# RadiSys

## DATASHEET



#### FEATURE SUMMARY

- 9.6" x 9.6" MicroATX
- Intel Core<sup>™</sup> 2 Duo, Core<sup>™</sup> 2 Quad and Celeron processors
- Intel Q35 Express chipset
- 667/800/1333MHz Front-Side Bus
- 4 DIMM sockets
- Up to 8GB DDR2-667/800 memory

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### Endura PL35Q

Intel® Q35 Core 2 Duo Micro ATX Embedded Motherboard

#### NEXTGEN PERFORMANCE

The Endura PL35Q ATX is based on the latest Intel Q35 Express chipset which delivers support for Intel Core<sup>™</sup> 2 Duo processors and the upcoming Intel Core<sup>™</sup> 2 Quad processors bringing higher performance in combination with greater energy efficiency. The Front Side Bus support is extended up to 1333MHz for use with nextgen 45nm processors. The PL35Q also supports faster DDR2-800 dual channel memory.

#### ADVANCED I/O

The Endura PL35Q comes with additional USB 2.0 ports with 6 on the rear I/O panel, 2 on-board connectors and 4 via on-board headers. Four SATA 3 Gbps ports are available, one of which also supports eSATA for use with external drives at a distance of up to 2m. A x4 PCI Express slot provides an interface for use high bandwidth data capture devices, such as used in medical ultrasound systems.

A range of long life embedded processors are available for use with the Endura PL35Q. These include the Core<sup>™</sup> 2 Duo E6400, E4300 and Celeron processors for a choice of scalable options to suit the price / performance needs of the application.

#### **IMAGING SOLUTIONS**

The Endura PL35Q has an integrated Intel GMA 3100 graphics controller for exceptional 3D graphics performance. It is also equipped with an optional DVI-D interface for use with flat panel displays and an S-Video port for use with TV monitors and video printers. A x16 PCI Express slot is available for graphics acceleration cards for applications with more demanding imaging requirements.

#### LONG LIFE

With a projected life time of up to 7 years, the Endura PL35Q is designed for the needs of embedded system designers. This is backed up by full revision control, change management and strong engineering support from RadiSys.

#### Endura PL35Q Specifications

FEATURE	FUNCTION	SPECIFICATION	
FORM FACTOR	Size	MicroATX motherboard, 9.6" x 9.6", 240mm x 240mm, 6-layer PCB	
PROCESSOR	Туре	Intel® Core™ 2 Duo, Core™ 2 Quad and Celeron® processors	
	Socket	LGA775 socket	
	FSB	800MHz, 1066MHz and 1333MHz system bus	
CHIPSET	Туре	Intel® Q35 Express chipset with Intel® ICH9	
MEMORY	Туре	Four sockets for DDR2-667 and DDR2-800 DIMM modules	
	Capacity	Up to 8GB of system memory	
	Performance	Dual-Channel memory	
VIDEO	Туре	Intel® Graphics Media Accelerator 3100 integrated video Dual independent video	
	Resolution	2048 x 1536 (QXGA) at 75Hz and 32-bit color	
	Graphics Acceleration	x16 PCI Express graphics slot with support for Media Expansion Cards	
	Video Outputs	VGA, DVI-D (option), S-Video (option) MUX to select SDVO on x16 graphics slot or DVI-D / S-Video interfaces	
AUDIO	Туре	Intel® High Definition Audio using Realtek ALC883 eight channel CODEC	
	Connectors	3 audio jacks for Line In, Line Out, Microphone On-board CD-ROM audio input header	
ETHERNET	Controller	Gigabit Ethernet using the integrated MAC and Intel 82566DM PHY	
EXPANSION	PCI Express	x16 PCI Express graphics slot x4 PCI Express slot x1 PCI Express slot	
	PCI	One PCI 2.3 compliant slot	
POWER MANAGEMENT	ACPI	ACPI 3.0	
SYSTEM MANAGEMENT	System Monitoring	Voltage, temperature and fan monitoring with three 4-pin fans	
		Lithium cell voltage monitoring	
	Fans	Automatic fanspeed control based on thermal monitoring	

	SMbus	SMbus SMbus header			
POWER SUPPLY	Connector	Standard 24-pin ATX power supply connector with 4-pin ATX 12V connector			
BATTERY	Туре	Lilthium coin cell (5 years operating life typical)			
BIOS	Туре	Phoenix BIOS TrustedCore™ with customizable logo and BIOS settings			
Ι/Ο	USB	12 USB 2.0 ports – 6 on rear I/O, 2 on-board and four on headers			
SERIAL PORTS	Two RS232 serial ports on headers				
DISKS	SATA	Four SATA 3Gb/s ports, one is eSATA ready			
	IDE	One Ultra ATA100 interface			
OPERATING SYSTEMS	Windows XP				
	Windows XPe				
	Windows Vista				
	Linux				
	Solaris				
SAFETY COMPLIANCE	Evaluated in accordance with	Evaluated in accordance with UL60950, EN60950 and IEC60950			
EMC COMPLIANCE	Evaluated in accordance with	Evaluated in accordance with EN55022, EN55024 and FCC Part 15 Class B			

#### **PHYSICAL SPECIFICATIONS**

ENVIRONMENT	Temperature	Operating	0°C to 55°C
		Storage	-40°C to 85°C
	Humidity	Relative	5% to 95% non-condensing

#### **Ordering Information**

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

DESCRIPTION: PL35Q without DVI and S-Video Order Code: PLV03-0-1

PL35Q with DVI and S-Video Order Code: PLVDS03-0-1

I/O Shield for either product
Order Code: IOSHLD-PL

Embedded Processor Support Intel Core™ 2 Duo E6400 Intel Core™ 2 Duo E4300 Intel Pentium Dual-Core E2160 Intel Celeron 440

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