

C320Turbo Series

8- to 32-port Intelligent RS-232 Universal PCI, ISA Boards



Features

- > Up to 32 ports per board (max. 4 boards, 128 ports per system)
- > Dramatically decreases host CPU loading
- > High performance at high port density
- > Modular expandable design
- > On-module LEDs, and two 7-segment displays
- > Versatile OS driver support
- > Various connection options
- > Data transmission speed up to 460.8 Kbps



: Overview

The Intelligent C320Turbo Series of multiport serial boards provides expandable and flexible COM/TTY solutions for 8- to 128-port RS-232 applications. The C320Turbo's on-board CPU and dual port large

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

: Supported OS Drivers

In addition to providing COM port drivers for all major operating systems, MOXA also supports the following dedicated operating systems for customers' special needs.

DOS

- Windows
- Windows (x64)
- SCO UnixWare 7
- SCO OpenServer 5/6

SCO UNIX SVR 4.2

- QNX 4.2x
- Linux 2.4/2.6
- Linux (x64)



: Specifications

Hardware

Processor: TMS320BC52-40 RISC CPU
I/O controller: 16C550C or compatible x 8
Memory: 512 KB

Interface

Bus: 32-bit Universal PCI or 16-bit ISA
Max. No. of ports: 128 (4 boards)

Performance

Baudrate: 50 bps to 460.8 Kbps

Configuration

Parity: None, Even, Odd, Space, Mark
Data Bit(s): 5, 6, 7, 8
IRQ: ISA: 2(9), 3, 4, 5, 7, 10 (Default), 11, 12, 15
 UPCI: BIOS assigned

Power and Environment

Power requirements:
 C32010T/PCI: 500 mA max. (+5V)
 C32010T: 840 mA max. (+5V)
Operating Temperature: 0 to 55°C (32 to 131°F)
Operating Humidity: 5 to 95% RH
Storage Temperature: -20 to 85°C (-4 to 185°F)

Dimensions

C32010T/PCI: 120 x 90 mm (W x D)
C32010T: 158 x 107 mm (W x D)

Regulatory Approvals

EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class A

Warranty: 5 years

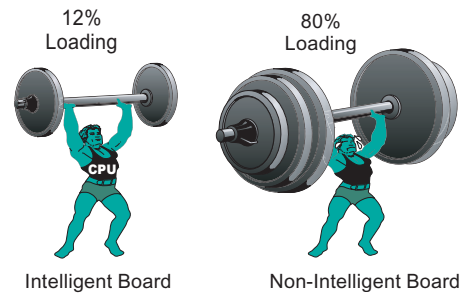
Expansion on demand up to 128 ports

Dramatically decrease host computer's CPU loading

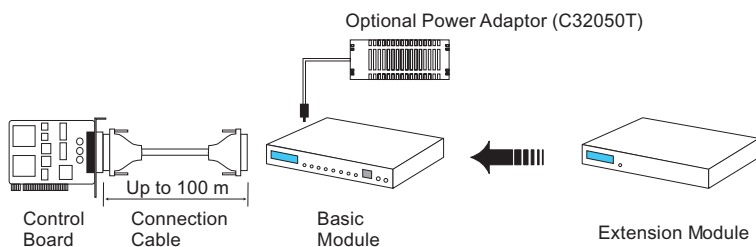
The C320Turbo Series' state-of-the-art onboard CPU dramatically reduces the host computer's loading—by up to 68%*—for applications that use 32 ports per board.

*Testing environment

- Pentium 4, 1.8G CPU, 128 MB RAM
- Windows 2000 Professional
- MOXA PComm Pro Performance Analyzer
- 115.2 Kbps, full duplex, 24-hour burn-in



Rackmount Solution



Rackmount 16-port RS-232 Solution



Ordering Example

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

Rackmount 32-port RS-232 Solution



Ordering Example

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

Rackmount Ordering Information

Control Board (must choose one)

C32010T/PCI: Universal PCI board

C32010T: ISA board

Connection Cable

C32020T: 2 m DB25 to DB25 cable

Optional Power Adaptor: C32050T

- Long range extension kit
- 2 m DB25(M) to DB25(F) 10-wire cable
- 90-240 VAC switch power adaptor included
- 0-30°C Operating Temperature

Rackmount Connection Modules

Basic Modules (must choose one)

C32080T: 8-port, RS-232, 10-pin RJ45

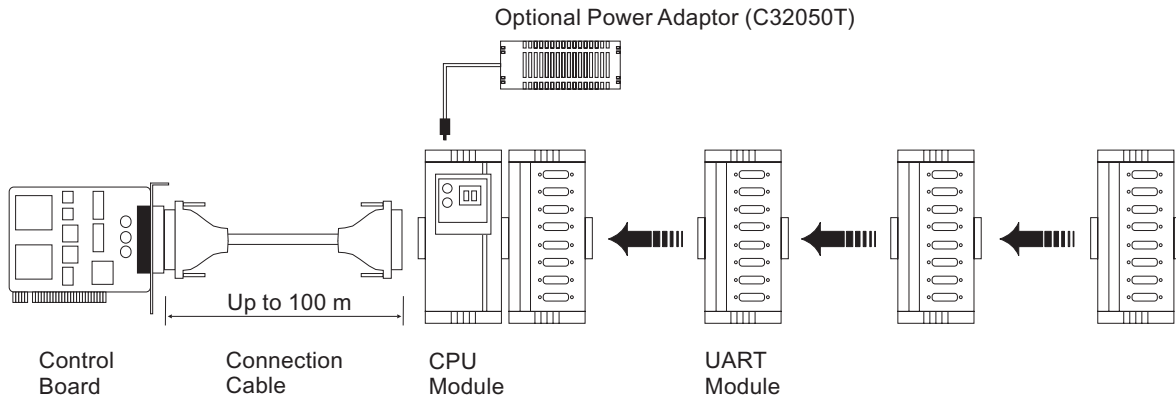
C32081T: 16-port, RS-232, 10-pin RJ45

Extension Module (optional)

C32082T: 8-port, RS-232, 10-pin RJ45

C32083T: 16-port, RS-232, 10-pin RJ45

: Desktop Solution



Note: Different UART modules can be connected together

8-port RS-232 Ordering Example



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

8-port RS-232+16-port RS-422 Ordering Example



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

16-port RS-232 Ordering Example



Control Board: C32010T/PCI
Connection Cable: C32020T
CPU Module: C32030T
UART Module: C32045T x 2 or C32047T x 2

32-port RS-232 Ordering Example



Control Board: C32010T/PCI
Connection Cable: C32020T
CPU Module: C32030T
UART Module: C32045T x 4

: Desktop Ordering Information

Control Board (must choose one)

C32010T/PCI: Universal PCI board
C32010T: ISA board

Connection Cable

C32020T: 2 m DB25 to DB25 25-wire cable

Optional Power Adaptor: C32050T

- Long range extension kit
- 2 m DB25(M) to DB25(F) 10-wire cable
- 90-240 VAC switch power adaptor included
- 0-30°C Operating Temperature

Desktop Connection Modules

CPU Module (must choose)

C32030T: CPU Module

8-Port UART Module (choose at least one)

C32045T: RS-232, female DB25

C32047T: RS-232, male DB25

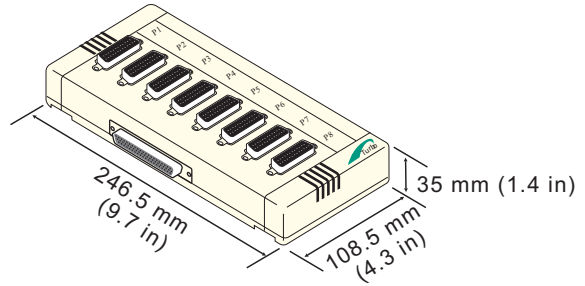
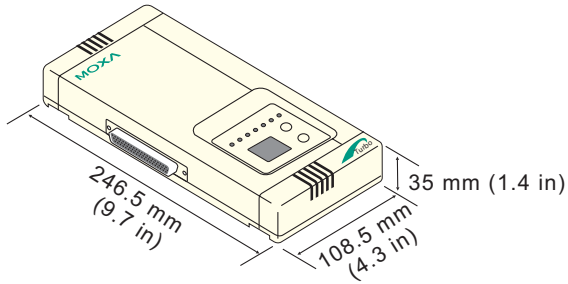
C32071T: RS-232, female DB25, with Surge Protection (25 KV ESD)

C32061T: RS-422, female DB25

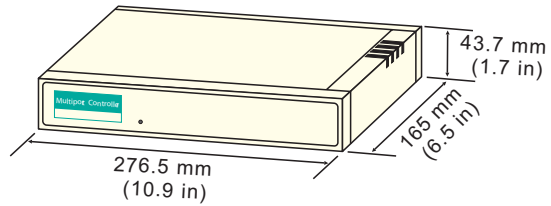
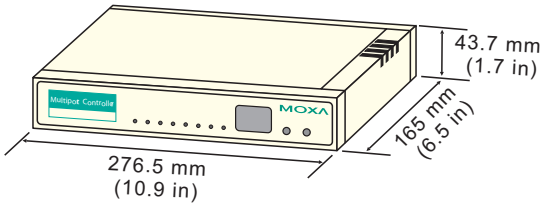
C32065T: RS-422, female DB25, with Isolation (2 KV)

Dimensions (unit = mm)

Desktop Solution



Rackmount Solution

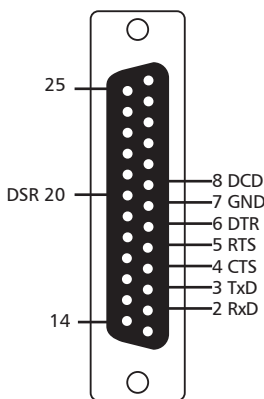


	C32010T/ PCI	C32010T	C32030T	C32045T	C32047T	C32061T
Dimensions (mm)	120 x 90 x 15	158 x 107 x 15	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35
Weight (g)	90	120	425	500	485	488
Power Requirements	0.5A (+5V)	0.84A (+5V)	0.59A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.485A (+5V)

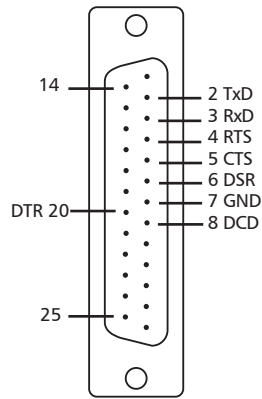
	C32065T	C32071T	C32080T	C32081T	C32082T	C32083T
Dimensions (mm)	247 x 108 x 35	247 x 108 x 35	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44
Weight (g)	525	525	1020	1120	920	1000
Power Requirements	1.32A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.88A (+5V) 0.095A (+12V) 0.06A (-12V)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

Pin Assignment

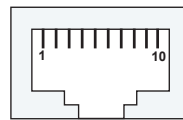
Female DB25



Male DB25



10-pin RJ45



C32080T/81T/82T/83T RJ45 Jack

PIN	Signals
1	DCD
2	DSR
3	RTS
4	GND
5	TxD
6	RxD
7	GND
8	CTS
9	DTR
10	---