

E

Communication

E-02 Product Lineup
/ Basic Knowledge

E-04 Low Profile PCI

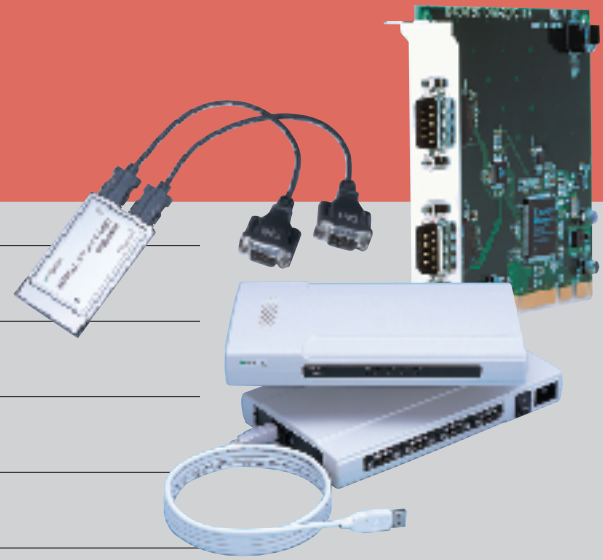
E-05 PCI

E-08 PC Card

E-09 USB

E-10 ISA

E-09 Media Converter



[Product Lineup]

●Low Profile PCI / PCI

*1 15~921,600bps when using the "Standard COM Driver Setup" and API-PAC(W32)

Name	Channels	Interface Type					Speed [bps]	Isolation	Connector	Software		Page
		RS-232C	RS-422A	RS-485	Async.	Sync.				COM-DRV(W32)	API-PAC(W32)	
RS-232C (Low Profile)												
COM-1(LPCI)H	1	○	—	—	○	—	2~921,600 *1	—	9-pin D-type	Included	○	E-04
COM-2(LPCI)H	2	○	—	—	○	—	2~921,600 *1	—	44-pin D-type	Included	○	E-04
COM-4(LPCI)H	4	○	—	—	○	—	2~921,600 *1	—	44-pin D-type	Included	○	E-04
RS-232C												
COM-2(PCI)H	2	○	—	—	○	—	2~921,600 *1	—	9-pin D-type	Included	○	E-05
COM-4(PCI)H	4	○	—	—	○	—	2~921,600 *1	—	37-pin D-type	Included	○	E-05
COM-8(PCI)H	8	○	—	—	○	—	2~921,600 *1	—	78-pin D-type	Included	○	E-05
Isolated RS-232C												
COM-2P(PCI)H	2	○	—	—	○	—	2~921,600 *1	○	9-pin D-type	Included	○	E-06
COM-4P(PCI)H	4	○	—	—	○	—	2~921,600 *1	○	37-pin D-type	Included	○	E-06
Isolated RS-422A/RS-485												
COM-2PD(PCI)H	2	—	○	○	○	—	2~921,600 *1	○	9-pin D-type	Included	○	E-07
COM-4PD(PCI)H	4	—	○	○	○	—	2~921,600 *1	○	37-pin D-type	Included	○	E-07
Intelligent RS-232C/RS-485												
COM-4FS(PCI)	4	○	○	○	○	○	Async: 10~115,200 BOP : 72~384,000 COP : 100~9,600	—	25-pin D-type	—	Included	E-07

●PC Card

Name	Channels	Interface Type					Speed [bps]	Isolation	Connector	Software		Page
		RS-232C	RS-422A	RS-485	Async.	Sync.				COM-DRV(W32)	API-PAC(W32)	
RS-232C												
COM-1(PM)	1	○	—	—	○	—	2~115,000	—	9-pin D-type	Included	○	E-08
COM-2(PM)	2	○	—	—	○	—	2~115,000	—	9-pin D-type	Included	○	E-08
COM-4(CB)H	4	○	—	—	○	—	2~921,600 *1	—	9-pin D-type	Included	○	E-08
Isolated RS-422A/RS-485												
COM-4FS(PCI)	1	—	○	○	○	—	2~115,000	○	9-pin D-type	Included	○	E-08

●USB

Name	Channels	Interface Type					Speed [bps]	Isolation	Connector	Software		Page
		RS-232C	RS-422A	RS-485	Async.	Sync.				COM-DRV(W32)	API-PAC(W32)	
RS-232C												
COM-4(USB)	4	○	—	—	○	—	2~115,000	—	9-pin D-type	Included	○	E-09

●ISA

Name	Channels	Interface Type					Speed [bps]	Isolation	Connector	Software		Page
		RS-232C	RS-422A	RS-485	Async.	Sync.				COM-DRV(W32)	API-PAC(W32)	
RS-232C												
COM-2(PC)F	2	○	—	—	○	—	50~115,200	—	9-pin D-type	○*2	○	E-10
Intelligent RS-232C												
COM-2S(PC)	2	○	—	—	○	—	300~19,200	—	9-pin D-type	—	○	E-10
Isolated RS-422A/RS-485												
COM-2PD(PC)	2	—	○	○	○	—	50~921,600	○	9-pin D-type	○*2	○	E-10
RS232C / RS-422A												
COM-4M(PC)	4	○	○	—	○	—	50~38,400	—	37-pin D-type	○*2	○	E-10

*2: Only in Enhanced Mode. Please use the driver supplied with operating system when using Compatible Mode.

●Media Converters

Name	Interface Type	Channels	Page
RS-232C Media Converter			
RP-COM(FIT)GY	RS-232C⇄ Ethernet (Wire LAN)	1	E-09
FX-DS110-COM	RS-232C⇄ Wireless LAN (Wireless LAN)	1	E-09
RS-422A/RS-485 Media Converter			
RP-422(FIT)GY	RS-422/485⇄ Ethernet (Wire LAN)	1	E-09
FX-DS110-422	RS-422/485⇄ Wireless LAN (Wireless LAN)	1	E-09

Tips of Communication Boards

1. Serial communication standard

Serial communication standards include RS-232C, RS-422A and RS-485. RS-232C is the most widely used and generally found in personal computers. RS-422A and RS-485 are primarily used in industrial applications. These serial communication standards were set up by the EIA (Electronic Industries Association: United States electronic industrial society) and are used internationally.

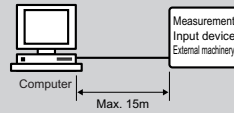
RS-232C

RS-232C is the communications standard found in most personal computers. It is also known as "EIA-232."

It uses either a 25 or 9 pin D-type connector. Each signal line has a specific purpose. The standard is revised whenever a signal line is added.

RS-232C uses a "1:1" connection and needs the same number of channels at the host computer as the number of connected devices.

Example of RS-232C connection



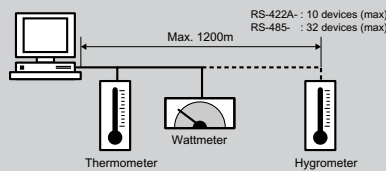
RS-422A

RS-422A was approved by the (EIA) for interconnecting a number of serial devices. Where RS-232 supports only point-to-point connections, RS-422 supports multi-point connections. Each signal has a specified purpose, but there are currently no set standards for the connector.

CONTEC has adopted the use of either a 25 pin D-type or 9 pin D-type connector for all of its products.

RS-422A uses a "1:N" connection which allows two or more machines using a "1:N" connection to connect to a single channel.

Example of RS-422A, RS-485 connection



RS-485

The number of devices that can interconnect via RS-422A is limited. To connect larger numbers of devices, the communication protocol was upgraded. This is referred to as "EIA-485" or RS-485 and is backwards compatible to RS-422A. As with RS-422A, each signal has a pre-specified purpose but there are no standards set for the connector.

CONTEC has adopted the use of either a 25 pin D-type or 9 pin D-type connector for all of its products.

RS-485 uses a "N:N" connection or "party line." Both RS-422A or RS-485 can connect two or more devices to a single channel.

The communication styles of RS-422A and RS-485 make the configuration of a telemetry system using multiple sensors easy. (see figure to left)

Parameter	RS-232C	RS-422A	RS-485
Transmission mode	Simplex	Multi-point Simplex	Multi-point Multiplex
Number of connectable devices	1 device to 1 receiver	1 driver to 10 receivers	32 drivers 32 receivers
Speed	20Kbps (max)	10Mbps (max)	10Mbps (max)
Wiring distance	15m (max)	1200m (max)	1200m (max)
Mode	Single-ended (Non-equilibrium type)	Differential (Equilibrium type)	Differential (Equilibrium type)
Connection image			
Advantages	Short distance Full-duplex 1:1	Long distance Full-duplex, half-duplex Multi-drops of 1:N	Long distance Full-duplex, half-duplex Party line of N:N

2. Support software

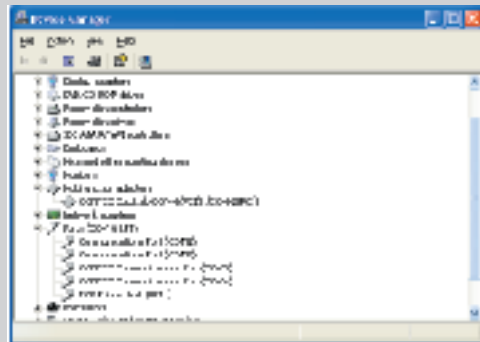
COM-DRV(W32) Standard COM driver

Enhanced mode setup driver - for use only by PCI and ISA boards operating in a Windows® environment

Installation of this driver into the operating system, allows CONTEC's add-on serial communication boards to be recognized as a standard serial port (COM port). They can then be used by commercial applications requiring a serial port (COM port).

This driver can be controlled using the programming language's standard function.

Updated versions can be downloaded from our website



[Communication] Low Profile PCI

For options, please see Page J-18 (Accessories & Cables) and Page I-01 (Software).
Please see Page 2-1 for PCI bus specifications.

Low Profile PCI / PCI
1 Port RS-232C
COM-1(LPCI)H



Includes Standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux.

FEATURES

- ★ Low Profile PCI compliant (includes bracket to support Standard PCI slot.)
- ★ Capable of being used as a standard COM port in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- ★ Uses 9-pin D-type male connector
- Supports high speed communication (up to 921,600bps)

SPECIFICATIONS

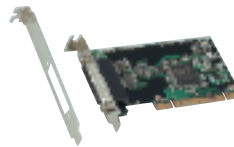
Interface type	RS-232C (Async.)
Number of Channels	1
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 150mA (max)

Connector	9-pin D-type male connector DEL-C-J9PAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 63.41(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	RSS-9M/F, RSC-9F, RSS-25M/9F,
Connectors	RSC-25F/9F, CN5D9F

*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

Low Profile PCI / PCI
2 Port RS-232C
COM-2(LPCI)H



Includes Standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux.

FEATURES

- ★ Low Profile PCI compliant (includes bracket to support Standard PCI slot.)
- ★ Capable of being used as a standard COM port in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

SPECIFICATIONS

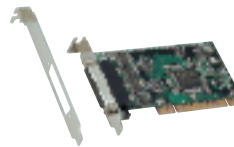
Interface type	RS-232C (Async.)
Number of Channels	2
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 150mA (max)

Connector	44-pin D-type female connector 103A-44FGTBBB3 [COXOC] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 63.41(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	PCE44/9P2S, CN5-D44M
Connectors	

*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

Low Profile PCI / PCI
4 Port RS-232C
COM-4(LPCI)H



Includes Standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux.

FEATURES

- ★ Low Profile PCI compliant (includes bracket to support Standard PCI slot.)
- ★ Capable of being used as a standard COM port in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- High speed communication of up to 921,600bps is supported

SPECIFICATIONS

Interface type	RS-232C (Async.)
Number of Channels	4
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 150mA (max)

Connector	44-pin D-type female connector 103A-44FGTBBB3 [COXOC] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 63.41(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	PCE44/9P4S, CN5-D44M
Connectors	

*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

2 Port RS-232C COM-2(PCI)H



Includes standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux

■ SPECIFICATIONS

Interface type	RS-232C (Async.)
Number of Channels	2
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 250mA (max)

Connector	9-pin D-type male connector DELC-J9PAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables / Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)
*2: +5V power must be supplied from PCI bus slot.

FEATURES

- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- ★ Uses 9-pin D-type male connector
- Supports high speed communication (up to 921,600bps)

4 Port RS-232C COM-4(PCI)H



Includes standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux

■ SPECIFICATIONS

Interface type	RS-232C (Async.)
Number of Channels	4
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 500mA (max)

Connector	37-pin D-type female connector DCLC-J37SAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	CCU-78F/25M *2, RSS-78M/37M
Cables / Connectors	PCE37/9PS, PCE37/25PS, COM-4M CABLE(PC)1, CN5-D37M

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)
*2: RSS-78M/37M is required.
*3: +5V power must be supplied from PCI bus slot.

FEATURES

- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

8 Port RS-232C COM-8(PCI)H



Includes standard COM Driver for Windows® XP/2000/NT/Me/98/95 and Linux

■ SPECIFICATIONS

Interface type	RS-232C (Async.)
Number of Channels	8
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 64-byte boundary
Power Consumption	5VDC 600mA (max)

Connector	78-pin D-type female connector
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	CCU-78F/25M *2, RSS-78M
Cables / Connectors	PCE78/9PS, PCE78/25PS, CN5-D78M

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)
*2: RSS-78M is required.
*3: +5V power must be supplied from PCI bus slot.

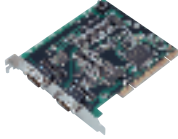
FEATURES

- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

[Communication] PCI

For options, please see Page J-18 (Accessories & Cables) and Page I-01 (Software).
Please see Page 2-1 for PCI bus specifications.

2 Port Isolated RS-232C COM-2P(PCI)H



Includes Standard COM Driver for Windows® XP/2000/NT/Me/98/95 or Linux

■ SPECIFICATIONS

Interface type	RS-232C (Async.)
Number of Channels	2
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 600mA (max)

FEATURES

- ★ Channels individually insulated / signals are surge protected
- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- ★ Uses 9-pin D-type male connector
- Supports high speed communication (up to 921,600bps)

Connector	9-pin D-type male connector DELC-J9PAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	RSS-9M/F, RSC-9F, RSS-25M/9F,
Connectors	RSC-25F/9F, CN5-D9F

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

4 Port Isolated RS-232C COM-4P(PCI)H



Includes standard COM Drive for Windows® XP/2000/NT/Me/98/95 or Linux

■ SPECIFICATIONS

Interface type	RS-232C (Async., Isolated)
Number of Channels	4
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power Consumption	5VDC 1000mA (max)

FEATURES

- ★ Channels individually insulated / signals surge protected
- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

Connector	37-pin D-type female connector DCLC-J37SAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	PCE37/9PS, PCE37/25PS,
Connectors	COM-4M CABLE(PC)1, CN5-D37M

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

High Speed 2 Port Isolated RS-422A/485 COM-2PD(PCI)H

PCI RS-485 RS-422A Isolated CE



Includes standard COM Drive for Windows® XP/2000/NT/Me/98/95 or Linux

SPECIFICATIONS

Interface type	RS-422A/RS-485 (Isolated) Full-duplex or Half-duplex communication mode
Number of Channels	2
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	1200m (max)
I/O address	Any 32-byte boundary

FEATURES

- ★ 2 RS-422A/RS485-compatible channels
- ★ On-board isolated circuit provides safe communication, even over long distances
- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

Power Consumption	5VDC 550mA (max)
Connector	9-pin D-type male connector DELC-J9PAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V or 3.3V*2 /
Dimensions (mm)	121.69(L) x 105.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	RSS-9M/F, RSS-25M/9F,
Connectors	CN5-D9F

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)

*2: +5V power must be supplied from PCI bus slot.

High Speed 4 Port Isolated RS-422A/485 COM-4PD(PCI)H

PCI RS-485 RS-422A Isolated CE



Includes standard COM Drive for Windows® XP/2000/NT/Me/98/95 or Linux

SPECIFICATIONS

Interface type	RS-422A/RS-485 (Isolated) Full-duplex or Half-duplex communication mode
Number of Channels	4
Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity check	even, odd, non-parity
Controller	162850 or equivalent (FIFO buffer: I/O 128 bytes per channel)
Interrupts	One interrupt request signal as INTA
Wiring distance	1200m (max)
I/O address	Any 32-byte boundary

FEATURES

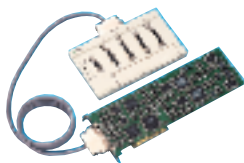
- ★ 2 RS-422A/RS485-compatible channels
- ★ On-board isolated circuit provides safe communication, even over long distances
- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Up to 16 boards can be added with settings of COM1~256
- ★ 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Supports high speed communication (up to 921,600bps)

Power Consumption	5VDC 950mA (max)
Connector	37-pin D-type female connector DCLC-J37SAF-20L9 [JAE] or equivalent
PCI Bus /	32bit, 33MHz, 5V /
Dimensions (mm)	121.69(L) x 106.68(H)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables /	PCE37/9PS, PCE37/25PS,
Connectors	COM-4M CABLE(PC)1, CN5-D37M

*1: Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)

Intelligent RS-232C / RS-485 Multiport System COM-4FS(PCI)

PCI RS-232C RS-485 CE



Includes standard COM Drive for Windows® XP/2000/NT/Me/98/95 or Linux

SPECIFICATIONS

Interface type	RS-232C, RS-485 Async./Sync., Full-duplex/Half-duplex
Number of Channels	4
Speed	Async: 10~115,200bps BOP: 72~384,000bps COP: 100~9,600bps
Data type	Async: 5/6/7/8 Bit, 1/1.5/2 Stop Bit BOP: 5, 7 Bit COP: 8 Bit
Parity check	Async: even, odd, non-parity (selectable by software) COP: non-parity
Controller	Async: 162850 or equivalent BOP, COP: μ PD72001 or equivalent

FEATURES

- ★ Intelligent communication - supports start-stop, bit and character synchronization
- ★ Two synchronization systems can be used concurrently
- 2 RS-232C / RS485-compatible channels

Interrupts	One interrupt request signal as INTA
Wiring distance	RS-232C: 15m (max) RS-485: 1200m (max)
I/O address	128 bytes, 32 bytes
Power Consumption	5VDC 2.5A (max)
Connector	25-pin D-type connector 17JE-13250-02(D1) [DDK]
PCI Bus /	32bit, 33MHz, 5V /
Dimensions (mm)	313.78(L) x 106.68(H)
Options	
Software	-
Accessories	-
Cables / Connectors	CN5-D25M

E-07

Communication

Product Lineup
/ Basic
KnowledgeLow Profile
PCI

PCI

PC Card

USB

ISA

CardBus 4 Port RS-232C COM-4(CB)H

Card Bus
RS-232C



Includes standard COM Driver for Windows XP/2000/Me/98

SPECIFICATIONS

Correspondent PC	IBM PC/AT series and Compatible Computer (ISA), DOS/V Correspondent Computer
Interface Type	RS-232C(Async.)
Channels	4
Access Speed	2~921,600bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity Check	even, odd, non-parity
Controller	162850 compatible (I/O buffer: 128Byte)
Interrupts	one interrupt request signal as INTA
Wiring distance	15m (max)
I/O address	Any 32-byte boundary
Power consumption	3.3VDC 200mA (max)
Connector	9-pin male D-type, DELC-J9PAF-20L9(JAE) or equivalent

FEATURES

- ★ Functions as a standard COM board when used in Windows® or Linux
- ★ Supports high speed communication (up to 921,600bps)
- 128-byte FIFO buffer (both transmission and reception) provided for each channel

Software	Standard COM Driver for Windows XP/2000/NT/Me/98/95
Length of attached cable	250mm
Card type	PC Card Standard CardBus Type II
Card size	Type II
Weight	30g (150g with cables)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables/Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F

*1. Selectable speed, 15~921,600bps, using Standard COM Driver Setup and API-PAC(W32)

2 Port RS-232C COM-2(PM)

PC Card
RS-232C



SPECIFICATIONS

Correspondent PC	IBM PC/AT series and Compatible Computer (ISA), DOS/V Correspondent Computer, NEC PC-9800 series
Interface Type	RS-232C(Async.)
Channels	2
Access Speed	2~115,200bps
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity Check	even, odd, non-parity
Controller	16550 compatible (I/O buffer: 16Byte)
Interrupts	One of IRQ3~7, 9~12 or 15
Wiring distance	15m (max)
I/O address	Any 16-byte boundary
Power consumption	+5VDC 170mA (max)
Connector	9-pin male D-type, DELC-J9PAF-20L9(JAE) or equivalent

FEATURES

- ★ Functions as a standard COM board when used in Windows® XP/2000/NT/Me/98/95
- ★ Supports high speed communication (up to 921,600bps)
- 128-byte FIFO buffer (both transmission and reception) provided for each channel

Software	Standard COM Driver for Windows XP/2000/NT/Me/98/95
Length of attached cable	250mm
Card type	Type II of PCMCIA Rel.2.0/JEIDA 4.1 upper
Card size	PCMCIA/JEIDA Type II
Weight	30g (90g with cables)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Accessories	-
Cables/Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F

1 Port RS-232C COM-1(PM)

PC Card
RS-232C
CE



SPECIFICATIONS

Correspondent PC	IBM PC/AT series and Compatible Computer (ISA), DOS/V Correspondent Computer, NEC PC-9800 series
Communication Spec.	RS-232C (non-isolated)
Interface Type	Async. Serial Transmission
Channels	1 (usable as 1ch of COM1~4)
Access Speed	2~115,200bps
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity Check	even, odd, non-parity
Controller	16550 compatible (I/O buffer: 16Byte)
Interrupts	One of IRQ3~7, 9~12 or 15
Wiring distance	15m (max)

FEATURES

- ★ Functions as a standard COM board when used in Windows® XP/2000/NT/Me/98/95
- ★ Supports high speed communication (up to 921,600bps)
- 128-byte FIFO buffer (both transmission and reception) provided for each channel

I/O address	Any 8-byte boundary
Power consumption	5VDC 100mA (max)
Operating Condition	0~50°C, 20~90% RH (no condensation)
Length of attached cable	150mm
Card type	Type II of PCMCIA Rel.2.0/JEIDA 4.1 & up
Weight	30g (70g with cables)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Cables/Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F

1 Port RS-485/RS422A COM-1D(PM)

PC Card
RS-422A
RS-485
Isolated
CE



SPECIFICATIONS

Correspondent PC	IBM PC/AT series and Compatible Computer (ISA), DOS/V Correspondent Computer, NEC PC-9800 series
Communication Spec.	RS-422A / RS-485 (isolated)
Interface Type	Async. Serial Transmission
Channels	1 (usable as 1ch of COM1~4)
Access Speed	2~115,200bps
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity Check	even, odd, non-parity
Controller	16550 compatible (I/O buffer: 16Byte)
Interrupts	One of IRQ3~7, 9~12 or 15
Wiring distance	1200m (max)

FEATURES

- ★ Functions as a standard COM board when used in Windows® XP/2000/NT/Me/98/95
- On-board isolated circuit provides safe communication, even over long distances

I/O address	Any 8-byte boundary
Power consumption	5VDC 100mA (max)
Operating Condition	0~50°C, 20~90% RH (no condensation)
Length of attached cable	150mm
Card type	Type II of PCMCIA Rel.2.0/JEIDA 4.1 upper
Weight	30g (70g with cables)
Options	
Software	ACX-PAC(W32)BP, API-PAC(W32)
Cables/Connector	RSS-9M/F, RSS-25M/9F, CN5-D9F

CardBus 4 Channels RS-232C Serial Interface COM-4(USB)



FEATURES

- High speed communication of up to 115,200bps is supported.
- A maximum of 16 terminals can be set, and COM1~COM4 can all be set.
- FIFO buffer (4KBytes transmission / 4KBytes reception) provided by each channel.
- Baud rate can be uniquely set for each channel

SPECIFICATIONS

Interface Type	RS-232C(Async.)
Channels	4ch
Access Speed	15~115,200bps *1
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit
Parity Check	even, odd, non-parity
Controller	16C654 compatible
Interrupt	-
Maximum distance	15m
I/O address	-
Power Consumption (Max.)	+5VDC 210mA

Connector	9-pin male D-type, DELC-J9PAF-20L9[JAE] or equivalent
Dimensions	5.5"(w)×9.1"(d)×1.3"(h)
Option	
Software	-
Accessories	-
Cables / Connector	RSS-9M/9F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F

*1: Software Selectable

Standard COM Driver for Windows XP/2000/Me/98

Media Converter

- These media converters convert serial communication (RS-232C or RS-422/485) into Ethernet or Wireless LAN protocol
- 3 operating modes are provided

Transparent Mode

Data from connected equipment will be transferred without going through any changes. The RS232C cable can be replaced with ethernet cable without any software changes.

Virtual COM Mode

Allows the unit to be used as a COM port for a Windows PC. Remotely located equipment can be operated via ethernet. Access by socket communication is also supported.

N-to-N Packet Communication (using dedicated command)

Used for creating communication programs and conducting packet transmission using a dedicated command. By attaching device IDs to the packet, you can carry out N-to-N communication between several units.

RS-232C Media Converter

RS-232C ⇔ Ethernet (Wire LAN) RP-COM(FIT)GY



SPECIFICATIONS

RS-232C	
Serial Standard	EIA-232-F
Data Speed	300~921,600bps
Connector	9-pin D-SUB (male)
Wire LAN	
Ethernet Standard	IEEE802.3u, IEEE802.3
Data Speed	10/100Mbps
Access Method	CSMA/CD
Transmission Format	Half Duplex / Full Duplex
Available ports	1 (10BASE-T / 100BASE-TX)
Power Supply	DC5V±5% (using attached AC Adapter)
Power Consumption (Max.)	0.4A
Dimensions	1"(w) × 2.5"(d) × 3.7"(h) (Exclusive of any protrusion)
Weight	3.5oz

RS-232C ⇔ Wireless LAN FX-DS110-COM



SPECIFICATIONS

RS-232C	
Serial Standard	
Data Speed	
Connector	
Wireless LAN	
Interface type	
Data Speed	
Access Method	
Transmission Packet	
Wireless LAN category	
Aerial Power	
Security	
Power Supply	
Power Consumption (Max.)	
Dimensions	
Weight	

RS-422/485 Media Converter

RS-422 ⇔ Ethernet (Wire LAN) RP-422(FIT)GY



SPECIFICATIONS

RS-232C	
Serial Standard	RS-422
Data Speed	300~921,600bps
Connector	9-pin D-SUB (male)
Wire LAN	
Ethernet Standard	IEEE802.3u, IEEE802.3
Data Speed	10/100Mbps
Access Method	CSMA/CD
Transmission Format	Half Duplex / Full Duplex
Available ports	1 (10BASE-T / 100BASE-TX)
Power Supply	DC5V±5% (attached AC Adapter)
Power Consumption (Max.)	0.5A
Dimensions	1"(w)×2.5"(d)×3.7"(h) (Exclusive of any protrusion)
Weight	3.5oz

RS-422/485 ⇔ Wireless LAN RP-DS110-422



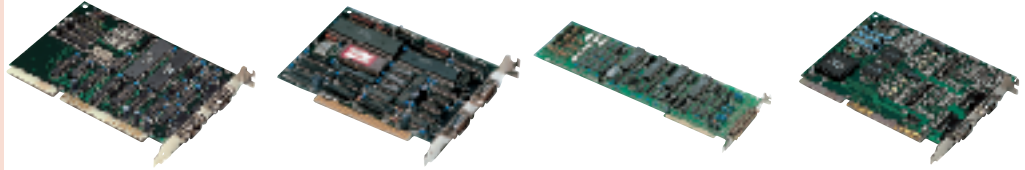
SPECIFICATIONS

RS-232C	
Serial Standard	RS-422, RS-485
Data Speed	300~921,600bps
Connector	9-pin D-SUB (male)
Wireless LAN	
Interface type	IEEE 802.11b Compliant, DS Spread Spectrum
Data Speed	11, 5.5, 2, 1Mbps (fixed/automatic)
Access Method	CSMA/CA + ACK (RTS/CTS)
Transmission Packet	IEEE 802.11b frame
Wireless LAN category	Low-power Data Transmission System (2400~2497MHz)
Aerial Power	10mW/MHz or less
Security	Proprietary scramble / WEP
Power Supply	DC5.5~7V (attached AC Adapter)
Power Consumption (Max.)	0.7A
Dimensions	3.2"(w)×1"(d)×6.9"(h)
Weight	7oz

[COMMUNICATION] ISA

For the optional items, please refer to Page J-18 (Accessories & Cables) and Page I-01 (Software).

ISA	2 Port RS-232C	2 Port Intelligent RS-232C	4 Port RS-232C/RS-422A	High Speed 2 Port Isolated RS-422A/RS485
	COM-2(PC)F	COM-2S(PC)	COM-4M(PC)	COM-2PD(PC)H



SPECIFICATIONS

Interface type	RS-232C		RS-232C, RS-422A	RS-422A, RS-485
Channels	2		4	2
Access Speed	50~115,200bps	300~19,200bps	50~38,400bps	50~921,600bps
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit	7/8 Bit, 1/2 Stop Bit	5/6/7/8 Bit, 1/1.5/2 Stop Bit	
Parity check	even, odd, non-parity			
Controller	16550 or equivalent	HD64B180 or equivalent	16550 or equivalent	
Interrupts	Compatible mode: Two of IRQ 3~7, 9~12, 14 or 15 Enhanced mode: One of IRQ 3~7, 9~12, 14 or 15	One of IRQ 3~7, 9	Compatible mode: Two of IRQ 3~7, 9 Enhanced mode: One of IRQ 3~7, 9	Compatible mode: Two of IRQ 3~7, 9~12, 14 or 15 Enhanced mode: One of IRQ 3~7, 9~12, 14 or 15
Wiring distance	15m (max)		RS-232C: 15m, RS-422A: 1.2km	1.2km (max)
I/O address	Any 16-byte boundary	Any 8-byte boundary	Any 32-byte boundary	Any 16-byte boundary
Power consumption (Max.)	+5VDC 420mA +12VDC 60mA -12VDC 50mA	+5VDC 480mA +12VDC 5mA -12VDC 50mA	+5VDC 800mA +12VDC 180mA -12VDC 180mA	+5VDC 480mA
Bus / Dimensions (mm)	XT Bus / 160.0(L) x 107.0(H)	XT Bus / 160(L) x 107.0(H)	XT Bus / 340.5(L) x 122.0(H)	AT Bus / 163.0(L) x 122.0(H)
Connector	9-pin male D-type DELC-J9PAF-20L9[JAE] or equivalent		RS-232C: 37-pin female D-type DC-37SA-N[JAE] or equivalent RS-422A: 40-pin header PC-40PE-D4T1-PN1[JAE] or equivalent	9-pin male D-type DELC-J9PAF-20L9[JAE] or equivalent
Options	Software	API-PAC(W32)		
	Accessories	-		
	Cables / Connector	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F	PCE37/9PS, PCE37/25PS, COM-4M CABLE(PC)1, CN5-D37M	RSS-9M/F, RSS-25M/9F, CN5-D9F
CE mark	○		-	○

*: Jumper selectable

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Communication

Product Lineup / Basic Knowledge

Low Profile PCI

PCI

PC Card

USB

ISA