G7S620-N-G
Intel® 865G ATX System Board

PROCESSOR
- LGA 775 socket for:
  - Intel® Pentium® D
  - Intel® Pentium® 4
  - Intel® Celeron D
- Supports Intel Enhanced Memory 64 Technology (EMT64T)
- Supports Enhanced Intel SpeedStep Technology (EIST)
- Supports Intel Hyper-Threading Technology
- Supports 800/533MHz FSB

CHIPSET
- Intel® chipset
  - Intel® 865G 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
  - PC2700/PC3200 (DDR333/DDR400) with 800MHz FSB CPU. DDR333 will run at 320MHz memory frequency when used with 800MHz FSB CPU.
  - PC2700 (DDR333) with 533MHz FSB CPU
- Supports non-ECC (x64) unbuffered DIMM using 128Mb, 256Mb or 512Mb

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/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/3.3V/5V/+12V voltages
- Monitors CPU/system fan speed
- Read back capability that displays temperature, voltage and fan speed
- Supports Watchdog Timer function

ONBOARD GRAPHICS FEATURES
- Graphics memory
  - Shares 1MB/8MB/16MB 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

ONBOARD AUDIO FEATURES
- Realtek ALC655
- 16-bit stereo full-duplex codec with 48KHz sampling rate
- High quality differential CD input
- True stereo line level outputs
- S/PDIF-out interface
- 5.1-channel audio output

ONBOARD LAN FEATURES
- Two Realtek RTL8110SC PCI Gigabit LAN controllers
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

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)

ACCELERATED GRAPHICS PORT (A.G.P.)
- Supports AGP 3.0 and AGP 2.0 spec.
- AGP 8x data rate provides a theoretical maximum bandwidth of 2.13GB/sec.
- Supports 1.5V AGP 4x with up to 1066MB/sec. bandwidth for 3D graphics applications (3.3V AGP card is not supported)

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
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line-out

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
- 1 Digital I/O connector
- 1 Digital I/O power connector
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 2 fan connectors

EXPANSION SLOTS
- 1 AGP slot
- 2 ISA slots
- 4 PCI slots

TEMPERATURE
- 0°C to 60°C

HUMIDITY
- 10% to 90%

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

SAFETY
- UL, cUL, FCC Class B, CE

REAR PANEL I/O PORTS

PS/2 Mouse | Parallel | LAN | LAN | Mic-in
Line-in
Line-out
PS/2 K/B | COM | VGA | USB 1-2 | USB 3-4

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