

# G4S600-B-G

Intel® 865G chipset  
Socket 478-based Intel® ATX board**PROCESSOR (Socket 478-based Intel®)**

- Intel® Pentium® 4 Processor with Hyper-Threading Technology
  - 800MHz/533MHz system data bus
- Intel® Pentium® 4 processor
  - 533MHz/400MHz system data bus
- Intel® Celeron® processor
  - 400MHz system data bus

**CHIPSET**

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

**SYSTEM Memory**

- Supports dual channel (128-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
- Flash EPROM for easy BIOS upgrades
- Supports DMI 2.0 function
- 4Mbit 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-Keyboard/Mouse
  - Wake-On-USB Keyboard
  - 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 and overheat alarm
- Monitors 5VSB(V)/VBAT(V)/1.5V/3.3V/5V/±12V/CPU(V) voltages and failure alarm
- Monitors CPU/chassis/2nd fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed
- Opened chassis alarm

**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
  - 200 megapixels/sec fill rate
  - 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
  - Windows NT® 4.0

**ONBOARD AUDIO FEATURES**

- 18-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**

- Uses Realtek RTL8101L fast ethernet controller
- Integrated IEEE 802.3, 10BASE-T and 100BASE-TX compatible PHY 32-bit PCI master interface
- Integrated power management functions
- Full duplex support at both 10 and 100 Mbps
- Supports IEEE 802.3u auto-negotiation
- Supports wire for management

**PCI 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

**SATA IDE INTERFACE**

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

**ACCELERATED GRAPHICS PORT (A.G.P)**

- Supports 1.5V AGP 8X (2.13GB/sec) and AGP 4X (1066MB/sec) for 3D graphics applications (AGP 2X and 3.3V AGP card are NOT supported)
- Supports AGP 3.0 and AGP 2.0 spec.

**REAR PANEL I/O PORTS**

- 2 USB 2.0/1.1 ports
- 1 RJ45 LAN port
- 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
- 1 game port
- 3 audio jacks: line-out, line-in and mic-in

**I/O CONNECTORS**

- 3 connectors for 6 additional external USB 2.0/1.1 ports
- 1 connector for 1 external serial port
- 1 front audio connector for external line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-out connector (audio digital interface)
- 1 connector for IrDA interface
- 2 Serial ATA, 2 IDE and 1 floppy connectors
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 1 chassis open connector
- 3 fan connectors for CPU fan, chassis fan and 2nd fan

**EXPANSION SLOTS**

- 1 AGP slot; 1.5V
- 5 PCI slots

**COMPATIBILITY**

- PCI 2.2 and AC '97 compliant

**PCB**

- 4 layers, ATX form factor
- 30.5cm (12.05") x 21cm (8.26")

**SAFETY**

- UL, cUL, FCC Class B, CE