



PROCELERANT CR100

COM Express FlexATX Carrier Board

Product Description

The RadiSys Procelerant™ CR100 Flex ATX carrier board is a development platform that enables customers to begin designing with RadiSys COM Express modules immediately. The CR100 products provide a wide range of device connectivity and flexibility to allow a broad range of system prototyping. These boards can also serve as a baseline for customer-specific COM Express carrier boards.

Key Features

The CR100 Carrier Boards bring key features from the COM Express module up to connectors on the board. The expansion options on the CR100 include two 32-bit 33MHz 3.3V PCI slots, one PCI Express Card slot and two x1 PCI Express slots (option for one x1 PCI Express slot in lieu of the x16 PCI Express slots). These expansion offerings enable customers to transition their IO from PCI to PCI-Express using the same module and carrier.

The CR100 boards include a LVDS flat panel interface, dual DVI-I ports with analog VGA, USB, SATA, ATA, a serial RS232 connection, IEEE1394, 100Mbit Ethernet and an ATX power connector. There are factory configurable options such as Gigabit Ethernet that will be made available.

Start Your Design Today

The CR100 paired with a RadiSys Procelerant™ CE760 COM Express module can get your design started today. Develop on a standard platform, across all your applications and start saving design time and resources today.

FEATURE SUMMARY

- PICMG COM Express Revision 1.0 Compliant
- Supports Type 1 and Type 2 Basic Form Factor Modules
- FlexATX Form Factor 7.5" x 9"
- One COM Express module interface
- Two 32-bit 33MHz 3.3V PCI slots, with 33MHz operation capable
- Two x1 PCI Express Slots for PCI Express expansion adapters
- One x16 PCI Express slot for PCI Express graphics adapters optional in lieu of one of the x1 PCI Express slots
- PCI Express Mini Card slot
- RS232 serial port
- LVDS flat panel interface via internal header, compliant with Open LDI connector
- Dual DVI-I ports driven from the module SDVO and SVGA interfaces
- Gigabit transformers for the Ethernet port driven from COM module
- Four SATA connectors with power and signal
- ATA100 port connector
- USB interface: quad rear panel connector, 2 on-board headers, 1 via Mini Card slot
- Internal header for module GPIO interfaces
- IEEE 1394 interface
- ATX Power Connector

Proclerant CR100 Specifications

Feature	Function	Description	
Physical	Dimensions	7.5" x 9.0"	
	Compliance	Flex ATX form factor	
Display	Standard	Integrated Chipset Graphics	
	CER100-2DVI only	Dual DVI-I (DVI and Analog VGA)	
	CER100-PCIE16 only	PCI Express x16 external graphics adapter	
Network	Standard	10/100BaseT via rear panel RJ-45	
	Optional	10/100/1000BaseT via rear panel RJ-45	
IEEE-1384b	Controller	100M bits/s, 200M bits/s, 400M bits/s, and 800M bits/s serial bus data rates	
	Transceiver	One port	
Expansion Slots	Dual DVI Option	Two PCI Express x1 slots	
		Two PCI 2.3 32-bit 33MHz slots	
		One PCI Express Minicard slot	
	PCI Express x16 Option	One PCI Express x1 slot	
		One PCI Express Graphics x16 slot	
		Two PCI 2.3 32-bit 33MHz slots One PCI Express Minicard slot	
Connectors	COM Express Module	440 pin (Type 2)	
	Network	One rear panel RJ-45	
	SATA	Four onboard headers	
	ATA100	One onboard header	
	USB 2.0	Quad rear panel connector, two onboard headers, one via Minicard slot	
	DVI/VGA	Two DVI-I rear panel connectors (with both digital video and analog VGA support)	
	LVDS	Onboard header	
	RS-232	Onboard header	
	IEEE-1394	Rear panel connector	
	Audio	Rear panel speaker, headphone, microphone	
	Fans	Three PWM controller connectors, One always-on (12V)	
	Power	ATX	
	GPIO	Onboard header	
	Power Requirement	Input	Standard ATX power supply
Dissipation		TBD	
Power Management	-	TBD	
Environment	Temperature	Operating	+0°C to +60°C, de-rated 2°C per 1000 ft. (300m) over 6600 ft. (2000m).
		Storage	-40° C to +85° C, 5° C per minute maximum excursion gradient.
	Humidity	Operating	5% to 95% non-condensing
		Storage	5% to 90% RH non-condensing at +40° C
	Shock	Storage	30G, trapezoidal 11ms duration
	Vibration	Operating	5-2000 Hz random, 0.5grms, 10 min minimum in each of 3 axes
Storage		5g acceleration over 5-2000 Hz sine wave (P-P), 1 oct/min sine sweep	
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.

Description:

CR100 COM Express CarrierDual DVI PortsTwo PCI Express x1

Order Code: CR100-2DVI

CR100 COM Express CarrierPCI Express x16 GraphicsOne PCI Express x1 No DVI Ports

Order Code: CR100-PCIE16

Contact Information

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