

Synchro104

SDLC/HDLC Communications Controller



The Synchro104 is an eight-channel synchronous serial communication controller on a single PC/104 card. It provides an unprecedented level of communication port integration, performance and flexibility.



Synchro104 is a cost-effective means to provide up to eight synchronous SDLC/HDLC ports on a PC/104 system. Synchro104 utilizes an ultra-high performance industry standard SCC with enhanced features resulting in improved flow control and extremely high data rates.

Each of the 8 channels may be individually configured for RS232, RS422 or RS485 operation at speeds up to 10/Mbits/sec. Interrupt control

Versatile
Synchronous
Communications
Controller



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hardware and flexible address decoding allow Synchro104 to occupy only a single IRQ line on a PC/104 system. Two 8-bit on-board parallel ports provide 16 I/O pins for custom interfacing with external devices.

Synchro104 is provided with software drivers for the most popular operating systems including Windows, Linux and RTOS such as QNX.

Applications

ISDN Routing

LAN Gateway or Bridge

Serial Protocol Conversion

Embedded WAN applications

Main Frame Communications

HDLC/SDLC Communications

Remote Instrumentation and Metering

Vending Machines, POS, ATM Systems

Synchronous Terminal Cluster Controller

Extensive

Windows and

Linux

drivers

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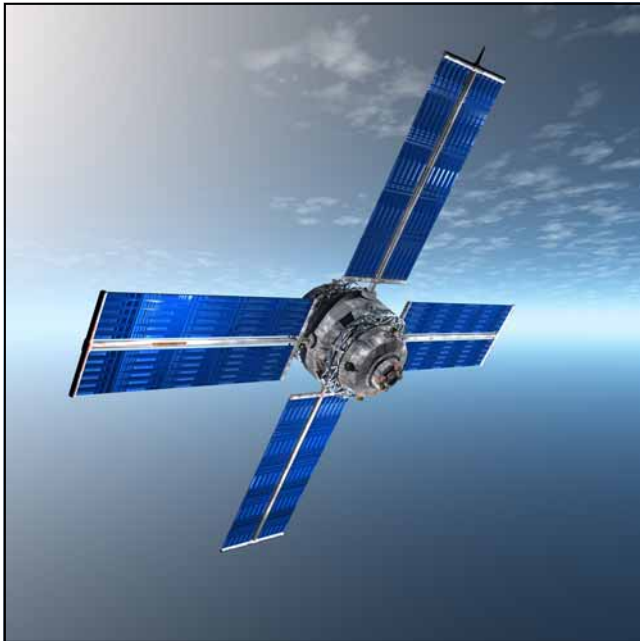
sales@ampltd.com

<http://www.ampltd.com>



Synchro104

SDLC/HDLC Communications Controller



Up to
10Mbits/sec
transfer rate

Features

Uses single IRQ

Single +5V power supply

128-Byte FIFO per channel

Standard PC/104 form factor

Up to 10Mbits/sec (single channel)

Supports SDLC, HDLC, IBM BISYNC

Extensive Windows and Linux Support

Eight independent synchronous channels

Comms Controller

SAB82538 Enhanced Serial Communication Controller
128Bytes FIFO per channel
BISYNC, SDLC, HDLC, CCIT-X.25
NRZ, NRZI, FM and Manchester encoding
8 independent full-duplex channels

Synch/Isosynch

10Mbits/sec maximum transfer rate (single channel)
Up to 1Mbit/sec multiple channels (depends on CPU)
External Data Clocking (option)

Character Synchronous

Internal or External character synchronisation
1 or 2 synch characters
Automatic CRC generation

SDLC/HDLC

Abort sequence generation and checking
Automatic zero bit insertion/deletion
Automatic flag insertion between messages
Address field recognition
CRC generation/checking

Universal Parallel Ports

Two 8-bit parallel ports.
Each line can be independently controlled for input/output

Bus Interface

16-bit PC/104 Interface (stack through)
Single IRQ - one of IRQ 10 or 11
Flexible memory-mapping to PC/104 memory space

Physical Interface

Eight independent RS232/422/485
Supporting TX-Data, RX-Data, CTS, RTS
2 off 40-pin 0.1inch pitch headers

Miscellaneous

Single +5V at less than 600mA
Operating temp 0°C to 60°C or -40°C to +85°C (extended temp option)
Standard 3.6 x 3.8in PC/104plus form factor

Software Support

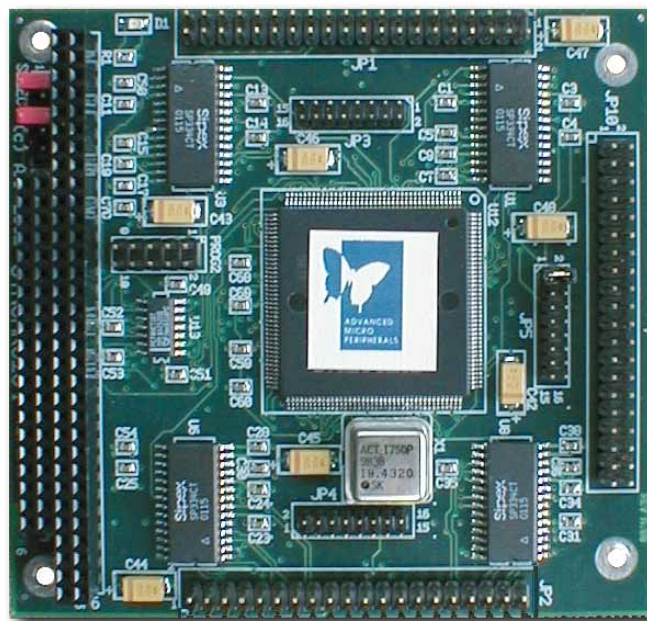
Windows 2000/XP
Linux, QNX, MSDOS
Other operating systems can be supported

Ordering Information

Synchro104-8	8 channel PC/104 HDLC/SDLC Controller (0 to 60°C)
Synchro104-8-Ext	8 channel PC/104 HDLC/SDLC Controller (-40°C to +85°C)

Related Products

Tiny886ULP	Ultra low power PC/104+ computer with 100Mbit Ethernet
Tiny-C3	High Performance PC/104+ Computer
LANSwitch	5-port Ethernet Switch for PC/104+

**Synchro104**