





Models SD10D, SD11D, SD16B, SD17C

-  Convert between Single-ended SCSI and HVD SCSI devices
-  New ASIC Versions
-  Both 8-bit and 16-bit Models
-  Extend SCSI Bus Length



NEW! [Custom Modifications to Your Specs](#)

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Many systems use single-ended SCSI because of the lower cost and large base of available devices. An increasing number of systems and devices use differential (HVD) SCSI because of the improved noise immunity, increased drive stability and the longer attainable cable lengths.

Paralan SCSI converters make communication between both types of devices possible. Hardware and software remain the same: the converter is transparent to all devices. Plug your single-ended cable into one end of the converter and the differential (HVD) cable into the other end. All SCSI devices will be available.

All Paralan SCSI Converters conform to the full SCSI ANSI standard. This includes managing the arbitration and disconnect/reconnect features of the latest systems, down to the SASI communications of earlier systems. They manage any possible signal conflicts such that they remain transparent to both HVD and single-ended devices.

New ASIC Version

Paralan introduced the industry's first **Fast** (10 Mbyte/sec) single/differential (HVD) SCSI converter in 1992.

These new models, using our own ASIC, are **Ultra SCSI compatible**: 20 Mbyte/sec for 8-bit (narrow) and 40 Mbyte/sec for 16-bit (wide) SCSI.

Narrow and wide devices may be placed in the same system. Call Paralan for details.

Extend Total Cable Length

By using two converters in series an extension up to 200 feet (60 m) is obtainable. See "Operation as a SCSI Extender," below, and the [transmission length table](#) on the SCSI extension page.

Handle Bus Noise, Termination Problems

[Auto Sense™](#) detects correct termination power. All models have internal terminations which may be disabled if the converter is not placed at the end of the bus.

Operation as a Single-ended/HVD SCSI Converter

Since SCSI is a bidirectional bus, a single converter is used to interconnect single-ended SCSI IDs with HVD SCSI IDs. Place the converter within 19 feet (6 m), or 10 feet (3 m) for fast SCSI, or 5 feet (1.5 m) for Ultra SCSI, of the single-ended SCSI port. Up to 82 feet (25 m) of cable may be placed between the converter and HVD port, or 87 to 100 feet (26.5-31 m) overall. Paralan is the first to produce SCSI converters that enable the maximum SCSI cable length on both ends, even through Ultra speeds. *For a printable version of this information, please see the [PDF version](#) of this data sheet.*

SCSI Extension

Single ended: Two Paralan converters can extend the single-ended SCSI bus up to 200 feet (60 m). Place each converter within 19 feet (6 m), or 10 feet (3 m) for fast SCSI, or 5 feet (1.5 m) for Ultra SCSI, of the two single-ended SCSI ports. Then connect up to 160 feet (50 m) of differential SCSI cable between them.

Differential (HVD): Two Paralan converters can extend the HVD SCSI bus up to 174 feet (53 m). Connect up to 82 feet (25 m) of differential SCSI cable to each converter. Then connect up to 10 feet (3 m) of single-ended cable between them. For HVD SCSI extension, the [SCSI RegeneratoR™s](#) (SIR-Dx series) are usually a better choice for distances up to 320 feet (100 m).

To 750 m (2,500 feet): If longer distances are required, refer to Paralan Fiber Optic [SCSI Extenders](#).



NEW! Paralan can match your SCSI needs with custom SCSI components, modifications to standard Paralan products, or even with [custom systems](#)! Paralan is ready to meet your exact requirements by applying our SCSI-savvy engineering - from SASI through Ultra320.

Ordering Guide

SCSI converter/extender models are available for both wide (16-bit) or narrow (8-bit); and in stand-alone or board-level versions:

| SCSI Converter/Extenders | Stand-alone | Board-level |
|---|--------------------------|--------------------------|
| Narrow (8-bit) SCSI | SD10D | SD11D |
| Wide (16-bit) SCSI | Use MH16 | Use MH17 |
| Need to Place an Order Or Do You Need Additional Assistance? Click Here to Get it! | | |

| Specifications SD10D/SD11D SD16B/SD17C | |
|--|--|
| <p>Environmental Relative Humidity: 0-95% non-condensing Operating Temperature: 0-50°C</p> <p>Power Requirements SD10D, SD16B: 115/220 V ac, auto select, 50-60 Hz, 10 Watts SD11D: +5 V dc $\pm 5\%$ @ 1 A max. SD17C: +5 V dc $\pm 5\%$ @ 1.5 A max.</p> <p>EMI/RFI Meets FCC Class A, CE</p> <p>Communication Parallel Transmission</p> | <p>SCSI Connections SD10D: SCSI-2 (Alt. 2-A cable, Centronics type) SD11D: SCSI Alt. 1 (0.1" pitch header) SD16B, SD17C: SCSI-3 68-pin High-Density female "P" Connector</p> <p>Dimensions SD10D: 4.1"W x 6.9"D x 1.6"H (104 x 175 x 41 mm) SD16B: 4.1"W x 7.5"D x 2.5"H (104 x 190 x 64 mm) SD11D, SD17C (board dimensions): 5.750" W x 3.880"H (146,0 x 98,5 mm). For complete dimensions see outline drawing.</p> |

Rate (sustained):
 SD10D, SD11D: up
 to 20 Mbytes/sec
 Ultra SCSI
 SD16B, SD17C: up
 to 40 Mbytes/sec
 Ultra SCSI
 Protocols: ANSI
 X3T10 SCSI
 standard

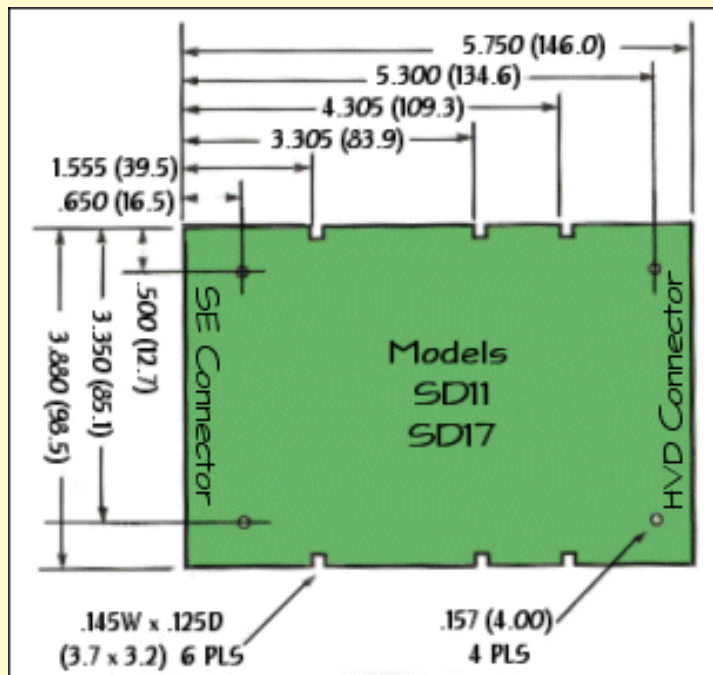
Safety Approvals

UL, CSA, TUV/VDE,
 CE

Weight: SD10D,
 approx. 1.5 lb. (0,7
 kg);
 shipping weight 4 lb.
 (1,8 kg)
 SD11D: SCSI Alt. 1
 (0.1" pitch header)
 SD16B: approx. 2 lb.
 (1 kg);
 shipping weight 4 lb.

Warranty

Two year limited
 warranty



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