



[\[Print This Datasheet\]](#)

## Procelerant CEZ5XT

### Extended Temp Intel® ATOM™ Small Form Factor COM Express Module

#### FEATURE SUMMARY

- 1.6GHz and 1.1GHz Intel ATOM™ processor
- 85mm x 70mm size
- Up to 2GB DDR2 memory down
- Type 2 COM Express pinout
- microSD socket
- Gigabit Ethernet

The RadiSys Procelerant® CEZ5XT is based on Intel's low power 1.6GHz ATOM™ processor on an 85mm x 70mm standardized Type 2 pin-out COM module. The ATOM™ processor delivers unprecedented performance and ultra low power in the smallest COM footprint possible. The Procelerant® CEZ5XT delivers powerful performance with sub-5watt power dissipation, along with up to 2GB memory down, a microSD socket, Gigabit Ethernet, and extended voltage range to make it ideal for battery powered handheld or mobile applications.

#### EXTREME CAPABILITY AND SUSTAINED RELIABILITY

RadiSys Extended Temperature products are designed with higher capability components and are subjected to an extensive suite of environmental tests to demonstrate capability of operation in -25C to +70C temperature range. With thorough design verification and 100% HASS screening, OEMs can depend on the sustained reliability of the Procelerant® CEZ5XT in harsh, ruggedized environments as required by Military, Aerospace, Government, Transportation and Industrial Automation applications.

#### CUSTOM SERVICES FROM THE COM EXPERTS AT RADISYS

In addition to the custom BIOS and carrier design services, OEMs can depend on RadiSys for custom thermal consulting or design to support their extended temperature system design. RadiSys also offers Humiseal 1B31 conformal coating option for the CEZ5XT. Ask your RadiSys Sales Manager for more information.

# Procelerant CEZ5XT Specifications

FEATURE	FUNCTION	DESCRIPTION
PINOUT	Type 2 COM Express Compatible	
PROCESSOR	Intel® Atom™ Processor Z530: 1.60GHz, 512K cache, 533MHz FSB Intel® Atom™ Processor Z510: 1.10GHz, 512K cache, 400MHz FSB	
CHIPSET	Intel System Controller Hub US15W	
MEMORY	Type	Eight (8) 400/533 DDR2 memory devices
	Capacity	Up to 2GB memory
FLASH	4MB SP flash ROM (3MB reserved)	
VIDEO	US15W Integrated Graphics	Single channel LVDS interface with 18-bit or 24-bit format Support resolutions up to 1366x768 pixels at 85Hz Integrated PWM interface for LCD backlight inverter control
		One SDVO interface Supports resolutions up to 1280x1024 pixels at 85Hz
NETWORKING	Optional 10/100/1000 Base-T, requires one x1 PCI Express lane	
AUDIO	High Definition Audio	
	Speaker Out	
STORAGE	IDE	One IDE interface capable of supporting two Ultra ATA/100 devices
	SDIO	microSD socket
PCI EXPRESS	One x1 PCI Express link expansion ports	
USB	Eight USB 2.0 expansion ports USB Client mode on port 2	
LPC	One LPC interface	
POWER	+12 power rail, validated over 9V to 16.8V range	
POWER MANAGEMENT	ACPI 3.0 supporting states S0, S3, S4, S5, G3, and C0, C1, C2, C3, C4/C4E	
MISCELLANEOUS	One SMBus	
	One I2C bus	
	Eight GPIO (four GPI and four GPO)	
BIOS	Phoenix	
OPERATING SYSTEM	Windows XP® Embedded	
	Windows XP® Professional	

Windows Vista® Ultimate Edition

Windows Vista® Embedded Edition

Windows CE® 6.0

Red Hat® Embedded Linux

RadiSys Microware® OS-9

## PHYSICAL SPECIFICATIONS

PHYSICAL	Dimensions	85mm x 70mm	
	Compatibility	Compliant with the PICMG R1.0 COM Express Type 2 pinouts	
	Optional Conformal Coating	Humiseal 1B31	
ENVIRONMENT	Cooling	Forced air	Class EAC1 as defined in the ANSI/VITA 47-2005
		Conduction	Class ECC1 as defined in the ANSI/VITA 47-2005
	Temperature	Operating	Up to 2300m (7500 ft) -25°C to +70°C, derated 1.1°C per 305m (1000 ft) above 2300 m (7500 ft)
		Non-operating	-40°C to +85°C
	Shock	Operating	40g, half sine shock pulse, 11ms duration 3 times per face
		Non-Operating/Unpacked	50g, half sine shock pulse, 11ms duration 3 times per face
		Transportation/Packaged	Fixtured assembly: 50G, 17.4 ms trapezoidal pulse Drop test, 10-up bulk packaging, 30in free-fall, one drop each of six faces
	Vibration	Operating	Random 5Hz – 2KHz, 12.07 grms, 1hr in each of 3 axes 5 – 40Hz 0.04 g <sup>2</sup> /Hz 40 – 100Hz 0.04 g <sup>2</sup> /Hz ramping up to 0.1g <sup>2</sup> /Hz (3dB/oct) 100Hz – 1000Hz 0.1 g <sup>2</sup> /Hz 1000Hz – 2000Hz: 0.1g <sup>2</sup> /Hz ramping down to 0.025g <sup>2</sup> /Hz (6dB/oct)
		Non-Operating/Storage	Random 5Hz – 2KHz, 12.07 grms, 1hr in each of 3 axes 5 – 40Hz 0.04 g <sup>2</sup> /Hz 40 – 100Hz 0.04 g <sup>2</sup> /Hz ramping up to 0.1g <sup>2</sup> /Hz (3dB/oct) 100Hz – 1000Hz 0.1 g <sup>2</sup> /Hz

		1000Hz – 2000Hz: 0.1g <sup>2</sup> /Hz ramping down to 0.025g <sup>2</sup> /Hz (6dB/oct) 5 – 500 Hz swept sine, 2.5g (0-p), 25.4mm(p-p) MAX displacement, 5 min dwell at 3 resonances in each of 3 axes.
	Humidity	Operating 5% to 95% non-condensing. 95% RH@30C, linear derating to 25% RH@70C"
		Non-Operating/Storage 5% to 95% non-condensing
	Altitude	Operating To 15,000ft (4570m) Up to 2300m (7500 ft), -25°C to +70°C Derated -1.1 C per 305 m (1000 ft) above 2300 m (7500 ft)
		Non-Operating/Storage To 40,000ft (12000m)
<b>REGULATORY</b>	Safety	UL60950-1, EN60950-1, IEC60950-1 RoHS at time of production
	EMC	EN55022, EN55024, and FCC Part 15, Subpart B, Class B
<b>WARRANTY</b>	Standard	Two years, parts only

## Ordering Information

Information unavailable at this time.



---

© 2010 RadiSys Corporation. RadiSys is a registered trademark of RadiSys Corporation. Conveda, Microware and OS-9 are registered trademarks of RadiSys Corporation. Promentum, and Procelerant are trademarks of RadiSys Corporation. \*All other trademarks are the properties of their respective owners. All specifications within this document are subject to change without notice.

Procelerant CEZ5XT DATA SHEET | © 2010 RadiSys Corporation

\* All other trademarks are the properties of their *respective* owners.