

## G4S601-B Intel® 865G ATX System Board

### PROCESSOR

- Intel® Pentium® 4 (Prescott and Northwood) processor up to 3.2GHz+
  - Intel Hyper-Threading Technology
  - FSB: 400MHz, 533MHz and 800MHz
- Intel® Celeron® processor
  - 400MHz and 533MHz system data bus
- Socket 478

### CHIPSET

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

### SYSTEM MEMORY

- Two 184-pin DDR DIMM sockets
- Supports dual channel (128-bit wide) memory interface
- Supports up to 2GB system memory
- Synchronous operation with processor system bus
  - PC2700/PC3200 (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
- 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-PS/2 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
- Auto power-on function
- 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
  - 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

### ONBOARD AUDIO FEATURES

- Realtek audio CODEC
- 16-bit stereo full-duplex codec with 48KHz sampling rate
- High quality differential CD input
- True stereo line level outputs
- S/PDIF-out interface
- 6-channel audio output

### ONBOARD LAN FEATURES

- Uses Realtek RTL8101L fast ethernet controller
- 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

### IDE INTERFACE

- Supports up to UltraDMA 100Mbps hard drives
- PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)

### SERIAL ATA INTERFACE

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

### REAR PANEL I/O PORTS

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

### I/O CONNECTORS

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 1 connector for 1 external serial port
- 1 connector for 1 external game/MIDI port
- 1 connector for external line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 surround connector
- 1 S/PDIF-out connector
- 1 connector for IrDA interface
- 2 Serial ATA connectors
- 2 IDE connectors
- 1 floppy connector
- 1 20-pin ATX power connector
- 1 4-pin 12V ATX power connector
- 1 Wake-On-LAN connector
- 3 fan connectors

### EXPANSION SLOTS

- 1 AGP slot
- 6 PCI slots

### COMPATIBILITY

- PCI 2.2 and AC '97 compliant
- Intel AGP version 3.0

### PCB

- 4 layers, ATX form factor
- 30.5cm (12") x 22cm (8.66")

### REAR PANEL I/O PORTS

