

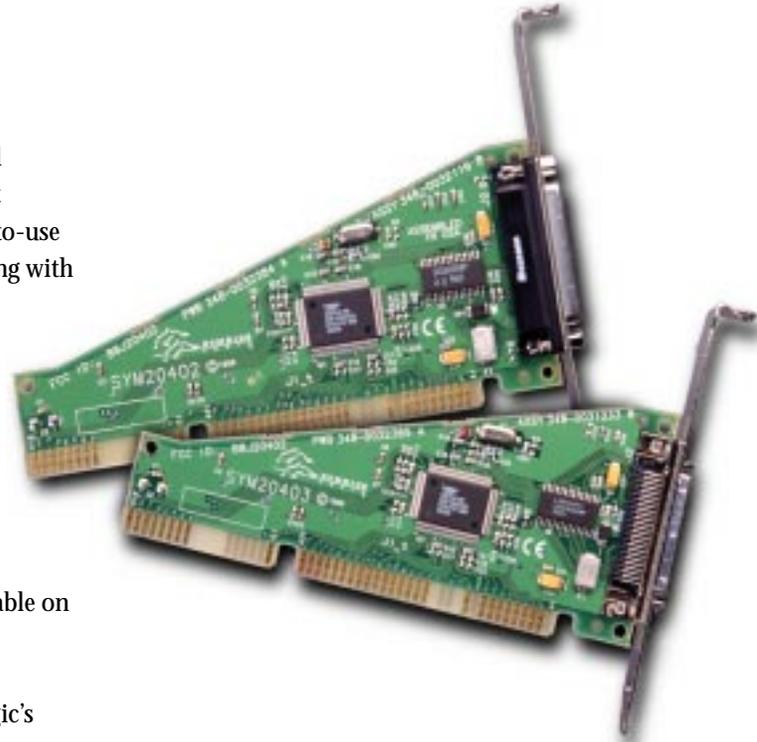


*SYM20402/SYM20403 Data Sheet*

# SYM20402/SYM20403

## *ISA to SCSI Plug-and-Play Host Adapter*

Symbios Logic's single chip, SYM20402 and SYM20403 ISA to SCSI plug-and-play Host Adapter solutions provide a low-cost, easy-to-use attachment for most SCSI peripherals. Along with Symbios Logic's SDMS™ software package, these Fast SCSI host adapter solutions are ideal for bundling with an OEM's scanner, CD-ROM, Removable Storage Media, tape drive, etc. With these host adapters, users quickly and easily attach and start operating their SCSI peripherals. The SYM20402 differs from the SYM20403 only in the type of external connector available on the host adapter.



These host adapter boards use Symbios Logic's 16-bit, high performance SYM53C416 host controller chip to interface between the SCSI and ISA buses. The host controller chip has an internal, 128 bytes PIO FIFO which significantly reduces host overhead, and a 24-bit counter which allows up to 16 MByte data transfers while eliminating inter-sector transfer delays. Additionally, the SYM20402 and SYM20403 host adapters are fully compliant with the ISA Plug and Play specification, version 1.0a, and the SCSI-2 specification, version 11.

### Applications

- Providing ISA bus PCs with an external, Fast SCSI connection for scanners, CD-ROMs, removable media devices (i.e. Iomega and SyQuest), tape, etc.
- A low-cost SCSI host adapter solution for OEMs to bundle with their SCSI peripherals.

**SYM20402 /  
SYM20403  
ISA to SCSI  
Plug-and-Play  
Host Adapter**

Bus Interface	Plug-and-Play	SCSI Rate	SCSI Bus	Bootable	Number of SCSI Devices	SCSI Connector
16-bit ISA	Yes	10 MB/s Synchronous 7 MB/s Asynchronous Fast SCSI	8-bit, Single-Ended	No	7	External: 25-pin (SYM20402) 50-pin (SYM20403)

## Benefits

- Complete host adapter solution decreases OEM time-to-market
- Low cost connectivity
- Easy to install – plug-and-play with no jumpers
- Fast SCSI transfer rates up to 10 Mbytes/sec
- DMA channel not required
- Active termination
- Fused termination power supplied
- IRQ and I/O port assigned automatically (Available SDMS drivers also allow the host adapter to operate without an assigned IRQ)
- Low power mode for power management

## Software Features

The Symbios Logic *SCSI Device Management System* (SDMS) solves the increasingly complex problem of managing system I/O. It seamlessly addresses hardware and software interfaces by supporting the Symbios Logic family of SCSI controllers, and a wide range of SCSI peripheral devices. SDMS offers interoperability across application programs, operating systems, and host platforms. SDMS support for the SYM2040x consists of a series of SCSI device drivers that provide operating system and specific SCSI peripherals support.

- Operating Systems
  - DOS/Windows 3.1x
  - Windows 95
  - Windows NT
- Utilities
  - SDMS DOS Installation Utility

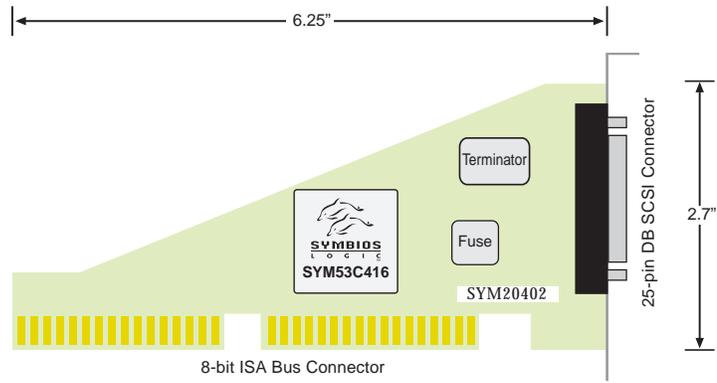
## Symbios Logic Host Adapter Compatibility and Quality

Symbios Logic is a key developer and contributor to the original committees that defined today's SCSI standards. This leadership and dedication to the development of industry standards and work with other industry leaders of core chip sets, processors, system providers, SCSI device peripherals, BIOS, and operating systems enables Symbios Logic to assure users the utmost compatibility and interoperability. Our product compatibility and interoperability are thoroughly tested in Symbios Logic's and technology partners' test labs. Symbios Logic's ISO-9001 certification assures users of the highest levels of product quality and reliability.

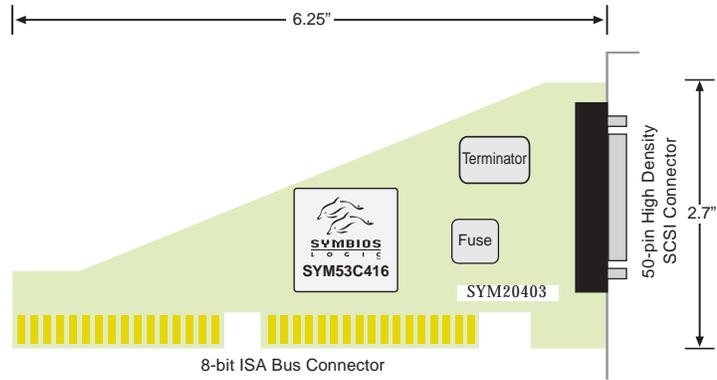
## Technical Specifications

- Supported Buses: 16-bit, Plug and Play ISA host bus  
8 bit, Narrow, Single-ended SCSI Bus
  - SCSI Asynchronous transfers
  - SCSI and Fast SCSI Synchronous transfers
- SCSI Bus Termination: Single-ended with active, auto termination  
Fused, self-resetting termination power
- Performance: SCSI Asynchronous – up to 7 MB/sec  
SCSI Synchronous – up to 5 MB/sec  
SCSI-2 Synchronous – up to 10 MB/sec  
ISA transfer rates up to 8 MB/sec
- SCSI Bus Connection: Up to 7 SCSI or SCSI-2 devices
- Board Connector: 25-pin, DB25 (SYM20402)  
50-pin, high density (SYM20403)
- Physical and Environmental Specifications
  - Electrical: 5V +/- 5%  
(1.1 A maximum)
  - Bracket: ISA/EISA style
  - Form factor: Approximately 6.2 in. x 2.7 in.
  - Operating temperature: 5° to 55° C
  - Storage temperature: -40° to 85° C
  - Relative humidity: 5% to 90%  
non-condensing
  - Maximum dewpoint temperature: 32° C
  - MTBF: 500,000 hours
- Full agency certification and compliance:
  - FCC and CISPR Class B
  - CE
  - VCCI Class
  - UL 94V0

**SYM20402  
Board  
Diagram**



**SYM20403  
Board  
Diagram**



## *Symbios Logic Sales Locations*

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