

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

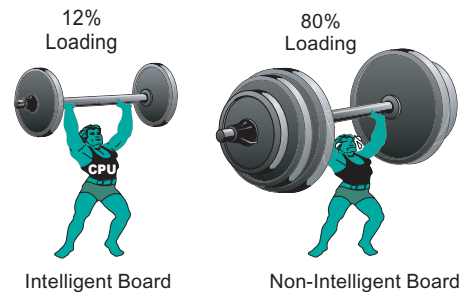
Expansion on demand up to 128 ports

Dramatically decrease host computer's CPU loading

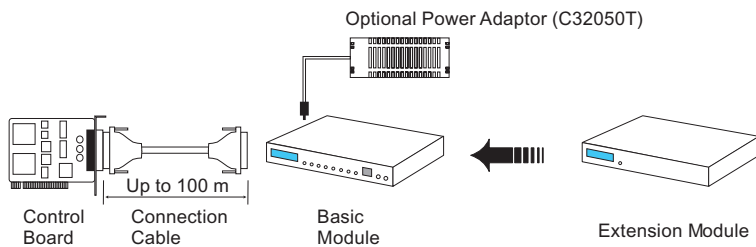
The C320Turbo Series' state-of-the-art onboard CPU dramatically reduces the host computer's loading—by up to 68%*—for applications that use 32 ports per board.

*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

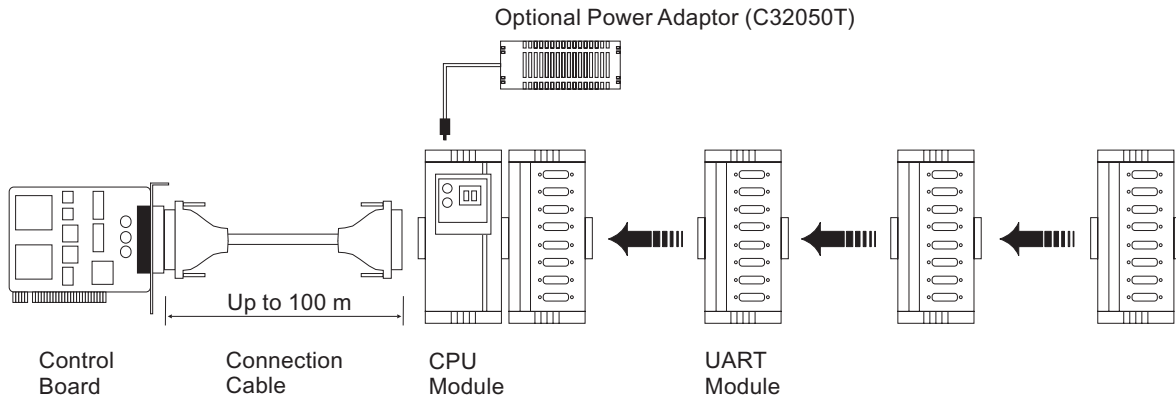
C32081T: 16-port, RS-232, 10-pin RJ45

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

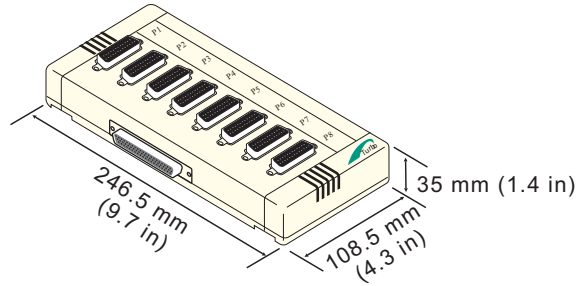
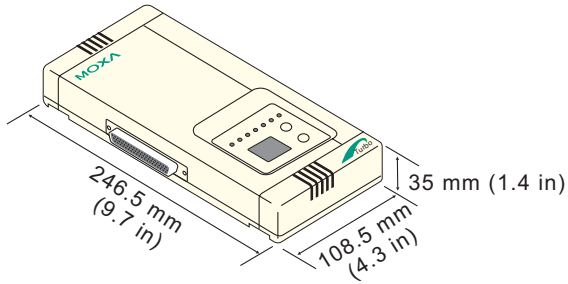
C32071T: RS-232, female DB25, with Surge Protection (25 KV ESD)

C32061T: RS-422, female DB25

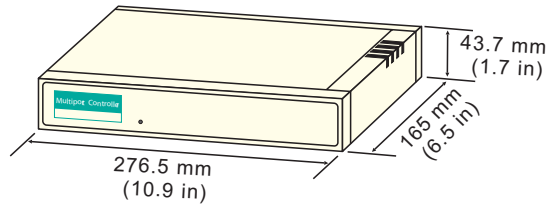
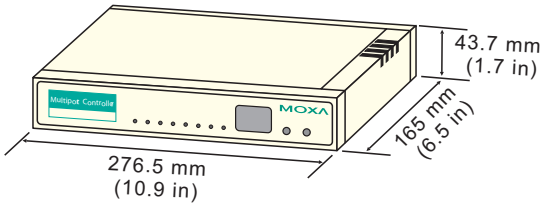
C32065T: RS-422, female DB25, with Isolation (2 KV)

Dimensions (unit = mm)

Desktop Solution



Rackmount Solution

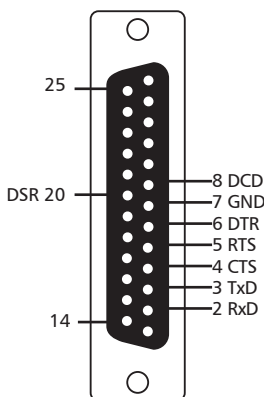


	C32010T/ PCI	C32010T	C32030T	C32045T	C32047T	C32061T
Dimensions (mm)	120 x 90 x 15	158 x 107 x 15	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35	247 x 108 x 35
Weight (g)	90	120	425	500	485	488
Power Requirements	0.5A (+5V)	0.84A (+5V)	0.59A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.28A (+5V) 0.095A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

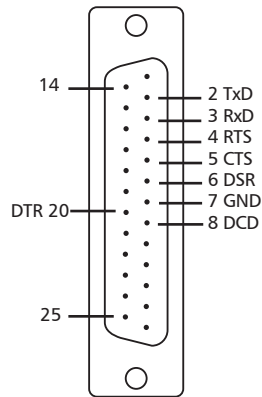
	C32065T	C32071T	C32080T	C32081T	C32082T	C32083T
Dimensions (mm)	247 x 108 x 35	247 x 108 x 35	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44	277 x 165 x 44
Weight (g)	525	525	1020	1120	920	1000
Power Requirements	1.32A (+5V)	0.28A (+5V) 0.095A (+12V) 0.06A (-12V)	0.88A (+5V) 0.095A (+12V) 0.06A (-12V)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

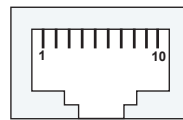
Female DB25



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	---