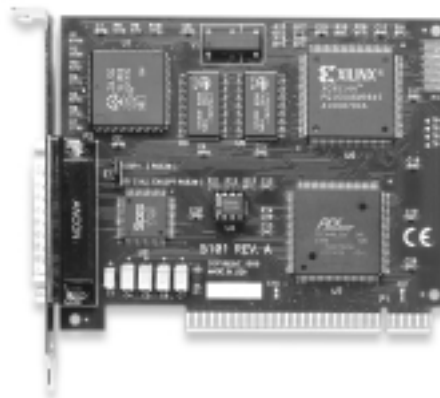


Innovative I/O

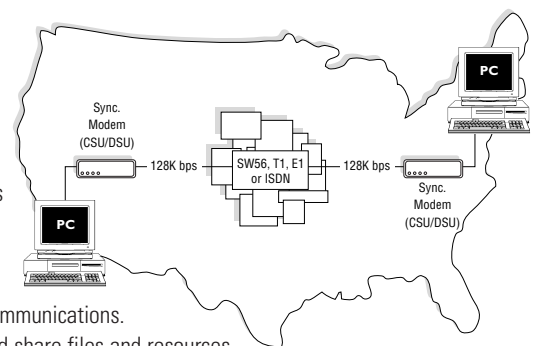
New PCI Synchronous cards provide the speed and power your applications need. Contact Sealevel for all of your high-speed data communications needs.

PCI and ISA Synchronous Serial I/O

When your communication needs call for Synchronous communications, call on Sealevel Systems. Each of our Sync/Async adapters are designed with the high end features your application requires while providing the best price/performance ratio available. These versatile cards are currently being used in applications including CSU/DSU and ISDN T/A connections for high-speed network file transfer, satellite modem interface for high-speed satellite file transfer/broadcast, digital radio communications and virtually any other digital line communication. With our new 16C32 IUSC based product we're providing even more horsepower for even higher speed applications including MPEG/JPEG compression and Wide Area Networking (WAN).



Sealevel Systems' ACB cards provide versatility and a price/performance ratio that is unmatched. A typical application involves WAN communications. Connect remote locations and share files and resources. Our Sync/Async cards provide the Synchronous data pipe to handle your digital line connectivity needs.



PCI I Channel Multi-Protocol High-Speed WAN Interface

Route 56.PCI

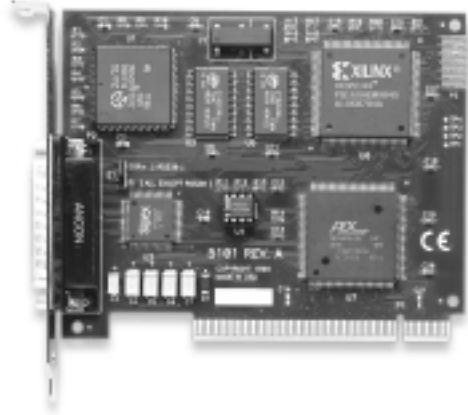
The Route 56.PCI is the ideal solution for developers integrating Wide Area Networks or for applications where data rates up to 10M bps burst are required. Its ability to communicate reliably at high speeds in a variety of operating systems, including Windows makes the Route 56.PCI card ideal for T1, E1, and other digital service line technology applications.

ORDERING INFORMATION

Description	Part No.	Price
Single Channel WAN Adapter	5101	\$499.00
<u>Cable Options</u>		
DB25 M/F Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
X.21 Cable (72 in.)	CA159	\$19.95
V.35 Cable (72 in.)	CA178	\$39.95
DB25 Terminal Block	TB04	\$29.95

Unique Features

- RS-232, RS-422/485/449, EIA-530, V.35 and X.21 serial interface capability with versatile cabling options
- Onboard Z16C32 (IUSC™) with built-in DMA controller and 32-byte FIFO buffer
- 256K bytes of onboard RAM/Link list DMA supported
- Up to 10M bps burst mode
- Multiple protocols supported including: PPP, (Point-to-Point Protocol), Frame Relay, X.25, high-speed ASYNC, BISYNC, MONOSYNC, HDLC, SDLC
- Ideal for Fractional T1, T1, E1 and ISDN applications
- Off loads communications processing
- Software selectable memory range
- OEM Security feature for software protection
- Supports all PCI interrupts
- ROUTE 56 developer's toolkit included with Windows NT HDLC/SDLC driver, applications and sample source code



Technical Specifications

IUSC	.....16C32
Number of ports	.....1
I/O Space	.....8 bytes
Memory space	.....256K
Max. data rate	.....10M bps (burst)
Max. data distance	.....Up to 4000 ft.
Operating temperature	.....0-50° C
Storage temperature	.....-20-70° C
Humidity range	.....10-90% R.H.
Current specifications	.....+5V @ 450mA
Connector(s)	.....DB25P
Physical dimensions	.....4.72" L x 3.3" H (11.99 x 8.38 cm)

*Max. data rate is dependent on cpu, cable length, etc.



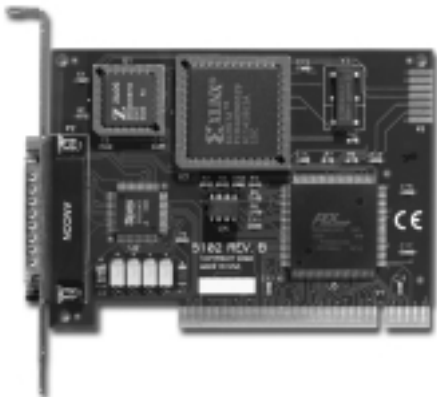
*For the most up to date information on Sealevel Software, please visit www.sealevel.com

PCI I Channel RS-232/422/485/449/530/U.35 Interface

NEW
PRODUCT

ACB MP.PCI

The ACB-MP.PCI was developed in tandem with our PC-ACB-MP to provide the user with both a PCI and a PCMCIA Synchronous solution. Both cards feature the multi-interface Sipex™ chip, which offers the most popular electrical interfaces available. Choose from RS-232, RS-422, RS-485, RS-449, RS-530, V.35 and even X.21 all from a single card via software control.



Technical Specifications

ESCC	.....85230
Number of Ports	.....1
Max. data rate	.....128K bps (burst)
Max. data distance	.....Up to 4000 ft.
Operating temperature	.....0-50° C
Storage temperature	.....-20-70° C
Humidity range	.....10-90% R.H.
Current Specifications	.....+5V @ 350mA
Connector(s)	.....DB25P
Physical dimensions	.....(4.75" L x 3.5" H) (12.065 x 8.890 cm)

* Max data rate is dependent on cpu, cable length, etc.

ORDERING INFORMATION

Description	Part No.	Price
PCI RS-232/422/485/449 /530/V.35 Adapter	5102	\$309.00
<u>Cable Options</u>		
DB25M/F Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
X.21 Cable (72 in.)	CA159	\$19.95
V.35 Cable (72 in.)	CA178	\$39.95
DB25 Terminal Block	TB04	\$29.95

Unique Features

- PCI bus 2.1 compliant adapter
- Onboard Z85230 ESCC
- OEM Security feature for software protection
- RS-232, RS-422/485/449, EIA-530, V.35 and X.21 serial interface capability with versatile cabling options
- Up to 128K bps burst mode
- Supports all PCI interrupts
- Ideal for Fractional T1, ISDN, and other DDS (digital data service) applications
- SeaMAC developer's toolkit included with Windows drivers, and sample applications. Other drivers under development
- Windows 98/ME/NT/2000 HDLC/SDLC driver included
- Windows NT Async driver included



*For the most up to date information on Sealevel Software, please visit www.sealevel.com

PC-ACB-MP

The PC-ACB-MP card provides a single PCMCIA Synchronous serial link to devices that require high-speed mobile communications. Use the PC-ACB-MP for 56K, 64K or user programmable data rates utilizing HDLC, SDLC, X.25, BISYNC or MONOSYNC protocols. The PC-ACB-MP card conforms to PCMCIA Type II specifications.

ORDERING INFORMATION		
Description	Part No.	Price
PC-ACB-MP	3612	\$339.00
<u>Cable Options</u>		
DB25M/F Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
X.21 Cable (72 in.)	CA159	\$19.95
DB25 Female to V.35 Connector (72 in.)	CA178	\$39.95
DB25 Terminal Block	TB04	\$29.95

Unique Features

- RS-422/485/530 Modem Control Signals TX±, RX±, RTS±, CTS±, TSET±, RXC±
- RS-232 Modem Control Signals TD, RD, RTS, CTS, TSET, RXC
- Software programmable baud rate
- "Hot-swapping"/Auto configuration standard
- Based on Zilog 85233 SCC (single channel 85230)
- Interface cable included terminates in DB25P Connector (EIA-530 pin-out)
- Windows 98/ME/NT/2000 HDLC/SDLC driver included
- Windows NT Async driver included



Technical Specifications

Communications Chip. 85233 ESCC
 Number of Ports. 1
 Max. Data Rate 128Kbps*
 Max. Data Distance Up to 4000 ft.
 Operating temperature. 0-50° C
 Storage temperature -20-70° C
 Humidity range. 0-90% R.H.
 Current specifications +5V @ approx. 25mA
 Connector(s). DB25P
 Compatibility PCMCIA 2.01, JEIDA 4.1
 Physical Dimensions. Type II PCMCIA Card
 *Max. data rate is dependent on cpu, cable length, etc.



*For the most up to date information on Sealevel Software, please visit www.sealevel.com

ISA I Channel High-Speed Sync/Async RS-232/U.35 with RS-232 Async CSU/DSU Interface

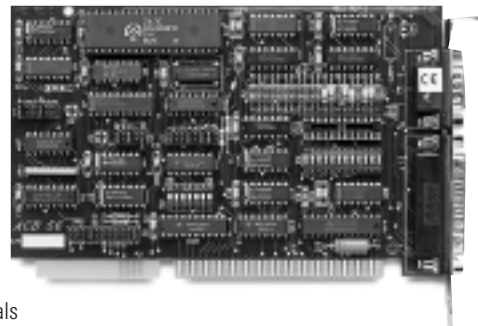
ACB 56

The ACB 56 provides the PC with two communications ports, a single Sync/Async channel jumper selectable as RS-232 or V.35, and a single Asynchronous RS-232 port. Use the Async RS-232 port on the ACB 56 to control and monitor a CSU/DSU.

ORDERING INFORMATION		
Description	Part No.	Price
Single Channel RS-232/V.35 with Async RS-232 CSU/DSU Control Port	4021	\$199.00
<u>Cable Options</u>		
DB25 Female to DB25 Male Cable (72 in.)	CA104	\$7.95
DB25 Female to V.35 Connector (72 in.)	CA178	\$39.95
DB25 Terminal Block	TB04	\$29.95

Unique Features

- 85230 ESCC (Enhanced Serial Communications Controller)
- DMA supports data rate greater than 1 million bps
- Full duplex DMA transfer capability
- Selectable port address, IRQ level (2-5, 7, 10-12 and 15) and DMA channel (1 or 3)
- V.35 interface with full modem control signals
- RS-232 interface modem control signals supported: TD, RD, RTS, CTS, DSR, DCD, DTR, TXC, RXC, TT
- Clocks can be inverted for unique installations
- Software programmable baud rate
- Software toolkit including Windows Drivers, Applications and Sample Source Code provided
- Higher speed Enhanced SCCs and CMOS SCCs optional
- Various oscillators available for custom clock rates



Technical Specifications

ESCC 85230-8
 Number of ports 1
 Max. data rate 1.8432M bps*
 Max. data distance Up to 100 ft.
 Operating temperature 0-50° C
 Storage temperature -20-70° C
 Humidity range 10-90% R.H.
 Current specifications +5V @ 420mA, ±12V @ 50mA ea.
 Connector(s) (1) DB25P, (1) DB9P
 Physical dimensions 6.6" L x 4.2" H (16.67 x 10.66 cm)
 *Max. data rate is dependent on cpu, cable length, etc.



ACB II/EX

The ACB II/EX provides the PC with a single high-speed Synchronous/Asynchronous channel. The RS-422 interface allows the ACB II/EX to communicate reliably at high-speeds under harsh conditions, which makes it an ideal solution for industrial environments. Line noise, present in industrial environments, is eliminated over the RS-422 line.

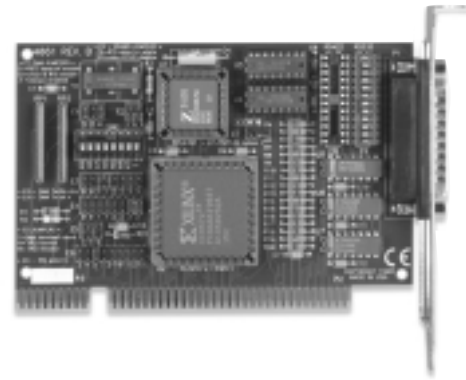
ORDERING INFORMATION

Description	Part No.	Price
Single Channel RS-232/422/485/530	4061	\$199.00
Single Channel RS-232	4061-232	\$169.00
<u>Cable Options</u>		
DB25 Female to DB25 Male Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
DB25 Terminal Block	TB04	\$29.95

* Contact Sealevel Systems' Technical Support for high-speed options or refer to the ACB Options page located at the end of this section.

Unique Features

- 85230 ESCC (Enhanced Serial Communications Controller)
- DMA supports data rate greater than 1 million bps
- Full-duplex DMA
- Selectable port address, IRQ level (3-5, 7, 9-12 and 15) and DMA channel (0, 1, 2 or 3)
- OEM security feature for software protection
- RS-232 interface modem control signals supported: TD, RD, RTS, CTS, TXC, RXC, TSET, DTR, DSR, DCD
- RS-422/485/530 interface modem control signals supported: TD, RD, RTS, CTS, TXC, RXC, TSET, DTR
- Software programmable baud rate
- Software toolkit including Windows Drivers, Applications and Sample Source Code provided
- Higher speed Enhanced SCCs and CMOS SCCs optional
- Various oscillators available for custom clock rates



Technical Specifications

ESCC	85230-8
Number of ports	1
Max. data rate	1.8432M bps*
Max. data distance	Up to 4000ft. @ 9600 bps
RS-485 operation	Two or four wire
Operating temperature	0-50° C
Storage temperature	-20-70° C
Humidity range	10-90% R.H.
Current specifications	+5V @ 275mA, ±12V @ 50mA ea.
Connector(s)	DB25P
Physical dimensions	5.3" L x 3.5" H (13.46 x 8.89 cm)

*Max. data rate is dependent on cpu, cable length, etc.

ISA 2 Channel High-Speed Sync/Async RS-232 or V.35 Serial Interface

ACB III and ACB V

The ACB III and ACB V adapters provide the PC with two direct Synchronous/Asynchronous links to RS-232 or V.35 devices. The ACB III, supporting RS-232 electrical interfaces provides an industry standard interface to Synchronous data links, modems and other devices. The ACB V incorporates the CCITT V.35 specified connector with balanced twisted pair cabling from the board to the external device. Both products support data rates in excess of 1 million bps.

ORDERING INFORMATION

Description	Part No.	Price
Dual Channel RS-232	4010	\$299.00
<u>Cable Option</u>		
DB25 Female to DB25 Male Cable (72 in.)	CA104	\$7.95
Dual Channel V.35 with 72 in. Cable Included	4012	\$379.00
<u>Cable Option</u>		
Additional V.35 Cable (72 in.)	CA134	\$59.95

* Contact Sealevel Systems' Technical Support for high-speed options or refer to the ACB Options page located at the end of this section.

Unique Features

- Dual channel Sync/Async
- 85230 ESCC (Enhanced Serial Communications Controller)
- DMA supports data rate greater than 1 million bps
- Full duplex DMA transfer capability
- Selectable port address, IRQ level (2, 3, 4 and 5) and DMA channel (1 or 3)
- RS-232 interface modem control signals supported: TD, RD, RTS, CTS, DSR, DCD, DTR, TXC, RXC, TT
- Software programmable baud rate
- Software toolkit including Windows Drivers, Applications and Sample Source Code provided
- DB-25P interface cable included with Part #4010
- (1) V.35 interface cable included with Part #4012
- Higher speed Enhanced SCCs and CMOS SCCs optional
- Various oscillators available for custom clock rates
- V.35 interface with full modem control signals



Technical Specifications

ESCC	85230-8
Number of ports	2
Max. data rate	RS-232 typically 64K bps. V.35 1.8432M bps*
Max. data distance	RS-232 up to 50 ft., V.35 up to 4000 ft.
Operating temperature	0-50° C
Storage temperature	-20-70° C
Humidity range	10-90% R.H.
Current specifications	
Part No. 4010	+5V @ 285mA, ±12V @ 50mA ea.
Part No. 4012	+5V @ 450mA, -5V @ 75mA, ±12V @ 50mA ea.
Connector(s)	4010 - (2) DB25, 4012 - (2) DB15
Physical dimensions	
Part No. 4010	4.9" L x 4.2" H (12.446 x 10.66 cm)
Part No. 4012	6.4" L x 4.2" H (16.256 x 10.66 cm)

*Max. data rate is dependent on cpu, cable length, etc.

ACB 530

The ACB 530 provides the PC with two high-speed Sync/Async links to devices requiring extremely high data rates. The ACB 530 is capable of RS-530, RS-422/485 or RS-449 (with optional cable) connections. The ACB 530 card has a maximum data rate in excess of 1 million bps. The ACB 530 supports simultaneous full duplex DMA transfers on both channels.

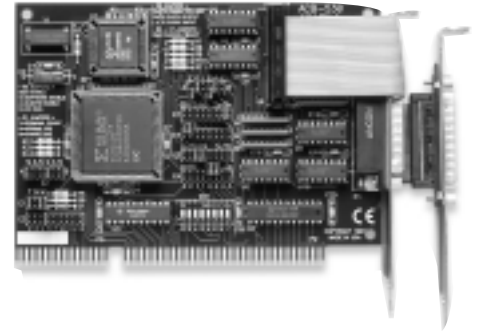
ORDERING INFORMATION

Description	Part No.	Price
Dual Channel RS-530/422/485	4111	\$319.00
<u>Cable Options</u>		
DB25 Female to DB25 Male Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
DB25 Terminal Block	TB04	\$29.95

* Contact Sealevel Systems' Technical Support for high-speed options or refer to the ACB Options page located at the end of this section.

Unique Features

- 85230 ESCC (Enhanced Serial Communications Controller)
- DMA supports data rate greater than 1 million bps
- Full duplex DMA transfer capability on both channels A and B
- Selectable port address, IRQ level (2-5, 7, 10-12 and 15) and DMA channels (0, 1, 2 or 3)
- OEM security feature for software protection
- DMA terminal count interrupt supported
- Software toolkit including Windows Drivers, Applications and Sample Source Code provided
- DB25P interface cable included with 2 channel board
- RS-449 cabling option available
- Higher speed Enhanced SCCs and CMOS SCCs optional
- Various oscillators available for custom clock rates
- Software programmable baud rate



Technical Specifications

ESCC85230-8
 Number of ports2
 Max. data rate1.8432M bps*
 Max. data distanceUp to 4000 ft. @ 9600 bps
 RS-485 operationTwo or four wire
 Operating temperature ...-0-50° C
 Storage temperature-20-70° C
 Humidity range10-90% R.H.
 Current specifications+5V @ 900mA
 Connector(s)DB25P
EIA-530 DTE
 Physical dimensions5.8" L x 4.2" H (14.73 x 10.66 cm)
 *Max. data rate is dependent on cpu, cable length, etc.



ACB-104

The ACB-104 provides the PC/104 system with a direct high-speed RS-232/422/485/530 Sync/Async link to instruments requiring extremely fast data flow. The RS-422 communication standard allows the ACB-104 to communicate reliably at high speeds under harsh conditions, making it an ideal solution for industrial environments. Line noise, present in industrial environments, is eliminated over the RS-422 line. By utilizing RS-422, factory applications requiring long distance communications operate with high data integrity.

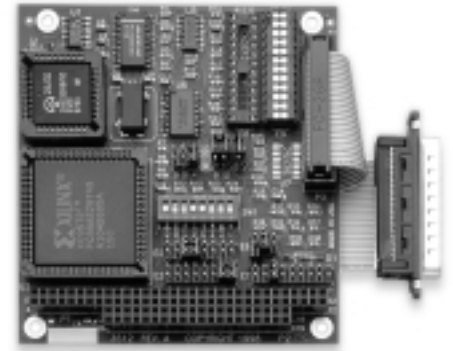
ORDERING INFORMATION

Description	Part No.	Price
Single Channel RS-232/422/485/530	3512	\$279.00
<u>Cable Option</u>		
DB25 Female to DB25 Male Cable (72 in.)	CA104	\$7.95
RS-530 to RS-449 (9 in.)	CA107	\$24.95
DB25 Terminal Block	TB04	\$29.95

* Contact Sealevel Systems' Technical Support for high-speed options or refer to the ACB Options page located at the end of the ACB section.

Unique Features

- 85230 Serial Communications Controller (ESCC)
- Higher speed ESCCs optional
- Various oscillators available for custom clock rates
- DMA supports data rate greater than 1 million bps
- Selectable port address, IRQ level (3-5, 7, 9-12 and 15) and DMA channel (0, 1, 2 or 3)
- OEM security feature for software protection
- RS-232 interface modem control signals supported: TD, RD, RTS, CTS, TXC, RXC, TSET, DTR, DSR, DCD
- RS-422/485/530 interface modem control signals supported: TD, RD, RTS, CTS, TXC, RXC, TSET, DTR
- Software programmable baud rate
- Software tool kit including Windows drivers, applications and sample source code provided
- DB-25P interface cable included, EIA-232/530 DTE pin-out
- PC/104 form factor (3.6" x 3.8")



Technical Specifications

ESCC85230-8
 Number of ports1
 Max. data rate1.8432M bps
 Max. data distanceUp to 4000 ft. @ 9600 bps
 RS-485 operationTwo or four wire
 Operating temperature ...-0-50° C
 Storage temperature-20-70° C
 Humidity range10-90% R.H.
 Power requirements+5V only operation
 Current specifications250mA (NMOS SCC)
130mA (CMOS SCC Option)
 Physical dimensions3.775" L x 3.550" H (9.588 x 9.017 cm)
 *Max. data rate dependent on CPU, cable length, etc.



ACB Options

Sealevel Systems Explains "SCCs and Oscillators"

Sealevel Systems ACB cards provide a versatile and flexible high-speed link from the PC to any Sync/Async device or connection. One feature that lends to the card's flexibility is the capability to utilize various serial communications controllers and oscillators to achieve a specific range of data rates. Each oscillator value provides more than 65,000 unique data rates that can be selected to fit the specific application. An example of the more popular combinations is shown below.*



High-Speed Options

Part No.	Description	Price
- B	8530-8	\$10.00
- C	85C30-8	\$12.00
- D	85C30-10	\$14.00
- E	85C30-16	\$20.00
- F	85230-16	\$25.00
- G	85230-20	\$30.00
- H	AM 85C30-16PC	\$20.00
- I	AM 85C30-8PC	\$20.00

Oscillators (in megahertz)

Part No./Speed	Price
OSC6.144	\$25.00
OSC11.0592	\$25.00
OSC14.31818	\$25.00
OSC14.7456	\$25.00
OSC16.000	\$25.00
OSC18.000	\$25.00
OSC18.432	\$25.00
OSC20.000	\$25.00

Cable Options

Part No.	Description	Price
CA104	DB25 Female to DB25 Male 72 in. long	\$7.95
CA107	DB25 Female to DB37 Male 9 in. long (RS-449 to RS-530 Adapter Cable)	\$24.95
CA134	DB15 Female to V.35 Connector 72 in. long	\$59.95
CA159	X.21 Cable (72 in.)	\$19.95
CA178	DB25 Female to V.35 Connector 72 in. long	\$39.95

By offering specific SCC and Oscillator upgrades, Sealevel Systems gives you the flexibility your applications need. Simply add the options to the end of your 4 digit part number and we'll handle the rest.

Note: The Mhz speed of the SCC must always be equal to or greater than the Mhz speed of the oscillator.

*Example:

4111-G-OSC20 - ACB 530 card (Part Number 4111) with a 85230-20Mhz SCC and a 20Mhz oscillator.



SEALEVEL