

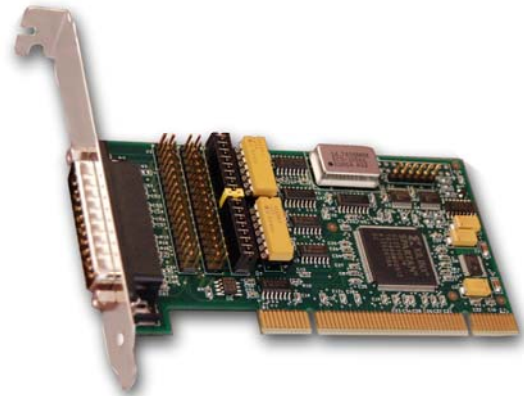


SyncLink WAN Adapters for Windows

The SyncLink *GT*, SyncLink *GT4* and SyncLink PCMCIA WAN Adapters provide high-speed, synchronous PPP ports for computers running Windows NT/2000/XP and Server 2003 . These ports connect to remote routers or computers using a variety of wide area networking services including DDS, ISDN and T1/E1.

SyncLink emulates an Ethernet LAN adapter, enabling Windows LAN applications to communicate over a wide area network as though locally connected. The single-port *GT* and 4-port *GT4* adapters support data rates up to 10 Mbps. The PCMCIA supports up to 128Kbps and higher.

Through its serial data interface, which can be configured as V.35, RS-232, or RS-422/485 (RS-530, RS-449, X.21) SyncLink cables directly to data communications equipment such as high-speed synchronous modems and digital service CSU/DSUs, as well as, satellite and RF modems. The 4-port SyncLink *GT4* also supports these same connections through independently configured serial data interfaces. Available conversion cables are required for each port for V.35, RS-449, RS-530, and X.21 applications.



SyncLink adapters feature Plug and Play configuration of adapter resources, such as I/O base address and interrupt request level. The number of adapters that can be installed is limited only by the number of available PCI and PCMCIA slots.

To verify installation or test SyncLink at any time after installation, comprehensive board-level diagnostics can be activated in the Control Panel and Device Manager.

PRODUCT CONFIGURATIONS

Single Port Adapters	Product Code
SyncLink <i>GT</i> WAN Adapter for Windows/PCI/V.35	191183
SyncLink <i>GT</i> WAN Adapter for Windows/PCI/RS-232	192183
SyncLink <i>GT</i> WAN Adapter for Windows/PCI/RS-422/X.21	193183
SyncLink <i>GT</i> Low-Profile Bracket	LPB000
PCMCIA Adapters	
SyncLink WAN Adapter for Windows/PCMCIA	P10183
4-port Adapters	
SyncLink <i>GT</i> WAN for Windows/PCI/V.35/4p	491183
SyncLink <i>GT</i> WAN for Windows/PCI/RS-232/4p	492183
SyncLink <i>GT</i> WAN for Windows/PCI/RS-422/X.21/4p	493183
Cables	
V.35 cable	2534GT
RS-232 cable	CMF000
RS-449 cable	2537FM
RS-530 cable	CMF000
X.21 cable	2515FM

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FEATURES

LAN Emulation

SyncLink appears to Windows NT/2000/XP and Server 2003 as a LAN adapter supported by a standard NDIS network driver. LAN packets sent by Windows to the adapter are encapsulated into frames and transmitted over the PPP data link. Received frames are converted to LAN packets and passed up to Windows for processing. These conversions are transparent to LAN applications.

Cisco HDLC

The SyncLink WAN adapter supports the proprietary Cisco HDLC point-to-point protocol.

Persistent Connections

SyncLink provides automatic connection reestablishment after loss of a PPP data link.

Authentication

SyncLink supports one and two-way authentication using PAP and CHAP protocols.

Routing

SyncLink supports IP and IPX routing through the Routing and Remote Access Service (RRAS).

Protocols

SyncLink supports IP and IPX network protocols in addition to the following IETF protocols for PPP connections:

- RFC1661 Point to Point Protocol (PPP)
- RFC1662 HDLC Framing for PPP
- RFC1334 Password Authentication Protocol (PAP)
- RFC1994 Challenge Handshake Authentication Protocol (CHAP)
- RFC1332 Internet Protocol Control Protocol (IPCP)
- RFC1552 Internetwork Packet Exchange Control Protocol (IPXCP)

Control and Monitoring Utility

A utility program is provided that controls the PPP connection, monitors the status of a PPP connection, and performs data and event tracing for diagnostic purposes.

APPLICATIONS

Networking applications for the SyncLink WAN adapter include internet gateways for LANs, high-speed Internet and Intranet servers (WWW, FTP, etc.), LAN to remote LAN connections, high-speed WAN connections with remote devices over PPP links, and IP & IPX routing with Routing and Remote Access Service.

SyncLink WAN Adapters for Windows

SPECIFICATIONS (SyncLink GT)

Controller: MicroGate FPGA
Serial Ports: One
Serial Interface: Jumper-selectable as V.35, RS-232, RS-422/485 (RS-530 & RS-449, X.21)
Serial Data Format: Bit-synchronous, SDLC, HDLC
Data Rates: Up to 10 Mbps
Clocking: Internal or external
I/O Base Address: Plug and Play configurable
Interrupt Request Level: Plug and Play configurable
Environmental: Temperature 0-60oC; humidity 0 to 95% non-condensing; alt. - 200 to +10,000 ft.
Mechanical: Low-Profile PCI MD1; length 4.7 ", height 2.5 ", Weight 2.7 Oz
PCI 3.0 compliant, 32-bit, 33mhz (5v, 3.3v and PCI-X compatible), Low-profile compatible w/optional bracket.
Power usage: 0.2A +5V, 23 mA +12V, 23mA -12V
Certification: Complies with FCC limits for a Class B digital device; conforms with CE requirements
Connector: DB-25 (male)
Cable Options: DB-25 (female) to DB-25 (male); DB-25 (female) to 34-pin V.35 (male); DB-25 (female) to 37-pin RS-449 (male); DB-25 (female) to 15-pin X.21 (male)

SPECIFICATIONS (SyncLink GT4)

Controller(s): MicroGate FPGA
Serial Ports: Two (2) or four (4); custom designs offer more ports-per-adapter
Serial Interface: Jumper-selectable as V.35, RS-232, RS-422/485 (RS-530,RS-449, X.21)
Serial Data Format: bit-synchronous: HDLC, SDLC; asynchronous
Data Rates: Up to 10 Mbps per port synchronous; 921600 bps asynchronous
Interrupt Request Level: Plug and Play configurable
Environmental: Temperature 0-60oC; humidity 0 to 95% non- condensing; alt. - 200 to +10,000 ft.
Mechanical: Standard PCI short card; length 6.875", height 4.2", Weight 5.5 Oz
PCI 3.0 compliant, 32-bit, 33mhz (5v, 3.3v, and PCI-X compatible)
Power usage: 300mA 5V, 80mA +12V, 80mA -12V
Certification: Complies with FCC limits for a Class B digital device; conforms with CE requirements
Connectors: LFH-60
Supplied Adapter Cable: LFH-60 to dual DB-25 (male)
Cable Options: DB-25 (female) to DB-25 (male); DB-25 (female) to 34-pin V.35 (male); DB-25 (female) to 37-pin RS-449 (male); DB-25 (female) to 15-pin X.21 (male)

SPECIFICATIONS (SyncLink PCMCIA)

Controller(s): SAB82532
Serial Ports: One
Serial Interface: Software-selectable as V.35, RS-232, RS-422 (RS-530,RS-449, X.21)
Serial Data Format: bit-synchronous: HDLC, SDLC; BSC; async
Data Rates: 128Kbps and higher
I/O Base Address: Plug and Play configurable (PC Card)
Interrupt Request Level: Plug and Play configurable
Environmental: Temperature 0-60oC; humidity 0 to 95% non- condensing; alt. - 200 to +10,000 ft.
Mechanical: Standard Type II PCMCIA card; length 3.37 inches, width 2.126 inches, weight 1.0 Oz
Power usage: 200 mA +5V
Certification: Complies with FCC limits for a Class B digital device; conforms with CE requirements
Supplied Adapter Cable: PCMCIA I/O connector to DB-25 (male)
Cable Options: DB-25 (female) to DB-25 (male) DB-25 (female) to 34-pin V.35 (male); DB-25 (female) to 37-pin RS-449 (male); DB-25 (female) to 15-pin X.21 (male)