



Introducing Amphenol 6G SAS SFF8087 Internal Cable Solutions

- AMPH-8787-XXX - Mini SAS 36 to Mini SAS 36 Cable Series
- AMPH-874S-XXX - Mini SAS 36 to 4 X SATA with Latches



Features:

- **High Performance Cables** – Differential pair signaling with less than 10ps/m in pair skew and maximum of 6dB/m of attenuation at 4.5 Ghz. Foil in cable construction provides improved EMI.
- **Signal Integrity** – Provides end-to-end signal integrity. Our process controlled termination assures performance at both SATA (1.5Gbps), SATAII (3.0Gbps) as well as SAS (3.0Gbps) data rates in the same cable.
- **Smaller Cable Package** – Thinner 30Awg and more flexible cables allow for many efficient routing with improved airflow and thermal mechanics. Configuration of storage devices is simplified.
- **Cost Effectiveness and Scalability** – World class manufacturing to support the desktop market cost drivers and reliability of the server market.
- **Variety Solutions** – Straight, R/A, side exit configuration, fan-out assemblies, 26Awg/30Awg wire options, 26,36,50,68 postions, and host base / target base fan-out assemblies...etc

Performance Test Data is shown as below

TEST RESULT AND RECORD
Temperature: 23.2 °C

Humidity: 58.5 %

Sample No.	Signal	Impedance(Risetime=70ps, 20%~80%)								Cable pair matching	Common mode	scd21 (6G)	scd22 (6G)	sdd21 (4.5G)	sdd22 (6G)	NEXT (6G)	sdd21-sdd21 (6G)	RESULT
		Differential impedance																
		Termination area				Cable Absolute area												
		Side A		Side B		MAX		MIN										
Wire Unit	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	Ohm	Ohm	dB	dB	dB	dB	dB	dB		
	High Limit	115	115	115	115	110	110	110	5	40	See the test data							
	Lower Limit	85	85	85	85	90	90	90	0	25								
#1	A5A6	102.7	95.8	103.8	95.9	101.1	100.6	1.2	30.2									
	A2A3	104.3	94.8	104.0	95.0	101.1	100.3	0.5	30.5									
	B2B3	105.3	98.4	102.7	98.8	101.4	100.7	0.9	30.4									
	B5B6	102.4	96.9	102.4	97.4	101.4	100.7	0.5	29.8									
	B13B14	102.2	98.9	104.8	98.4	101.2	100.4	0.7	31.8	OK	OK	OK	OK	OK	OK		PASS	
	B16B17	102.2	98.7	105.5	98.3	101.6	100.5	1.2	30.5									
	A16A17	106.2	94.8	104.2	95.5	101.4	100.4	1.5	30.5									
A13A14	103.6	95.0	104.2	96.2	101.5	100.4	2.6	30.8										
#2	A5A6	102.5	94.5	100.9	95.0	101.3	100.1	0.8	30.0									
	A2A3	103.2	94.0	101.6	94.5	101.5	100.9	1.5	30.4									
	B2B3	102.9	98.5	102.1	97.7	101.5	101.1	0.9	29.8									
	B5B6	102.2	98.6	102.2	94.7	101.3	100.6	0.4	29.4	OK	OK	OK	OK	OK	OK		PASS	
	B13B14	102.1	97.9	102.3	97.8	101.7	100.5	1.5	29.8									
	B16B17	101.8	98.0	101.9	97.0	101.4	100.6	0.5	29.1									
	A16A17	101.1	93.7	103.9	94.8	101.7	100.0	1.5	30.1									
A13A14	100.7	94.8	101.2	95.8	101.3	100.2	0.5	30.5										

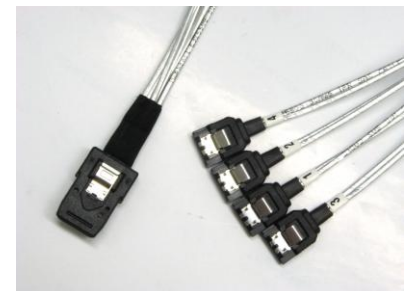


AMPH-8787-XXX:
SFF-8087 to SFF-8087 Cable with XXX as the standard or customized length in cm

TEST RESULT AND RECORD
Temperature: 23.2 °C

Humidity: 58.5 %

Sample No.	Signal	Impedance(Risetime=70ps, 20%~80%)								Cable pair matching	Common mode	scd21 (6G)	scd22 (6G)	sdd21 (4.5G)	sdd22 (6G)	NEXT (6G)	sdd21-sdd21 (6G)	RESULT
		Differential impedance																
		Termination area				Cable Absolute area												
		Mini SAS		SATA		MAX		MIN										
Wire Unit	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	MAX Ohm	MIN Ohm	Ohm	Ohm	dB	dB	dB	dB	dB	dB		
	High Limit	115	115	115	115	110	110	110	5	40	See the test data							
	Lower Limit	85	85	85	85	90	90	90	0	25								
#1	A5A6	101.4	94.5	101.4	91.3	100.6	99.3	1.9	28.9									
	A2A3	101.4	93.4	101.2	92.6	100.3	99.3	0.6	28.7									
	B2B3	103.4	97.2	100.6	92.9	100.6	99.8	1.7	29.1									
	B5B6	101.3	96.4	101.9	91.8	100.6	99.8	0.9	28.8									
	B13B14	101.8	97.0	101.9	92.1	100.3	99.5	0.3	28.8	OK	OK	OK	OK	OK	OK		PASS	
	B16B17	102.1	97.6	101.3	93.0	100.3	99.4	1.2	28.9									
	A16A17	101.7	93.2	102.0	92.3	100.5	99.9	0.7	28.8									
A13A14	100.8	93.3	101.4	91.7	100.6	100.0	0.9	28.9										
#2	A5A6	101.2	92.2	103.1	91.6	100.4	99.9	0.6	28.8									
	A2A3	101.6	92.1	100.7	92.6	100.3	99.7	0.7	28.9									
	B2B3	101.9	95.6	100.8	92.8	100.3	99.8	1.0	28.8									
	B5B6	101.6	95.2	100.7	91.5	100.4	99.7	1.4	28.9	OK	OK	OK	OK	OK	OK		PASS	
	B13B14	102.4	96.5	103.2	91.6	100.4	99.6	0.7	28.6									
	B16B17	102.3	96.5	101.7	92.7	100.0	99.5	0.4	28.9									
	A16A17	100.9	92.0	100.8	92.2	100.2	99.5	0.5	28.8									
A13A14	101.1	91.8	101.5	91.6	100.4	99.9	1.3	28.6										
	MAX	103.4	97.6	103.2	93.0	100.3	99.8	1.9	29.1									
	MIN	100.8	91.8	100.6	91.3	100.0	99.3	0.3	28.6									
	AVERAGE	101.7	94.7	101.5	92.1	100.4	99.7	0.9	28.8									



AMPH-874S-XXX:
SFF-8087 to 4 SATA2 Cable with XXX as the standard or customized length in cm

MSAS36 Series