



EVERCLEAR

Mini Multi-Lane High Speed Interconnects & Cable Assemblies

The TE EVERCLEAR product family is the next generation high speed multi-lane interconnect for both internal and external solutions, including both receptacles and cable assemblies. The system is designed to be compliant to SFF-8086 and 8088 standards.

KEY FEATURES

- + 26 and 36 position receptacles
- + High density 0.8 mm contact spacing
- + Up to 6 Gbps data rate
- + Supports trained and untrained systems per SAS 2.0 and SAS 2.1 specifications
- + Cables lengths from 0.5 m through 10 m
- + Key rib 3 "blocking key" for long cables (> 6 meters)
- + Standard and universal key slots, other key slots available
- + Robust pull tab latch release
- + Connector meets SFF-8088
- + Shielded external assembly

APPLICATIONS

- + High speed I/O
- + Multiple channels interconnects
- + Switches for fiber channel and InfiniBand standards
- + External SAS and SATA
- + Data centers
- + Storage systems
- + Servers



Electrical Testing

EVERCLEAR External Cable Assembly Test Results Summary								
Cable AWG	Cable Length (M)	Impedance 100+/-10 OHMS	Min.	Max	Intra-Pair Skew 50 PS Max	ISI 60 PS Max	Insertion Loss	Near-End Coss Talk
28	0,5		90.9	105.6	3,1	19	See Report	See Report
28	1		90.9	105.6	1,8	23	See Chart	See Chart
28	2		90,9	105,4	2,6	17	See Report	See Report
28	3		90.8	107.6	4,9	23	See Report	See Report
24	4		91.6	104.6	2,6	14	See Report	See Report
24	5		91.8	103.6	4,3	16	See Chart	See Chart
24	6		91.7	102.8	0,6	17	See Report	See Report

Test Report available from TE upon request.

*Equalized cables assemblies are still available on request.



External Mini-SAS, SATA Connectors

Connectors				
	1 Port	2 Port	3 Port	4 Port
Receptacle (26 position)	1761987-7	1761987-7	1761987-7	1761987-7
Shield (universal key #4)*	1888321-1	1888321-2	1888321-3	1888321-4

*Other key and port configurations available, see TE dwg 1888321

Type							
	Part Number	Length	AWG	Key Slots		Key Rib	
				P1	P2	P1	P2
				Mini-SAS to Mini-SAS Standard Key Slots	2127833-1	0.5 mtr	30
	2127833-2	1.0 mtr	30	2-4	4-6	-	-
	2127833-3	1.5 mtr	28	2-4	4-6	-	-
	2127833-4	2.0 mtr	28	2-4	4-6	-	-
	2127833-5	2.5 mtr	28	2-4	4-6	-	-
	2127833-6	3.0 mtr	28	2-4	4-6	-	-
	2127833-7	4.0 mtr	28	2-4	4-6	-	-
	2127833-8	5.0 mtr	24	2-4	4-6	-	-
	2127833-9	6.0 mtr	24	2-4	4-6	-	-
	1-2127833-0	7.0 mtr	24	2-4	4-6	3	3
	1-2127833-1	8.0 mtr	24	2-4	4-6	3	3
	1-2127833-2	9.0 mtr	24	2-4	4-6	3	3
	1-2127833-3	10.0 mtr	24	2-4	4-6	3	3

	Part Number	Length	AWG	P1	P2	P1	P2
				Mini-SAS to Mini-SAS Universal Key Slots	1-2127833-4	0.5 mtr	30
	1-2127833-5	1.0 mtr	30	2-4-6	2-4-6	-	-
	1-2127833-6	1.5 mtr	28	2-4-6	2-4-6	-	-
	1-2127833-7	2.0 mtr	28	2-4-6	2-4-6	-	-
	1-2127833-8	2.5 mtr	28	2-4-6	2-4-6	-	-
	1-2127833-9	3.0 mtr	28	2-4-6	2-4-6	-	-
	2-2127833-0	4.0 mtr	28	2-4-6	2-4-6	-	-
	2-2127833-1	5.0 mtr	24	2-4-6	2-4-6	-	-
	2-2127833-2	6.0 mtr	24	2-4-6	2-4-6	-	-
	2-2127833-3	7.0 mtr	24	2-4-6	2-4-6	3	3
	2-2127833-4	8.0 mtr	24	2-4-6	2-4-6	3	3
	2-2127833-5	9.0 mtr	24	2-4-6	2-4-6	3	3
	2-2127833-6	10.0 mtr	24	2-4-6	2-4-6	3	3

Features and Benefits

- Direct attach copper cable assemblies are SFF-8088
- Supports serial data rate up to 6 Gbps
- Pull-to-Release retractable pin latch design
- Die Cast Back shell
- Bulk Cable Shield is crimped to back shell with a ferrule offering 360 degree shielding, providing a proper EMI performance
- Bulk cable ranges from 30 AWG to 24 AWG depending on length
- PCB in cable plug provides controlled impedance through connector
- Customize key-slot possible

Industry Standards

- SFF-8088: External 26 position Mini-SAS with Keys

Technical Documents

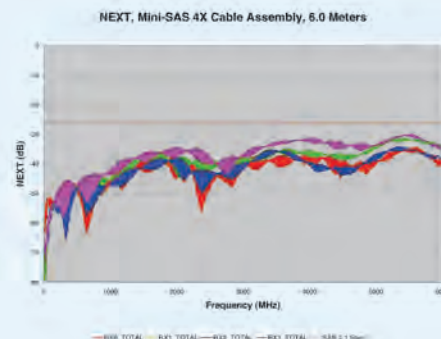
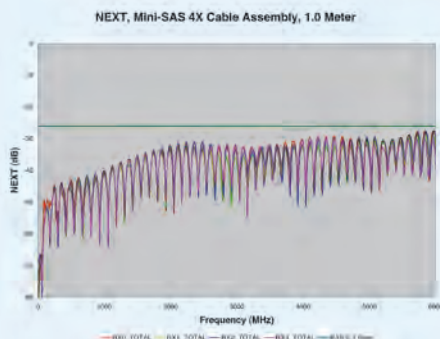
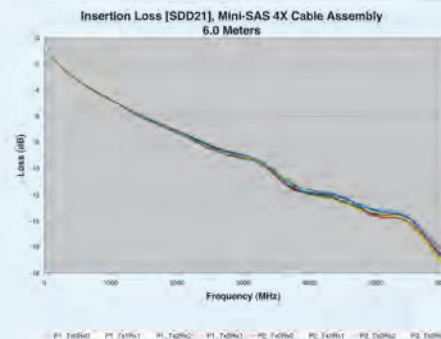
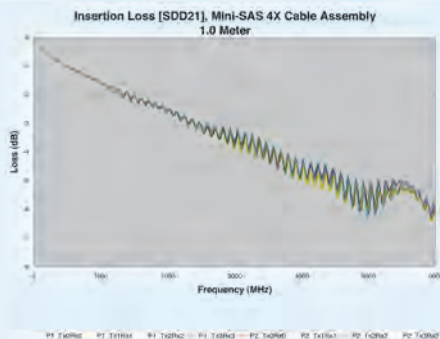
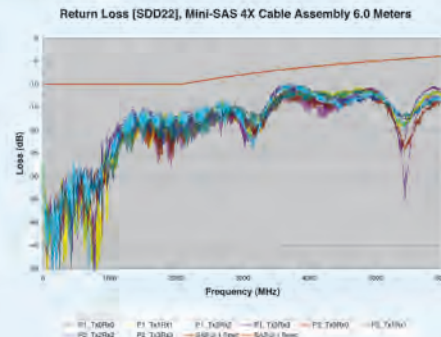
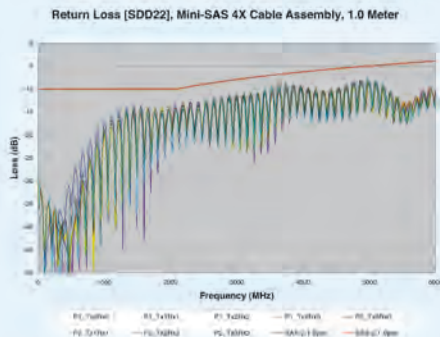
- Product Specification: 108-2234
- Qualification Test Report: 501-638

Environmental Design Objectives

- Custom cable lengths
- Customized equalization
- Various keying options
- Internal assembly side bands

*Please contact TE for specific requirements or additional information.

ISI Through Cable Assembly Measurements



Frequently asked questions

What data rate does Mini-SAS external cables support?

Mini-SAS external cables supports up to 6 Gbps data rates.

What are the PCB termination options?

Cages are offered in screwing and solder receptacle connector options.

Is application tooling required?

Single and ganged port assemblies require only a screwdriver to mount the cage onto the PCB. Receptacle connector will be soldered.

What cable lengths are required?

Cable length and wire gauge are related to the performance characteristics of the cable assembly. Longer cable lengths require heavier wire gauge, while shorter cable lengths can utilize a smaller gauge cable. Smaller gauge cable assemblies provide many benefits to the data center operator, such as ease of routing, less weight and increased airflow.

FOR MORE INFORMATION

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*as defined www.te.com/leadfree

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