

3Gb x 12-port Serial Attached SCSI (SAS) Fanout Expander

General Description:

The RTSASRFO-12X is a 12-port, 3 Gigabit Serial Attached SCSI (SAS) Fanout Expander. This expander provides functionality for connecting targets and initiators with up to 12 phys integrated for 12 SAS initiator, SAS target, SAS edge expander, or Serial ATA (SATA) target devices. The RTSASRFO-12X supports both wide and narrow port configurations.

SAS Expander Features:

- Supports SSP, STP, and SMP standards
- Supports SATA
- Supports multiple data rates and auto negotiation
 - 1.5Gb/s and 3.0Gb/s SAS
 - 1.5Gb/s SATA
- Provide low latency connection router
- Provides configurable drive spin-up sequencing on per phy basis
- Customizable Device Routing
- LEDs indicate SAS Port Activity & Fault
- Allows concurrent connections to SAS or SATA targets
- Provides a Serial I/O interface for managing general purpose data communication
- Provides 144 routing table entries

STP/SATA Features:

- Supports SATA/STP data transfers of 1.5Gb/s
- Allows addressing of multiple SATA targets
- Allows multiple initiators to address a single target

SMP Features:

- Decodes SMP packets that are destined for the expander
- Performs CRC checking and generation on the request frames and response frames

Specifications:

Size: 1.72 x 17 x 16 inches, Fits a 1U 19" rack

Weight: 12.5 lbs.

Power: 10 watts, 100-240 VAC @ 50/60Hz



RTSASRFO-12X

Data Connectors:

- 3 x SFF-8470
- 1 x HSSDC2
- Serial port (DB9) connector

Throughput:

- Up to 3Gb/s per phy for SAS
- Up to 1.5Gb/s per phy for SATA

Environment:

- Operating temperature: 0-50 °C
- Altitude: 3000 meters
- Relative humidity: 5-95% (non condensing)

Application:

The RTSASRFO-12X can be used in simple topologies to attach an initiators and other SAS expanders to SAS/SATA devices, in fanout expander topologies to increase the number of SAS accessible devices, or in fault tolerant path redundancy topologies to improve system reliability.