



PROCELERANT CE 915GM

COM Express Embedded Computing Module

FEATURE SUMMARY

- 2GHz Pentium® M and 1.5GHz Celeron® M combined with Intel® 915GM Chipset on COM Express Module
- Intel ICH6M I/O Hub
- PICMG COM Express Compliant
- Basic Form Factor (95mm x 125mm)
- Type 2 COM Express Pin-out
- Intel 82573 10/100/1000BaseTX Ethernet Controller
- One SODIMM Socket for up to 1GB DDR2 Memory
- Flexible PCI-Express Options
- 3*PCI-Express x1 PCI Express Ports
- Integrated Graphics
- Dual SDVO
- Analog VGA
- LVDS
- TV out
- COM Express Standard Features
- 8 USB Ports
- 2 SATA Ports
- 1 ATA 100 Port
- PCI 32-bit/33MHz PCI Bus
- 8 GPIO Lines
- Phoenix BIOS with ACPI 2.0 Power Management
- Win XP/Win XP Embedded/Red Hat Desktop Linux
- Optimized Passive and Active Heatsinks Available
- ROHS Compliant

PRODUCT DESCRIPTION

Based on the open PICMG® standard, the RadiSys Procelerant™ CE COM Express module combines Intel® Pentium® M and Celeron® M performance with key features vital for today's embedded applications. Paired with a RadiSys Procelerant™ CR carrier board, the RadiSys family of COM Express modules provides a final production or a design-specific development platform.

PICMG STANDARD

COM Express is the PICMG standard for a Computer-On-Module (COM) based on new serial differential signaling technologies such as PCI Express, Serial ATA, USB 2.0, LVDS, and Serial DVO. The COM Express modular concept enables OEMs to reduce time to market by reducing the time spent on processor design and enabling OEMs to focus on their core competencies and product differentiation. The modularity provides the ability for an OEM to plan for feature changes, contributing to the success of the product over its lifetime.

APPLICATIONS

RadiSys COM Express products are ideal for embedded applications that require a standard processor and memory subsystem at the center of their design – and require the modular flexibility to meet customer needs. Other ideal applications include designs that are size constrained and require the small footprint of COM Express.

CARRIER DESIGNS SUPPORTED BY RADISYS

Whether customers design their own carrier board or utilize RadiSys Design Services to design one, RadiSys supports the design each step of the way. Tools such as the Carrier Design Guide and Thermal Design Guide, as well as schematics and Gerber files are available for customers committed to using RadiSys Procelerant™ CE processor modules. Ask your RadiSys Sales Manager for more information.

Procelerant CE 915GM Specifications

Feature	Function	Description
Physical	Dimensions	95mm x 125mm - COM Express Basic Form Factor
	Compliance	PICMG COM Express R1.0 Basic Form Factor, Type 2
Processor	Options	Intel® Pentium® M 760, LV Pentium-M 738, Celeron® M 370, ULV Celeron®-M 373
	Performance Clock Speed/FSB/Cache	CE760 Pentium®-M: 2GHz/533MHz FSB / 2MB Cache CE370 Celeron®-M: 1.5GHz /400MHz FSB / 1MB Caches CE738 LV Pentium®-M: 1.4GHz/400MHz FSB/2MB Cache CE373 ULV Celeron®-M: 1.0GHz /400MHz FSB / 512MB Cache
	Package	BGA
	Power	27W / 21W / 10W / 5W (Processor only)
Chipset	Supplier	Intel® 915GM with ICH6M I/O Hub
	Features	Integrated video, PCI, IDE, PCI-Express, SATA, USB, LPC, GPIO
Memory	Type	Single 200-pin SO-DIMM socket, supports 400 and 533 Memory
	Capacity	Up to 1GB DDR2 in a single channel (Market Availability)
BIOS	Type	1MB, Phoenix Technologies
Audio	Compliance	AC '97 Intel High Definition Audio via ICH6M I/O Hub
Video	Type	Dual Independent Displays via Intel 915GM Chipset
	Features	Dual SVDO, LVDS 18-bit dual channel, Analog VGA, TV Out
	External	PCI-Express x16 Graphics Port, Multi-plexed on SDVO interface pins
Networking	Type	IEEE 802.3 10BASE-T/100BASE-TX/1000BASE-T Compliant Physical Layer via Intel 82573V - Utilizes (1) PCI-Express x1 interfaces
I/O	USB	Eight USB 2.0 / 1.1 ports
	SATA	Two SATA 150 ports
	IDE	One Ultra ATA100/66/33 port
	OTHER	LPC, Smbus/I2C Bus
Super I/O	BIOS Support	National Semiconductor PC8374, Ask about support for Winbond W83627HF-AW
Expansion	PCI Express	3*PCI-Express x1 and 1*PCI-Express x16
	PCI	PCI 2.3 32-bit 33MHz, four logical devices
Connectors	COM Express	(2) 220 pin COM Express standard connectors. Module connector pn: Tyco 3-1827231-6, Carrier connector pn: Tyco 3-3-1827233-6
Power	Input	12V input from carrier board (5V standby)
	Dissipation: 3D Mark (Max)	CE 760: 30.3W CE370: 26.5W CD738: 20.7W CE373: 16.9W
Environment	Temperature	0° – 60°C (operation), -40° – 85° (non-operating)
	Humidity	5% to 95% Condensing (Operating), 5% – 90% RH Non-Condensing at 40C
	Shock	30G, trapezoidal 11ms duration
	Vibration	Operating: 30G, half sine 11ms duration, Storage: 50G, half sine 11ms duration 30G
Regulatory	Safety	UL60950-1, EN60950-1, IEC60950-1
	EMC	EN55022, EN55024 and FCC Part 15, Subpart B, Class B.
Warranty	-	Two years

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.

ORDER CODES/description:

Module Order Codes:

CE760-0 2.0GHz Pentium M, 0MB

CE738-0 1.4GHz LV Pentium M, 0MB

CE370-0 1.5GHz Celeron-M, 0MB

CE373-0 1.0GHz ULV Celeron-M, 0MB

CE760-512 2.0GHz Pentium M, 512MB

CE738-512 1.4GHz LV Pentium M, 512MB

CE370-512 1.5GHz Celeron M, 512MB

CE373-512 1.0GHz ULV Celeron M, 512MB

Supporting Products:

CR100-2DVI: Development ATX Carrier Board with Dual DVI Connectors

CR100-PCIE16: Development ATX Carrier Board with 16-bit PCI-Express

CE-AHS: Active Heatsink & Assembly

CE-PHS: Passive Heatsink & Assembly

CE-PHS17: Low Profile Passive

CE-TIM: Thermal Interface Material, required with Heatsinks

CE-DVI-VGA: DVI to VGA cable



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