

FEATURE SUMMARY

- MicroATX 9.6" x 9.6"
- Intel® Pentium® 4 and Celeron™ D processors
- LGA775 socket
- 800 / 533MHz FSB
- Two DDR2 SDRAM sockets
- Support for DDR2-533 and DDR2-400
- Up to 2GB system memory
- Intel® 915GV chipset
- Intel® GMA900 graphics
- Intel® High Definition Audio
- Auto-sensing jack sockets
- One x1 PCI Express slot
- Two PCI slots (one with riser extension)
- ADD2 slot
- Eight USB 2.0 ports
- Two serial ports
- One parallel port
- Two SATA ports
- One ATA/100 port
- One diskette interface
- PS/2 keyboard and mouse ports
- Gigabit Ethernet controller
- Option for second Gigabit Ethernet controller
- Phoenix Award BIOS
- User-defined BIOS settings
- Customizable BIOS logo
- Suspend to RAM support
- System monitoring
- Automatic fanspeed control
- Watchdog timer
- GPIO port
- RoHS compliant

LATEST TECHNOLOGY

The Endura BY915GV microATX motherboard is based on Intel's long life, embedded 915GV Express chipset. This is the first Intel Pentium® 4 chipset to introduce support for PCI Express, the latest high speed serial interconnect standard. For example, the PCI Express x1 slot delivers 500 MB/s, over 3.5 times the bandwidth of a conventional PCI slot at 133 MB/s. In addition, the 915GV has integrated third generation graphics with Intel® Graphics Media Accelerator (GMA) 900, which supports widescreen LCD displays, accelerated DirectX 9 and has new 3D graphics capabilities. Integrated Intel® High Definition Audio provides 24-bit, two channel, stereo audio with support for 192 kHz quality audio.

With a front side bus of 800MHz, the Endura BY915GV supports the latest Intel® Pentium® 4 and Celeron™ D processors with Hyperthreading Technology for multi-tasking applications. Flexible memory support is available with DDR2-533 and DDR2-400 dual channel memory with a maximum of 2GB.

Eight USB 2.0 ports (4 rear I/O and 4 headers) provide support for high-speed I/O peripherals with 40X the speed of USB 1.1. Two SATA ports facilitate data transfers at 150 MB/s for the SATA hard drives and optical drives. An ATA/100 port is available for legacy hard drives and optical drives.

ROHS COMPLIANCE

With increasing market demand for RoHS (Restriction on the use of certain Hazardous Substances) compliant products, the BY915GV is also designed to be fully RoHS compliant.

DESIGNED FOR EMBEDDED APPLICATIONS

All RadiSys Endura motherboards are designed for long life (5–7 years typical). Components are chosen to meet the more demanding needs of embedded applications such as 24/7 operation. RadiSys provides full product life cycle management, including integration support, revision control and sustaining support. Combined with the benefit of time-to-market designs, the RadiSys Endura product line enables customers to achieve fast time to money and low cost-of-ownership.



SPECIFICATIONS

FEATURE	FUNCTION	DESCRIPTION
Processor	Type	Support for Intel® Pentium® 4 and Celeron™ D processors
	Socket	LGA775 socket
	FSB	800MHz and 533MHz system bus
Chipset	Type	Intel® 915GV Express chipset with Intel® ICH6
Memory	Type	Two sockets for DDR2-533 (PC2-4200) and DDR2-400 (PC2-3200) DIMM modules
	Capacity	Up to 2GB of system memory
Video	Type	Integrated Intel® GMA900 (Graphics Media Accelerator)
	Resolution	2048 x 1536 at 85Hz maximum resolution 1600 x 1200 at 75Hz and 32-bit color
	ADD2	Two Serial Digital Video Out (SDVO) ports for flat-panel monitors via Advanced Digital Display (ADD2) cards
Audio	Type	Intel® High Definition Audio subsystem using Sigmatel STAC9200 audio codec providing two channel stereo audio
	Connectors	Two auto-sensing jack sockets on the rear I/O panel and three ATAPI connectors for CD Input, Line Out and Mic In
Expansion	PCI Express	One x1 PCI Express slot
	PCI	Two PCI slots with PCI riser extension socket in slot 2
Power Management	ACPI	ACPI 2.0 supporting states S0, S3 (suspend to RAM), S4 and S5
System Management	System Monitoring	Voltage, temperature and fan monitoring (3 fans)
		Lithium cell voltage monitoring
		Automatic fanspeed control based on thermal monitoring
	Watchdog	Programmable watchdog timer
	Management	SMBios
SMBus	SMBus header	
Power Supply	Type	Support for hard- and soft- switched power supplies
		Must conform to ATX12V specification
	Connector	2 x 10 power connector
Battery		Lithium coin cell (5 years operating life typical)
BIOS		Phoenix Award BIOS
		Includes video BIOS and network boot
		Customizable logo and BIOS settings
I/O	USB	Eight USB 2.0 ports – four on rear I/O panel and four on headers
	Firewire	Not supported
	GPIO	13-bit General Purpose I/O header with LCD character display support
	Serial Ports	COM1 on 9-pin D-type, COM2 via 10-pin header
	Parallel Port	25-pin D-type supporting bi-directional EPP and ECP modes
Disks	SATA	Two Serial ATA (SATA) headers
	IDE	One Ultra ATA100 interface
	FDD	One floppy drive header
Drivers	Operating Systems	Windows XP, Windows XPe, Windows 2000, Red Hat Enterprise Linux WS v3, Novell SUSE Linux Professional 9.2, Knoppix Linux 3.6
Safety Compliance		Evaluated in accordance with UL60950, EN60950 and IEC60950
EMC Compliance		Evaluated in accordance with EN55022, EN55024 and FCC Part 15 Class B
Environment	Operating Temp.	0°C to 55°C
	Storage Temp.	-40°C to 85°C
	Relative Humidity	5% to 95% non-condensing

ORDERING INFORMATION

Call for pricing and availability.
Refer to the order codes below.

DESCRIPTION:

BY915GV with a single Gigabit Ethernet controller
ORDER CODE: BYGV1G00-0-0

BY915GV with dual Gigabit Ethernet controllers
ORDER CODE: BYGV2G00-0-0

Embedded Processor Support

Intel 2.93GHz Celeron D processor 340
Intel 3.4GHz Pentium 4 processor 550



World Headquarters
5445 NE Dawson Creek Drive
Hillsboro, OR 97124 USA
Phone: 503-615-1100
Fax: 503-615-1121
Toll-Free: 800-950-0044
www.radisys.com
info@radisys.com

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