ITOX
Applied Computing

Revision Control • **Long Life Cycle**

RoHS

G4G100-N-G
Intel 915GV chipset
Socket 478-based Intel® Mini-ITX 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® D processor
  - 533MHz system data bus
  - Based on 90nm core

CHIPSET
- Intel® 915GV chipset
  - Intel® 915GV Graphics Memory Controller Hub (GMCH)
  - Intel® 82801FB I/O Controller Hub (ICH6)

SYSTEM MEMORY
- Two 184-pin DDR SDRAM DIMM sockets
- Supports dual channel (128-bit wide) memory interface
- 2.6V unbuffered PC3200 (DDR400), or 2700 (DDR333) DDR SDRAM DIMM
- Supports maximum of 2GB system memory using 256Mbit, 512Mbit, or 1Gbit technology for x8 and x16 devices

BIOS
- Award BIOS
- Supports SCSI sequential boot-up
- 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-PS/2 Keyboard/Mouse
  - Wake-On-USB Keyboard/Mouse
  - Wake-On-Ring
  - Wake-On-LAN
  - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- Hardware supports SMI green mode
- 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
- Watchdog timer function

ONBOARD GRAPHICS FEATURES
- Graphics Memory
  - Shares 1MB/8MB of the system memory in DOS mode
  - Uses Dynamic Video Memory Technology (DVMT) in Windows mode
- Graphics Controller
  - Core frequency of 333MHz
  - 400MHz integrated 24-bit RAMDAC
  - Analog display up to 2048x1536 @ 85Hz refresh
  - 3D setup and render engine – Discrete, Triangles, Strips, and Fans
  - Hardware Pixel Shader 2.0
  - Supports 3D and OGL pixelization rules
  - Per pixel perspective corrected texture mapping
  - 533 MegaTexel/sec performance, 266 Megapixels/sec fill rate up to two bilinear textures
- 2D Graphics Features
  - Optimized 256-bit BLT engine
  - 32-bit alpha blended cursor
  - Programmable 3-color transparent cursor

- 3D Graphics Features
  - Supports maximum 3D resolution: 1600x1200x32 @ 85Hz
  - Flat and Gouraud shading
  - 16-bit and 24-bit Z-buffering and 8-bit Stencil buffering
  - Vertex and programmable pixel fogging and atmospheric effects
  - Double and triple render buffer
- Software drivers
  - Windows ® 2000/XP

ONBOARD AUDIO FEATURES
- Realtek ALC202A
- 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
- Two Marvell 88E8053 PCI Express Gigabit Ethernet controllers
- Integrated power management functions
- Full duplex support at 10Mbps, 100 Mbps, and 1Gbps
- IEEE 802.3 Auto-negotiation
- Supports wire for management

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

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

REAR PANEL I/O PORTS
- 4 USB 2.0/1.1 ports
- 2 RJ45 LAN ports
- 3 DB-9 serial ports
- 1 DB-15 VGA 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
- 1 connector for external COM 3
- 1 connector for external parallel port
- 1 front audio connector for line-out and mic-in jacks
- 1 S/PDIF-out connector
- 1 CD-in internal audio connector
- 1 connector for IrDA interface
- 1 40-pin IDE connector
- 1 floppy connector (FPC connector type)
- 2 ATX 12V power supply connectors
- 1 chassis open connector
- 3 fan connectors

EXPANSION SLOTS
- 1 PCI slot for PCI expansion card or customized riser card for 1, 2, or 3 PCI slot expansion (for low profile PCI card only)

COMPATIBILITY
- PCI 2.2 and AC '97 compliant

CIRCUIT BOARD (PCB)
- 6 layers, Mini-ITX form factor
- 17 cm (6.7") x 17 cm (6.7")

SAFETY
- UL, cUL, FCC Class B, CE