

CPT-COM Card
RS-232 Interface Board
Technical Brief

July 2008
Manual Release 1.0
Card Version 1.2

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CPT-COM Manual Revision History

CARD VERSION 1.0: Internal Use

CARD VERSION 1.1: Internal Use

CARD VERSION 1.2: Added Battery and External Supply Support
This version should be used for isolated RS-232 operation with an on-card Battery option

Release 1.0 – Initial Release

CARD VERSION 1.3: Added RS-422/485 support, made battery an external add on
This version should be used for isolated RS-232/422/485 operation. Battery to be mounted separately

Release 1.1 – Initial Release

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2.0 Specifications

2.1 Serial Communication Interface

Definition	RS-232 connection, providing two pin serial communications for interface between a standard PC serial port and a 3.3V-TTL serial interface, as used on Creative Power Technologies DSP controller boards DEFAULT MODE: 3.3V-TTL level serial connection, providing two pin serial communications for interface to an off-card 3.3V-TTL level to RS-232 translation card. This is necessary for interfacing to a standard PC serial port
Isolation	1kV
Compatibility	Links provided to enable the board to be configured as a DTE or a DCE (LK1) Default is configuration as a DCE
PCB Connections: 3.3V	4 way MASCON/MOLEX header with VCC (3.3V) and GND connections (X4)
PCB Connections: RS-232	10-way IDC connector, with pin outs to suit standard PC 9 pin serial port (X5) OR 9-way DSUB connector, with pin outs to suit standard PC 9 pin serial port (X3)

2.2 General

Physical Dimensions	L: 60mm
	W: 78mm
	H: 40mm approx.
Mounting Arrangement	4 off 3.5 mm holes spaced 52 x 70mm apart in the corners of the board
Environmental	-40 – 85°C ambient operating temperature 5% - 95% non condensing humidity

2.3 Power Supply

Input Voltage Range	8-12VDC (nominal 9V)
Battery	9V
Standalone Input Current	<11mA
Max Input Power	Approx. TBD ~100mW
Supplies Generated on-card	+5V Isolated
Input Power Connector	2-way MASCON/MOLEX (X1) +9V on pin 1, CGND on pin 2