

G4S620-N Intel® 865GV Socket 478 ATX System Board

PROCESSOR

- Intel® Pentium® 4 (Prescott and Northwood) processor up to 3.2GHz+
 - Intel Hyper-Threading Technology
 - FSB: 533MHz and 800MHz
- Intel® Celeron® processor
 - 400MHz system data bus

CHIPSET

- Intel® 865GV chipset
 - Intel® 865GV Graphics Memory Controller Hub (GMCH)
 - Intel® 82801EB I/O Controller Hub (ICH5)

SYSTEM MEMORY

- Supports two channel (64-bit wide) memory interface
 - Each channel supports 2 DIMM sockets
- Supports up to 4GB system memory
- Synchronous operation with processor system bus
 - PC2100/PC2700/PC3200 (DDR266/DDR333/DDR400) with 800MHz FSB CPU. DDR333 will run at 320MHz memory frequency when used with 800MHz FSB CPU.
 - PC2100/PC2700 (DDR266/DDR333) with 533MHz FSB CPU
 - PC2100 (DDR266) with 400MHz FSB CPU
- Supports non-ECC (x64) DIMM using 128Mb, 256Mb or 512Mb
- Supports unbuffered DIMMs

BIOS

- Award BIOS, Windows® 98SE/2000/ME/XP Plug and Play compatible
- Supports SCSI sequential boot-up
- Supports DMI 2.x function
- 2Mbit flash memory

ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
 - Wake-On-PS/2 Keyboard/Mouse
 - Wake-On-USB Keyboard/Mouse
 - Wake-On-Ring (external modem)
 - Wake-On-LAN
 - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- Microsoft®/Intel® APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature
- Monitors CPU/1.5V/5VSB/VBAT/3.3V/5V/±12V voltages
- Monitors CPU/chassis/2nd fan speed
- Read back capability that displays temperature, voltage and fan speed
- Supports Watchdog Timer function

ONBOARD GRAPHICS FEATURES

- Graphics memory
 - Shares 1MB/4MB/8MB/16MB/32MB of the system memory in DOS mode
 - Uses Dynamic Video Memory Technology (DVMT) in Windows mode
- Graphics controller
 - Core frequency of 266MHz
 - 350MHz integrated 24-bit RAMDAC
 - Analog display up to 2048x1536 @ 60Hz refresh
 - 3D setup and render engine - Discrete, Triangles, Strips and fans
 - Per pixel perspective corrected texture mapping
 - Software DVD at 30fps, full screen
- 2D graphics features
 - Optimized 256-bit BLT engine
 - 32-bit alpha blended cursor
 - Programmable 3-color transparent cursor
- 3D graphics features
 - Maximum 3D resolution: 1600x1200x32 @ 85Hz
 - Flat and Gouraud shading

- 16- and 24-bit Z-buffering and 16- and 24-bit W-buffering
- Vertex and programmable pixel fogging and atmospheric effects
- Double and triple render buffer
- Software drivers
 - Windows® 98SE/2000/ME/XP and Windows NT® 4.0

ONBOARD AUDIO FEATURES

- 20-bit stereo full-duplex codec with independent variable sampling rate
- High quality differential CD input
- True stereo line level outputs
- S/PDIF-out interface
- 2-channel audio output

ONBOARD LAN FEATURES

- Intel 82547 Gigabit ethernet controller
 - Uses Intel Communication Streaming Architecture (CSA) interface
 - IEEE 802.3x-compliant flow-control and IEEE 802.3ab auto-negotiation
 - IEEE 802.1Q VLAN
 - On-chip SMBus 2.0
 - Compliant with PCI Power Management v1.1/ACPI v2.0
- Realtek RTL810S integrated Gigabit ethernet controller
 - Integrated 10, 100 and 1000 Mbps transceiver
 - PCI 2.2 32-bit/64-bit, 33/66MHz
 - Fully compliant with IEEE 802.3, IEEE 802.3u and IEEE 802.3ab
 - IEEE 802.1Q VLAN tagging

IDE INTERFACE

- Supports ATA/33, ATA/66 and ATA/100 hard drives
- PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)
- Bus mastering reduces CPU utilization during disk transfer
- Supports ATAPI CD-ROM, LS-120 and ZIP

Serial ATA INTERFACE

- Supports two SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification (1.5Gbps interface)

PROCESSOR SOCKET

- Socket 478

REAR PANEL I/O PORTS

- 4 USB 2.0/1.1 ports
- 2 RJ45 LAN ports
- 1 DB-9 serial port
- 1 DB-15 VGA port
- 1 DB-25 parallel port
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 3 audio jacks: line-out, line-in and mic-in

I/O CONNECTORS

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 3 connectors for 3 external serial ports
- 1 front audio connector for external line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-out connector
- 1 connector for IrDA interface
- 2 Serial ATA, 2 IDE and 1 floppy
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 3 fan connectors

EXPANSION SLOTS

- 2 ISA slots
- 5 PCI slots

COMPATIBILITY

- PCI 2.2 and AC '97 compliant

PCB

- 4 layers, ATX form factor
- 30.5cm (12.05") x 24.4cm (9.6")