

C320Turbo Series

8 to 32-port intelligent RS-232 Universal PCI serial boards



PCComm Lite

- > Supports 128 high-performance serial ports per system
- > Dramatically decreases host CPU load
- > Modular design makes port expansion easy
- > Monitor transmission status with LEDs on the module and two 7-segment displays
- > Drivers provided for a broad selection of operating systems
- > 460.8 kbps maximum baudrate



Overview

The intelligent C320Turbo serial boards are expandable and flexible COM/TTY solutions for RS-232 applications that require connecting up to 128 serial devices to one computer. The C320Turbo's on-board

CPU and large dual-port memory take the load off host systems whose performance and scalability are critical for large-scale systems.

Specifications

Hardware

Comm. Controller: 16C550C or compatible x 8

Bus: 32-bit Universal PCI

Connector: DB25 female

Processor: TMS320BC52-40 RISC CPU

Memory: 512 KB

Serial Interface

Number of Ports: 32 per control board (max.)

Serial Standards: RS-232 (RS-422 available with desktop option)

Max. No. of Boards per PC: 4

Performance

Baudrate: 50 bps to 460.8 kbps

Serial Communication Parameters

Data Bits: 5, 6, 7, 8

Stop Bits: 1, 1.5, 2

Parity: None, Even, Odd, Space, Mark

IRQ: Assigned by BIOS

Serial Signals

RS-232: Tx/D, Rx/D, RTS, CTS, DTR, DSR, DCD, GND

RS-422: Tx/D+/-, Rx/D+/-, RTS+/-, CTS+/-, GND

Operating Systems

Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), DOS, Windows Embedded CE 5.0/6.0, Windows XP Embedded

Fixed TTY Drivers: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD

Linux Real TTY Drivers: Linux 2.4.x, 2.6.x, 3.x

Note: Please refer to Moxa's website for the latest driver support information.

Physical Characteristics

Dimensions: 90 x 120 mm (3.54 x 4.72 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F)

Storage Temperature: -20 to 55°C (-4 to 131°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Altitude: Up to 2000 m

Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

Standards and Certifications

EMC: CE, FCC

EMI: EN 55022, FCC Part 15 Subpart B Class A

EMS: EN 61000-4-2, EN 61000-4-3, EN 61000-4-4

Green Product: RoHS, CRoHS, WEEE

MTBF (mean time between failures)

Time: 305,270 hrs

Database: MIL-HDBK-217F, GB 25°C

Power Requirements

Power Consumption: 500 mA max. @ +5 V

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

	C32010T/ PCI	C32030T	C32045T	C32047T	C32061T
Dimensions (mm)	120 x 90 x 15	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35
Weight (g)	90	425	500	485	488
Power Requirements	0.5A (+5V)	0.59A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.485A (+5V)

	C32065T	C32071T	C32080T	C32081T	C32082T	C32083T
Dimensions (mm)	247 x 108 x 35	247 x 108 x 35	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44
Weight (g)	525	525	1020	1120	920	1000
Power Requirements	1.32A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.88A (+5V) 0.095A (+12V) 0.06A (-12V)	1.22A (+5V) 0.19A (+12V) 0.12A (-12V)	0.34A (+5V) 0.095A (+12V) 0.06A (-12V)	0.67A (+5V) 0.19A (+12V) 0.12A (-12V)

: Ordering Information

Package Checklist

- 1 C320Turbo/PCI board
- Long-range extension kit (optional)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

Available Models

Control Boards (must choose one)

C32010T/PCI: Universal PCI board

External Modules

Rackmount Option

Basic Modules (must choose one)

C32080T: 8 RS-232 ports, 10-pin RJ45 connectors

C32081T: 16-port, RS-232, 10-pin RJ45

Expansion Modules (optional)

C32082T: 8 RS-232 ports, 10-pin RJ45 connectors

C32083T: 16 RS-232 ports, 10-pin RJ45 connectors

Long-range Extension Kit (optional)

C32050T: Includes the following items

- 2 meter DB25-M to DB25-F 10-wire cable (generally used for set-up)
- 90-240 VAC switching power adaptor (0-30°C operating temperature)

NOTE: Build your own DB25-M to DB25-F 10-wire cable for connecting up to 100 meters.

Desktop Option

- CPU module
- One or more UART modules (32 ports maximum per board)

Rackmount Option

- Basic module
- Zero or more expansion modules (32 ports maximum per board)

Connection Cable (required)

C32020T: 2 meter DB25-M to DB25-F cable with 25 pins for short-range usage

Desktop Option

CPU Module (required)

C32030T: Connects directly to one UART module

8-port UART Modules (choose at least one)

C32045T: RS-232, DB25-F connectors

C32047T: RS-232, DB25-M connectors

C32071T: RS-232, DB25-F connectors (25 kV ESD surge protection)

C32061T: RS-422, DB25-F connectors

C32065T: RS-422, DB25-F connectors (2 kV electrical isolation)

: Ordering Examples

Rackmount Ordering Examples

16 RS-232 ports



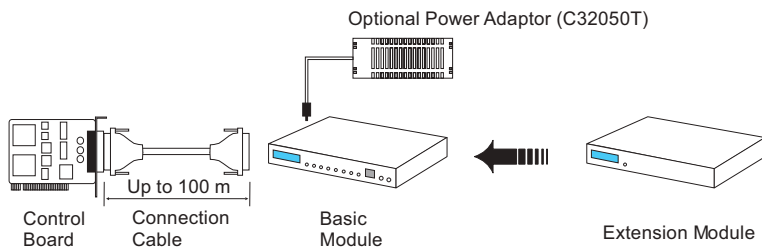
Control Board: C32010T/PCI
Connection Cable: C32020T
Basic Module: C32081T

32 RS-232 ports



Control Board: C32010T/PCI
Connection Cable: C32020T
Basic Module: C32081T x 1
Expansion Module: C32083T x 1

Rackmount Setup Diagram



Desktop Ordering Examples

8 RS-232 ports



Control Board: C32010T/PCI
Connection Cable: C32020T
CPU Module: C32030T
UART Module: C32045T x 1

8 RS-232 ports + 16 RS-422 ports



Control Board: C32010T/PCI
Connection Cable: C32020T
CPU Module: C32030T
UART Module: C32045T x 1 +
 C32061T x 2

Desktop Setup Diagram

