

ENDURA CH815C

Long Life Intel® 815 Dual Ethernet MicroATX Embedded Motherboard



FEATURE SUMMARY

- 370-pin PGA socket for Intel® Celeron and Pentium III processors in FC-PGA and FC-PGA2 packages
- Intel® 815 chipset with C-ICH
- Up to 512MB SDRAM
- Integrated VGA
- Dual Intel® 10/100 Ethernet
- On-board PC speaker
- 12 GPIOs/LCD character display interface
- System monitoring
- Fan control
- Dual watchdog timers
- Power management
- PhoenixBIOS*
- 4 PCI Slots
- 9.6" x 8," microATX compliant
- Peripheral connectivity
 - Dual USB
 - Dual 10/100 Ethernet
 - Dual IDE
 - Floppy
 - Parallel
 - Quad serial
 - Keyboard
 - Mouse
 - Video
- ROHS 6 Compliant



The Endura CH815C dual Ethernet motherboard is designed specifically as a platform for Enterprise applications. It is based on the Intel® C-ICH communications I/O controller hub, a device designed and manufactured by Intel®'s embedded division (EID), aimed at communications applications. It has dual integrated Ethernet MACs and two additional serial ports thus expanding the number of available ports in a highly integrated design. With the use of an embedded chipset, the CH815C is designed for a target lifetime of five years. Engineering services, change management and high quality of design and manufacture are just some of the support services provided by RadiSys to customers who value the low cost of ownership that can be achieved with this level of support.

The CH815C is designed for ease of use in 1U and 2U rack mount servers. Support for PCI riser cards in PCI slots 2, 3 and 4 enables a low profile design. Slot 2 has a standard ATX riser extension slot while slots 3 and 4 have additional signals enabling the use of two back to back riser cards with up to 5 PCI slots. The front panel connector has additional signals for the LAN LEDs enabling these to be mounted on the front of the chassis. Additional on-board headers allow internal connections to be made to the keyboard and mouse ports. A 12-bit GPIO port provides a convenient way to interface a 40 x 2 character mode LCD display. System monitoring, dual watchdog timers and an SMBus interface are just some of the essential features on the CH815C required for Enterprise system design. With support for the latest Tualatin based processors, the CH815C offers a cost-effective, scalable solution from entry-level Celeron® processors to high-end Pentium® III processors at speeds of 1.26GHz and beyond.

Endura CH815C Specifications

FEATURE	FUNCTION	DESCRIPTION
Processor	Socket	370-pin PGA ZIF for Intel® Celeron and Pentium III processors in FC-PGA and FC-PGA2 packages
	FSB	66MHz, 100MHz and 133MHz operation Tualatin support
	Cache	Provided by processors with integrated L2 cache
Chipset	-	Intel® 815 GMCH and C-ICH (embedded communications I/O controller hub)
Memory	Type	Two 168-pin DIMM sockets for PC133/PC100 SDRAM
	Capacity	Maximum of 512MB
	ECC/Parity	Not supported
Video	Controller	3D graphics controller integrated in 815 chipset
	Frame Buffer	Stored in main memory (holds 2D and 3D data)
	Monitor Support	Analog VGA
Audio	-	On-board mini-speaker for status and diagnostic beep codes
Network	Controller	Intel® C-ICH MACs with Intel® 82562ET PHYs IEEE 802.3 10Base-T & 100Base-TX compatible
	Connector	Two RJ45 connectors, each with two LEDs to indicate line activity, link integrity and line speed
	LEDs	LED drives duplicated for front panel connection
IDE	Devices	Two Ultra ATA/100 interfaces via 40-way boxed header
	Drive Types	Supports ATAPI, LS120 and ZIP drives
Floppy	Types	Supports standard 3.5" and 3-mode floppy drives
Mechanical	Dimensions	9.6" x 8.0", 4-layer PCB
	Compliance	microATX compliant
	I/O shield	Available with cutouts for two RJ45 Ethernet connectors
I/O	VGA	Via 15-way D-type
	Parallel Port	25-pin D-type supporting bi-directional, EPP and ECP modes
	Serial Ports	COM1 on 9-pin D-type, COM2, 3, 4 via 10-way headers
	IrDA	Supported in place of COM2 via front panel connector
	USB	Dual stacked USB 1.1 rear connector
	Keyboard & Mouse	Swappable PS/2 connectors, on-board header connectors
	GPIO	12 GPIO lines via header (also usable for character LCD modules)
	SMbus	4-pin header
Expansion Slots	PCI	4 dedicated bus master PCI 2.2 slots
	Riser Support	PCI riser extension on Slot 2, multi-slot riser support on Slots 2, 3 and 4
System Monitoring	-	Monitoring of voltage, temperature and three fans
	-	CPU and chassis (2) fan speed control
	-	Dual watchdog timers
	-	SMBus connector
Power Management	-	PCI PME, ACPI 1.0, APM 1.2
Power Supply	Type	Support for hard- and soft- switched power supplies
	Typical	47W with 1.26GHz Pentium III, 512MB SDRAM, running power stress software
Battery	-	Lithium coin cell (5 years operating life typical)
BIOS	Type	PhoenixBIOS 4.0 Release 6.0
	Special Features	Customizable defaults, customer logo, silent boot, automatic configuration
	Network	PXE, remote boot from both Ethernet ports
Drivers	Intel® C-ICH	Windows NT* 4.0, Windows NT Embedded, Windows* XP, Windows XP Embedded, Windows* 2000, Linux,* VxWorks*, QNX*
Safety Compliance	-	Evaluated in accordance with UL1950, EN60950 and IEC60950
EMC Compliance	-	Evaluated in accordance with EN55022, EN55024 and FCC Part 15 Class B
Environment	Operating Temperature	0°C to 55°C
	Storage Temperature	-40°C to 85°C
	Relative Humidity	5% to 95% non-condensing

Ordering Information

Toll-Free: 800-950-0044

Phone: 503-615-1100

Support: 866-385-6167

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

DESCRIPTION

CH815C uATX, RoHS

PRODUCT CODE: CH2L03-0-0

I/O shield for CH2L03-0-0, RoHS

PRODUCT CODE: ATX-2L 81X IOSHLD

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