

1.1 Overview

1.1.1 Feature Summary

Table 1 summarizes the major features of the board.

Table 1. Feature Summary

Form Factor	ATX (12.00 inches by 9.60 inches [304.80 millimeters by 243.84 millimeters])
Processor	Support for an Intel® Pentium® 4 processor in an LGA775 socket with a 1066, 800, or 533 MHz system bus
Memory	<ul style="list-style-type: none"> • Four 240-pin DDR2 SDRAM Dual Inline Memory Module (DIMM) sockets • Support for DDR2 667, DDR2 533, or DDR2 400 MHz DIMMs • Support for up to 4 GB of system memory
Chipset	Intel® 945G Chipset, consisting of: <ul style="list-style-type: none"> • Intel® 82945G Graphics Memory Controller Hub (GMCH) • Intel® 82801G I/O Controller Hub (ICH7)
Video	Intel® GMA950 onboard graphics subsystem
Audio	Refer to Table 2 on page 11 for a description of audio subsystem options
Legacy I/O Control	Legacy I/O controller for diskette drive, serial, parallel, and PS/2* ports
USB	Support for USB 2.0 devices
Peripheral Interfaces	<ul style="list-style-type: none"> • Eight USB ports • One serial port • One parallel port • Four Serial ATA interfaces • One Parallel ATA IDE interface with UDMA 33, ATA-66/100 support • One diskette drive interface • PS/2 keyboard and mouse ports
LAN Support	Refer to Table 2 on page 11 for a description of LAN subsystem options.
BIOS	<ul style="list-style-type: none"> • Intel® BIOS (resident in the SPI Flash device) • Support for Advanced Configuration and Power Interface (ACPI), Plug and Play, and SMBIOS
Expansion Capabilities	<ul style="list-style-type: none"> • Four PCI Conventional* bus connectors • Two PCI Express* x1 bus add-in card connectors • One PCI Express x16 bus add-in card connector
Instantly Available PC Technology	<ul style="list-style-type: none"> • Support for PCI Local Bus Specification Revision 2.3 • Support for PCI Express Revision 1.0a • Suspend to RAM support • Wake on PCI, RS-232, front panel, PS/2 devices, and USB ports
Hardware Monitor Subsystem	<ul style="list-style-type: none"> • Hardware monitoring and fan control ASIC • Voltage sense to detect out of range power supply voltages • Thermal sense to detect out of range thermal values • Three fan connectors • Three fan sense inputs used to monitor fan activity • Fan speed control

1.1.2 Manufacturing Options

Table 2 describes the manufacturing options. Not every manufacturing option is available in all marketing channels. Please contact your Intel representative to determine which manufacturing options are available to you.

Table 2. Manufacturing Options

Audio Subsystem	Intel® High Definition Audio subsystem in one of the following configurations: <ul style="list-style-type: none"> 8-channel (7.1) audio subsystem with five analog audio outputs and two S/PDIF digital audio outputs (coaxial and optical) using the Sigmatel* 9223 audio codec 6-channel (5.1) audio subsystem with three analog audio outputs using the Sigmatel 9220 audio codec
Auxiliary fan connector	Additional fan connector for use in larger chassis
IEEE-1394a Interface	IEEE-1394a controller and three IEEE-1394a connectors (one back panel connector, two front-panel connectors)
LAN subsystem	The board provides one of the following: <ul style="list-style-type: none"> Gigabit (10/100/1000 Mbps/sec) LAN subsystem using the Intel® 82573E/82573V/82574V Gigabit Ethernet Controller 10/100 Mbps/sec LAN subsystem using the Intel® 82562GX/82562GZ Platform LAN Connect (PLC) device
SATA RAID	Intel® 82801GR I/O Controller Hub (ICH7-R) for RAID support (levels 0,1, 0+1, and 5) on the SATA interface
SCSI Hard Drive Activity LED Connector	Allows add-in hard drive controllers (SCSI or other) to use the same LED as the onboard IDE controller
Trusted Platform Module (TPM), revision 1.2	A component that enhances platform security

For information about	Refer to
Available configurations for the board	Section 1.2, page 15