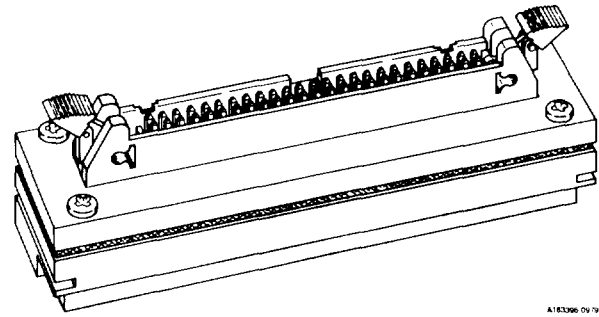


Hybrid Connectors

**3.18 × 6.35 mm (0.125 × 0.250 in.)
Centerlines**

Serpent™ I/O Adaptors



A18396 09/79

Features

- Standard grid [3.18 × 6.35 mm (0.125 × 0.250 in.)] can be adapted to any size [e.g., 2.54 × 2.54 mm (0.100 × 0.100 in.)], allowing flexibility in design and economical cabling wherever plug compatibility to IBM mainframe computers and peripherals is required. All 1.27 mm (0.050 in.) and 2.54 mm (0.100 in.) cable systems can be used.
- Vertically mounted PCB provides the shortest possible signal path and a densely packaged assembly.
- PCBs can be custom-designed to provide any pin-out requirement. Various header styles can also be provided on the back end.
- Ground clips are available in both slotted and mounting-ear versions, providing an excellent connection to the frame ground.
- GXT™ (palladium-nickel alloy with gold flash), a Berg Electronics gold equivalent plating, ensures high cycle life and excellent solderability.

Options

- Optional metalization of the Serpent housing provides grounding.

Technical Data

Materials

- Serpent housing Unfilled thermoplastic polycarbonate (UL 94 V-0)
 - ▶ Color Light or dark gray
- Optional housing grounding Aluminum-vapor deposition
- Serpent terminal 3/4-hard phosphor-bronze
- Header pin 3/4-hard phosphor-bronze
- Header housing Glass-reinforced polyester (UL 94 V-0)
 - ▶ Color Blue
- Terminal cover Styrene (UL 94 V-0)
 - ▶ Color White

- Back cover plate Glass-reinforced polyester (UL 94 V-0)
 - ▶ Color Light or dark gray
- Interface board 1.57 mm (0.062 in.) thick FR4 or equivalent 2 oz. copper clad PCB

Plating

- Serpent terminal
 - ▶ Contact area
 - Finish 0.76 μm (30 μin.) min gold
 - Underplate 1.27 μm (50 μin.) min nickel
 - ▶ Remainder Gold flash
- Header Pin
 - ▶ Finish 0.76 μm (30 μin.) min gold or 0.76 μm (30 μin.) GXT
 - ▶ Underplate 1.27 μm (50 μin.) min nickel

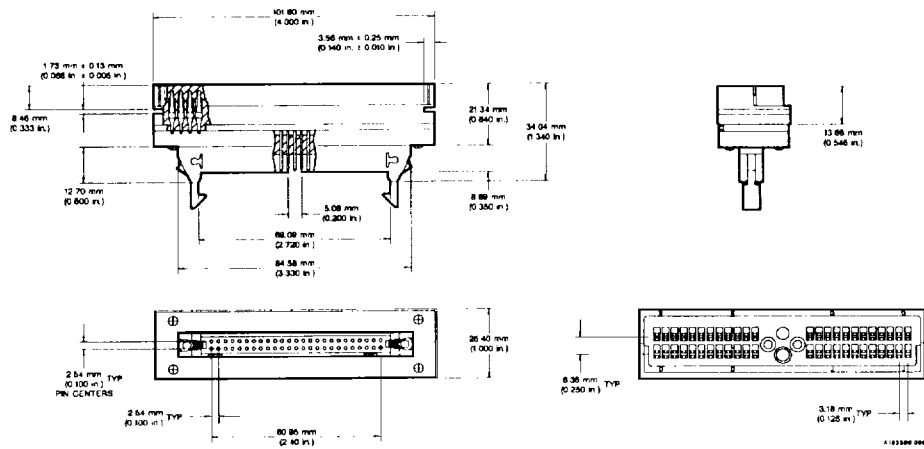
Customer Support Materials

Description	Order No.
Customer Product Drawings	By Part No.

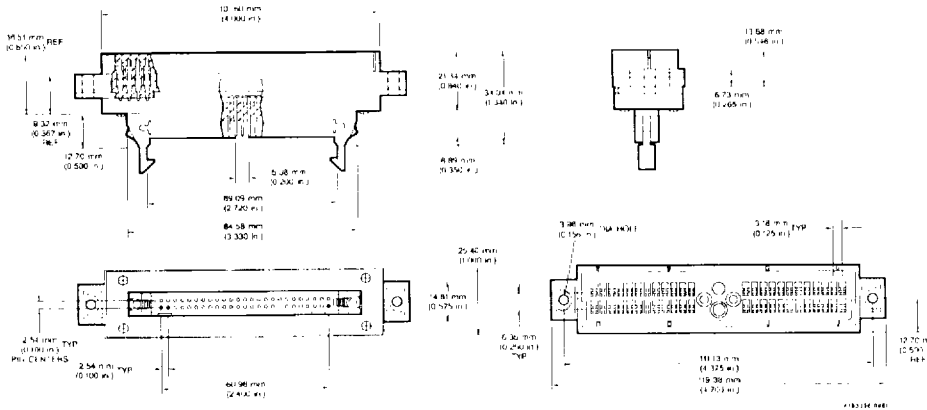
Description	Order No.
Product Samples	Upon Request

**Discrete Crimp-to-Wire
Pins/Receptacles/Housings
3.18 mm (0.125 in.)**

**Description
Slotted Mount**



With Mounting Ears



Ordering Data

Base Number	Description	Mounting Style	Part Number
	Serpent™ I/O adaptor with 50-position quick-eject header	Slotted	68243*
	Serpent I/O adaptor with 50-position quick-eject header	Mounting ears	68244*
	Serpent I/O adaptor with 50-position quick-eject header and grounding clips	Slotted	87445
	Serpent I/O adaptor with 50-position quick-eject header and grounding clips	Mounting ears	68245
	Interposer Serpent I/O assembly (Serpent connector on both ends)	—	68528
	Serpent I/O terminator bus	—	78884
	Serpent I/O terminator tag	—	78884
	Serpent I/O adaptor with 50-position quick-eject header and jack screw	—	69477

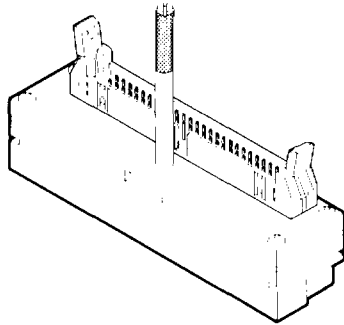
Dash Number (for 68243 and 68244 only)

Latch Style	Housing Material	Dash Number
Short	Light gray	001
Short	Dark gray	002
Short	Metallized light gray	003
Short	Metallized dark gray	004
Long	Light gray	005
Long	Dark gray	006
Long	Metallized light gray	007
Long	Metallized dark gray	008

*See "Dash Number" portion of table for latching and housing material options.

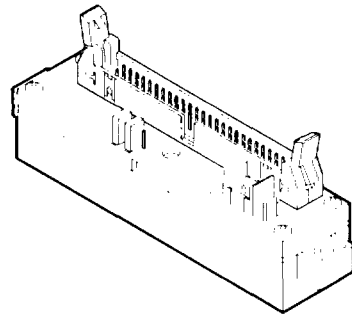
**Discrete Crimp-to-Wire
Pins/Receptacles/Housings
3.18 mm (0.125 in.)**

Design Options



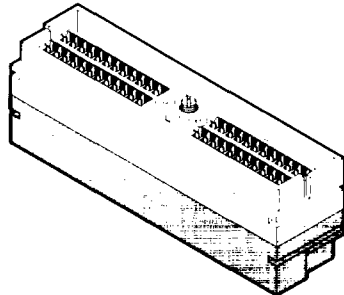
EXTERNAL ADAPTOR: Serpent to 2.54 x 2.54 mm (0.100 x 0.100 in.) interface

A183396 0823



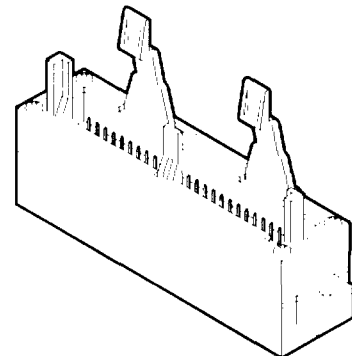
SERPENT ADAPTOR: Serpent to 2.54 x 2.54 mm (0.100 x 0.100 in.) interface with power contact and minijump switching devices

A183396 0834



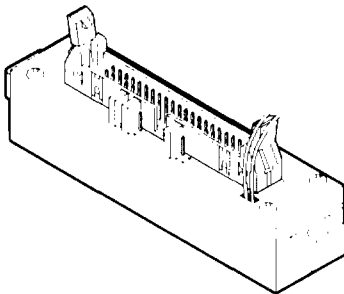
DARK SERPENT TO LIGHT SERPENT INTERPOSER

A183396 0835



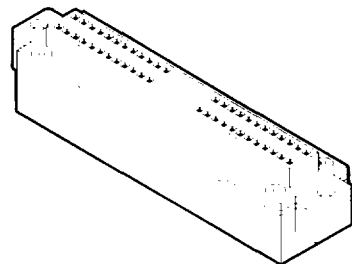
SLT TO SERPENT ADAPTOR

A183396 0838



SERPENT ADAPTOR: Serpent to 2.54 x 2.54 mm (0.100 x 0.100 in.) interface with minijump switching devices and power jumper cables

A183396 0827

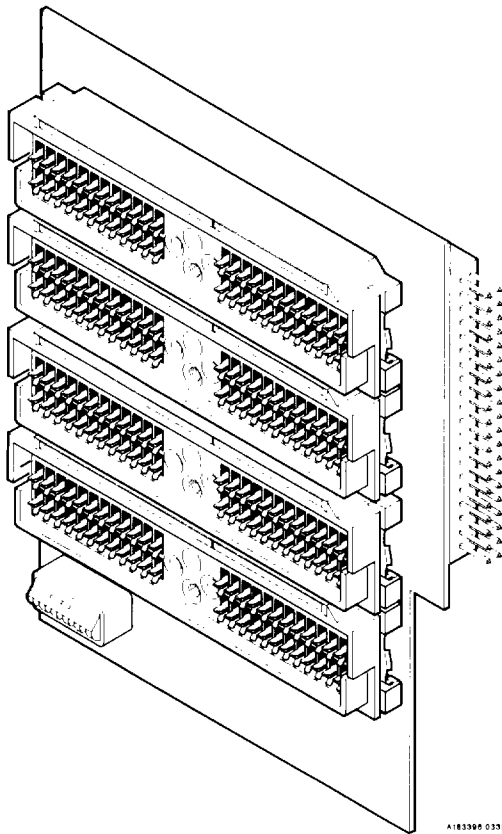
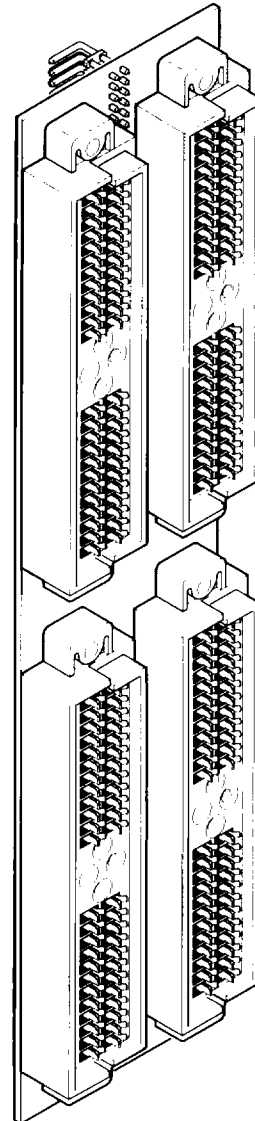
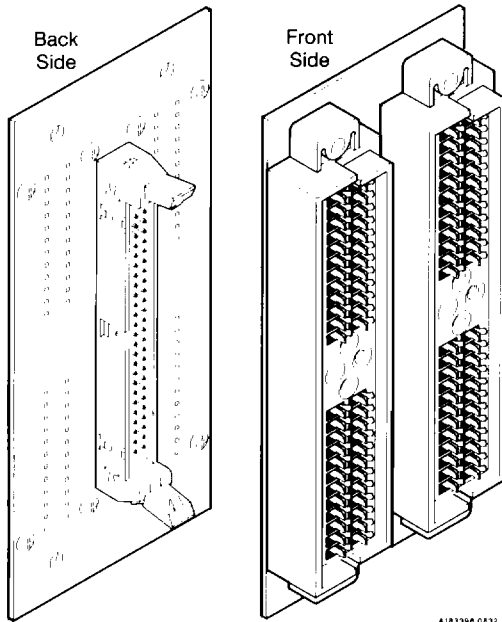


SERPENT ADAPTOR: Serpent to receptacle card connector

A183396 0833

Custom Serpent adaptors are available to satisfy individual application needs. To discuss your design requirements, contact your authorized Berg Electronics representative.

Design Options

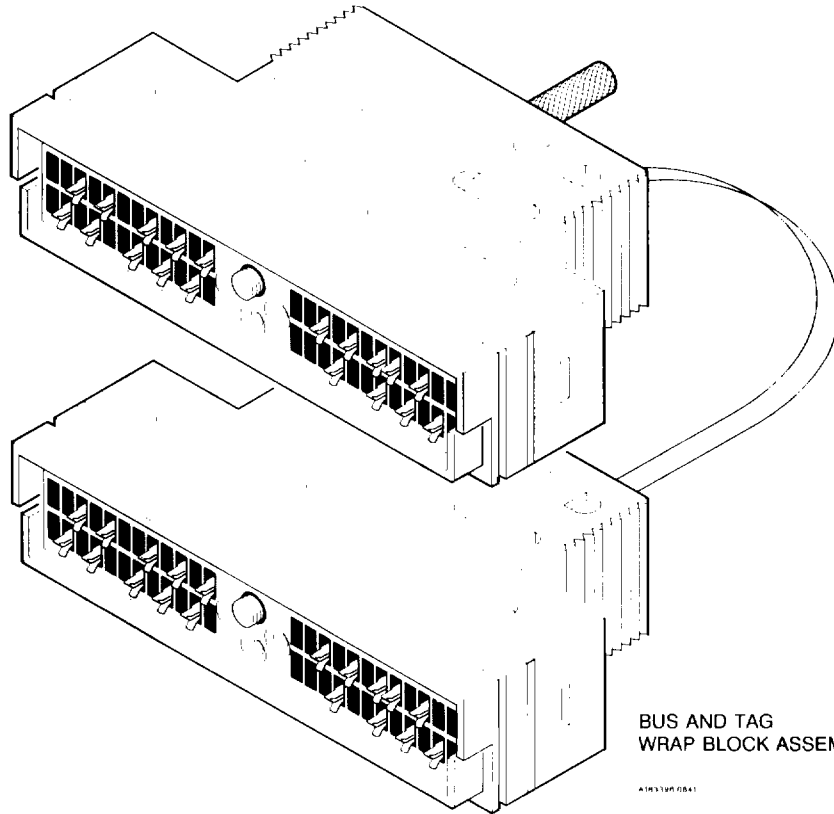


Custom multiple Serpent assemblies are available to satisfy individual application needs. To discuss your design requirements, contact your authorized Berg Electronics representative.



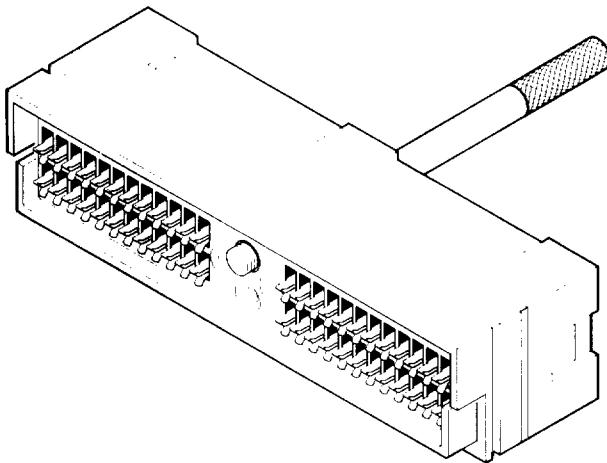
**Discrete Crimp-to-Wire
Pins/Receptacles/Housings
3.18 mm (0.125 in.)**

Design Options



BUS AND TAG
WRAP BLOCK ASSEMBLY

A18310R-08A1



BUS OR TAG TERMINATOR

A183500-08A0

Custom terminators and wrap (loop back) block assemblies are also available. Contact your authorized Berg Electronics representative.