x7 phone and Web-based technical support, Advanced Warranty Replacement, a three-year limited warranty, spares kits, and extensive technical training. Integrators also have access to a wealth of sales and marketing support in the form of sales tools, videos, and high-quality images for advertising. For more information on Intel server building blocks, please visit: **www.intel.com/go/serverbuilder**

Complete your Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E with Intel Server Building Blocks

Add from the following Intel building blocks to help ensure a highly reliable, available, and scalable server:

Intel® Entry Server Chassis SC5250-E is designed for easy integration with the Server Board SE7210TP1-E. This pedestal form-factor server chassis delivers:

- Four one-inch fixed-drive bays
- Option for hot-swap drives (SATA and SCSI kits available)
- Three peripheral bays
- 450W PFC power supply
- SSI-compliant front panel

Intel® Server Chassis SC5250-E

Intel® Server Chassis SC5200 (base redundant power configuration) provides a highly scalable pedestal or 5U rack chassis with redundant-power capability.

Intel® Server Chassis SC5200

Intel® Pentium® 4 Processors, with a system bus of up to 800 MHz and supporting Hyper-Threading Technology[1], are designed to provide superior performance for demanding applications and environments.

Intel® RAID Controllers help to protect data, applications, and the server operating system from disk failures and are part of an affordable, high-performance line of Intel RAID products, all of them tested and validated for easy integration.

Intel® PRO Server Adapters, including Gigabit Ethernet server adapters, help to reduce bottlenecks and boost availability with industry-leading performance and advanced server features.

Intel server building blocks are validated to work together, helping to save R&D, validation, and support expenses—and speed your time-to-market.

The Intel® Entry Server Chassis SC5250-E and Intel® Entry Server Platform SR1325TP1-E are specifically designed for entry-level servers.

Intel® Entry Server Board SE7210TP1-E and Intel® Entry Server Platform SR1325TP1-E Specifications

Processor	
Intel® Pentium® 4 processors with a system bus of up to 800 MHz and featuring Hyper-Threading Technology[1]; for the latest processor support information, visit http://support.intel.com/support/motherboards/server	

System Memory	
Memory Capacity	Four DIMM sockets for up to 4 GB of unbuffered ECC DDR PC2100/PC2700/PC3200 memory
Memory Type	Unbuffered ECC or Non-ECC DDR PC2100/PC2700/PC3200[2] SDRAM 72-bit, 184-pin gold-plated DIMMs
DIMM Sizes	128MB, 256MB, 512MB, 1GB
Memory Voltage	2.5 V only
Error Detection	Corrects single-bit errors, detects double-bit errors (using ECC memory)

Integrated On-Board	
Chipset	Intel® E7210 chipset
Dual Network Connections	One Intel® PRO/1000 Server Network Connection (Intel® 82547EI Controller) and one Intel® PRO/100+ Server Network Connection (Intel® 82551QM Controller)
Optional Ultra320 SCSI	Adaptec* AIC-7901 Single-Channel SCSI controller supporting mirroring and striping. Zero Channel RAID adapters are also supported. (The option for integrated Ultra320 SCSI is not available with Intel® Entry Platform SR1325TP1-E.)
Graphics	ATI* RAGE* XL SVGA PCI video controller with 8 MB of video memory
Super I/O Controller	Winbond W83627HF Super I/O controller

Input/Output	
CSA Port	Communication Streaming Architecture port providing a dedicated link to the Intel PRO/1000 XT Server Network Connection for rapid network communication
PCI	One 32-bit/33MHz PCI slot (not available on Intel® Entry Server Platform SR1325TP1-E)
PCI-X	Three 64-bit/66MHz PCI-X slots (one available on Intel® Entry Server Platform SR1325TP1-E)
Serial ATA	Two ports supporting RAID levels 0 and 1
IDE	Two EIDE channels for a total of four IDE devices
USB	Three stacked USB connectors for a total of three at the rear panel, one internal front-panel USB header to provide one USB port
Serial Ports	Two serial ports: one asynchronous 9-pin RS-232C, one via 10-pin internal header
Floppy Controller	1.44MB and 2.88MB, 3-mode support
Keyboard/Mouse	PS/2, 8240A-compatible

Management Solution[3]	
Hardware	MINI BMC (NATIONAL PC87431MAT OR EQUIVALENT), AND HECETA* (ADM 1027) MANAGEMENT CONTROLLER
Software	Intel Server Management 5.8 (at product launch)
Remote Management	LAN access to system status, logs, configuration data, and utilities, without the need for a remote-management card
Server Monitoring	To monitor temperatures, voltages, and fans
Server Troubleshooting	Event filtering and proactive alerting via LAN

Validated Operating Systems
Microsoft* Windows* 2000 Server, Microsoft Windows Server* 2003, Red Hat* Linux* 9.0, Red Hat Enterprise Linux ES 3.0, SuSE Linux 9.0 Professional

System BIOS	
BIOS Type	8Mb Flash EEPROM with AMI* BIOS, Multiboot BBS (BIOS Boot Specification) 1.4–compliant
Special Features	Serial console redirection, Plug and Play, IDE drive autoconfigure, SMBIOS 2.3.1, ECC/Parity support, multilingual support

Jumpers and Front-Panel Connectors	
Jumpers	BIOS configuration
Front-Panel Connectors	SSI-compliant connector with power LED, NIC activity LEDs, power on/off switch, reset switch

Mechanical	
Server Board Style	ATX
Server Board Size	12" x 9.6"
1U Platform Size	1.7" H x 16.9" W x 23" D

Power Requirements	
Power Supply	ATX 12V- or EPS 12V-capable
+5V	20.0A maximum continuous current
+5V Standby	2.0A minimum continuous current
+12V	18.0A maximum continuous current
+3.3V	24.0A maximum continuous current
–5V	0.00 A maximum continuous current
–12V	0.5A maximum continuous current

Environment	
Ambient Temperature[3]	Operating (system): 10°C to 35°C; non-operating/storage (system): –40°C to +70°C
Relative Humidity	Non-operating: 95%, non-condensing at 30°C

Safety Compliance	
Canada	UL/CSA 60950-1:2003 (UL Recognition Mark)
Europe	EN 60 950; CE Mark-EU Directive 73/23/EEC
International	IEC 60 950
Nordics	EMKO-TSE (74-SEC) 207/94
Russia	GOST-R 50377-92 (GOST-R Mark)
United States	UL/CSA 60950-1:2003 (UL Recognition Mark)

EMI Verification	
Based on a board configured in a compatible[4] Intel host system	
Australia/New Zealand	Verified to AS/NZS 3548, Class A (C-tick Mark)
Canada	Verified to ICES-003, Class A
Europe	Verified to EN55022, Class A, EN55024 (Immunity), and CE Mark (EU Directive 89/336/EEC)
International/Japan	Verified to CISPR-22/VCCI, Class A
Korea	RRL Class A Certification to MIC Notices 1997-41 & 1997-42
Russia	Verified to GOST-R 29216-91, GOST-R 50628-95 (GOST-R Mark)
Taiwan	Verified to BSMI CNS13438, Class A (DOC)
United States	Verified to FCC, Class A

N232 E139761 CANADA ICES-003 CLASS A ME06 D33025

Abbreviated Configuration Guide

Item	Order Code
Intel® Entry Server Board SE7210TP1-E Options	
With integrated SCSI	SE7210TP1SCSI
Without SCSI	SE7210TP1
1U integrated platform without SCSI	SR1325TP1NA[5] SR1325TP1
Intel® Server Chassis Options	
Intel® Entry Server Chassis SR1325-E (1U)	Included with 1U Platform
Intel® Entry Server Chassis SC5250-E	KPTBASE450BLK
Intel® Server Chassis SC5200 (base redundant power configuration)	KHD3RP450
Intel® Server Chassis Accessories	
3rd Hard Drive Kit (for Server Chassis SR1325-E)	ATPA3HDUPKIT
1U Rail Kit	AXX1U2URAIL
Slimline CD-ROM Drive	AXXSCD
Slimline Floppy Drive	AXXSFLOPPY
Hot-Swap SATA Drive Upgrade (four bays for Server Chassis SC5250-E and SC5200)	ASATAHSDB
5U Rack Kit (for Server Chassis SC5200)	AHD2RACK

[1] Hyper-Threading Technology (HT Technology): Using HT Technology with this product requires a Pentium 4 processor that supports this feature and an HT Technology-enabled chipset, BIOS and operating system. See http://support.intel.com/support/motherboards/server/ for more information, including details on which processors and operating systems support this feature.

[2] DDR PC2100, PC2700, and PC3200 SDRAM modules are also often referred to as DDR266, DDR333, and DDR400 modules respectively.

[3] Environmental ambient temperature is the system-intake measurement for an Intel® Entry Server Board SE7210TP1-E installed in an Intel® Entry Server Chassis SC5250-E.

[4] Compatible host system denotes the system(s) with which Intel tested the board and found it compliant.

[5] Products with codes ending in NA include a North American power cord.

For the most current product information on Intel server building blocks, visit: www.intel.com/go/serverbuilder

0204/SJ&MM/DMW&LK/MD/PP/20K

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