



MOXA Intelligent C320Turbo Multiport Controller

**Flexible Serial I/O Solution for
Ever-Expanding Systems**

Overview

The Intelligent C320Turbo series, specially designed for flexibility, is an ideal multiport serial controller for PCs. It allows users to begin by adding only 8 ports to a PC system, with subsequent expansion up to 128 ports, depending on business growth. In addition, users have different options for control boards (PCI or ISA), connection modules (rackmount or desktop), connector type (RJ45 or DB25), and COM port interface (RS-232 or RS-422). Any combination of these options is possible in one system. Besides, with the high speed I/O trunk design between the control board and connection module, the connection module can be located as far away as 100 meters, and since only one cable is needed, this ensures that one PC can control multiple remote serial devices with the least cost on cabling layout.

Features

- Expands from 8 to 32 ports per board (max. 4 boards, 128 ports per system)
- Dual on-board RISC-based processors improve I/O performance
- Connection module's display panel provides operational status of each port
- Available with 19-inch rack-mountable or desktop connection module
- PCI or ISA bus available
- Controls RS-232 devices 100-m away without using a repeater
- Compatible with Windows COM ports and UNIX tty ports
- Works perfectly with all major Operating Systems

Benefits

- Serves your expansion needs well into the future, protecting your investment
- Large on-board buffer for high-performance communication
- Provides true flexibility, with the best choice of bus platform, connector type, COM port interface, and connection module

Applications

- Industrial automation
- Remote data acquisition
- Network console management
- Telecommunications
- Internet/Intranet server
- RAS (Remote Access Services)



Rack mountable

MOXA Intelligent C320Turbo Multiport Controller

Flexible Serial I/O Solution for Ever-Expanding Systems

Specifications

Control Board

| | |
|----------------------|--|
| Max. No. of ports | 32 per board (max. 4 boards, 128 ports per system) |
| Bus interface | PCI (Spec. 2.1) or ISA |
| Processor | TMS320BC52 RISC processor |
| Memory | 512 KB |
| IRQ | 2, 3, 4, 5, 7, 10, 11, 12, 15 |
| Power requirement | C320Turbo/PCI: 0.44A (+5 V) C320Turbo: 0.84A (+5 V) |
| Operating temp. | 0 – 55°C |
| Operating Humidity | 5 – 95%RH |
| Storage Temp. | -20 – 85°C |
| Regulatory approvals | FCC, CE, BSMI |

OS Supported

| | |
|---------------|--|
| C320Turbo/PCI | Windows XP, Windows 2000, Windows NT, Windows 95/98/ME, DOS, AT&T UNIX SVR4.2, MITUX SVR4.2, Unix Ware SVR4.2, Unix Ware7 SVR5, SCO Open Server, SCO UNIX, SCO XENIX, Linux 2.0.x (Intel x86), Linux 2.0.x (Alpha), Linux 2.2.x (Intel x86), Linux 2.2.x (Alpha), Linux 2.4.x (Intel x86), QNX 4.2x |
| C320Turbo | Windows XP, Windows 2000, Windows NT, Windows 95/98/ME, Windows 3.x, DOS, AT&T UNIX SVR4.2, MITUX SVR4.2, Unix Ware SVR4.2, Unix Ware7 SVR5, SCO Open Server, SCO UNIX, SCO XENIX, SunSoft Solarisx86 2.X, Linux 2.0.x (Intel x86), Linux 2.0.x (Alpha), Linux 2.2.x (Intel x86), Linux 2.2.x (Alpha), Linux 2.4.x (Intel x86), QNX 4.2x, OS/2 |

Basic Module (Rackmount)

| | |
|------------------|--|
| Serial interface | 8 /16 RS-232 (RJ45) |
| Speed | 50 bps – 460.8 Kbps |
| Signals | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND |
| Processor | TMS320BC52 RISC processor |

| | |
|----------------|---|
| I/O controller | 16C550C or compatible, each with 16 byte Tx/Rx FIFO |
| LED Display | COM port activity LEDs and diagnostic displays |

Extensive Module (Rackmount)

| | |
|------------------|---|
| Serial interface | 8 /16 RS-232 (RJ45) |
| Speed | 50 bps – 460.8 Kbps |
| Signals | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND |
| I/O controller | 16C550C or compatible, each with 16 byte Tx/Rx FIFO |

CPU Module (Desktop)

| | |
|-------------|--|
| Processor | TMS320BC52 RISC processor |
| LED Display | COM port activity LEDs and diagnostic displays |

UART Module (Desktop)

| | |
|------------------------------|---|
| Serial interface | 8 RS-232 or RS-422 ports |
| Signals | RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND RS-422: TxD+/-, RxD+/-, RTS+/-, CTS+/-, GND |
| Surge Protection (Optional) | C32071T: 25 KV ESD, 2 KV EFT |
| Optical Isolation (Optional) | C32065T: 2 KV |

Ordering Information

Basic Components

| | |
|-------------|---|
| C32010T/PCI | <ul style="list-style-type: none"> • PCI bus, control board • MOXA software CD-ROM contains drivers and MOXA PComm Lite serial comm development tool • User's Manual |
| C32010T | <ul style="list-style-type: none"> • ISA bus, control board • MOXA software CD-ROM contains drivers and MOXA PComm Lite serial comm development tool • User's Manual |

| Ports Interface | 2 | 4 | 8 | 16 | 24 | 32 |
|-----------------|---|---|---|----|----|----|
| RS-232 | | | √ | √ | √ | √ |
| RS-422 | | | √ | √ | √ | √ |
| RS-485 | | | | | | |

- C32020T
- DB25 to DB25 link cable (2m)
 - Select C32050T if it longer than 2m

Rackmount Connection Module

Basic Module (must choose one per C32010T/PCI or C32010T)

- C32080T 8 port RS-232 module, RJ45 connectors, rackmount kit included
- C32081T 16 port RS-232 module, RJ45 connectors, rackmount kit included

Extensive Module (optional, max. No. of ports for board is 32, max 128 ports for 4 boards)

- C32082T 8 port RS-232 module, RJ45 connectors, DB37 link cable and rackmount kit included
- C32083T 16 port RS-232 module, RJ45 connectors, DB37 link cable and rackmount kit included

Desktop Connection Module

CPU Module (must choose)

- C32030T CPU module

UART Module (must choose at least one, max No. of ports per board is 32, max.128 ports for 4 boards)

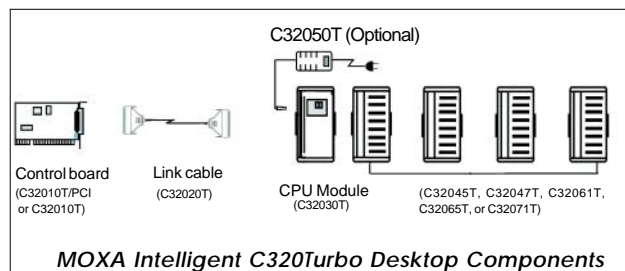
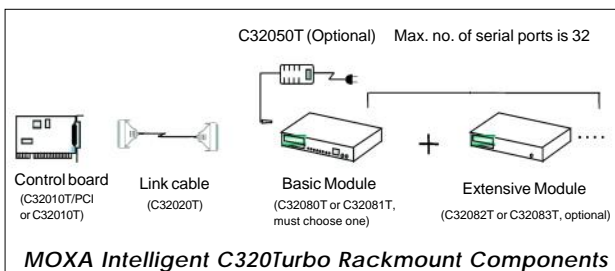
- C32045T 8 port RS-232 extending module with female DB25 connectors
- C32047T 8 port RS-232 extending module with male DB25 connectors
- C32061T 8 port RS-422 extending module with female DB25 connectors
- C32065T 8 port RS-422 extending module with optical isolation, female DB25 connectors
- C32071T 8 port RS-232 extending module with surge protection, female DB25 connectors

Optional Accessories

- C32050T Long range extension kit when module is more than 2 m from host, 90 – 240V AC auto-selective power adapter and a 10 pin link cable
- CN20030 150cm RJ45 to female DB25 RS-232 cable
- CN20040 150cm RJ45 to male DB25 RS-232 cable
- CN20060 150cm RJ45 to male DB9 RS-232 cable
- CN20070 150cm RJ45 to female DB9 RS-232 cable

| | C32010T/PCI | C32010T | C32030T | C32045T | C32047T | C32061T | C32065T | C32071T | C32080T | C32081T | C32082T | C32083T |
|--------------------|---------------|----------------|----------------|---|---|----------------|----------------|---|---|--|---|--|
| 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 | 247 X 108 X 35 | 247 X 108 X 35 | 270 x 160 x 44.5 | 270 x 160 x 44.5 | 270 x 160 x 44.5 | 270 x 160 x 44.5 |
| Weight (g) | 90 | 120 | 425 | 500 | 485 | 488 | 525 | 525 | 1020 | 1120 | 920 | 1000 |
| Power Requirements | 0.44A(+5V) | 0.84A(+5V) | 0.59A(+5V) | 0.28A(+5V) 0.095A(+12V) 0.06A(-12V) | 0.28A(+5A) 0.095A(+12V) 0.06A(-12V) | 0.485A(+5V) | 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) |

MOXA Intelligent C320Turbo Rackmount and Desktop Components



® **Moxa Technologies Co., Ltd. (Headquarters)**
 Fl.4, No.135, Lane 235, Pao-Chiao Rd., Shing Tien City, Taipei, Taiwan, R.O.C.
 Tel: +886-2-8919-1230 Fax: +886-2-8919-1231
 info@moxa.com.tw

USA
Moxa Networking, Inc.
 Tel: +1-732-738-4303 Fax: +1-732-738-4884
 info@moxa.com

Germany
Moxa Technologies GmbH
 Tel: +49 2405-462766 Fax: +49 2405-462799
 info@moxatech.de

China
Moxa Tech Beijing, Inc.
 Tel: +86-10-6872-3960/61 Fax: +86-10-6872-3958
 moxa@moxa.com.cn