



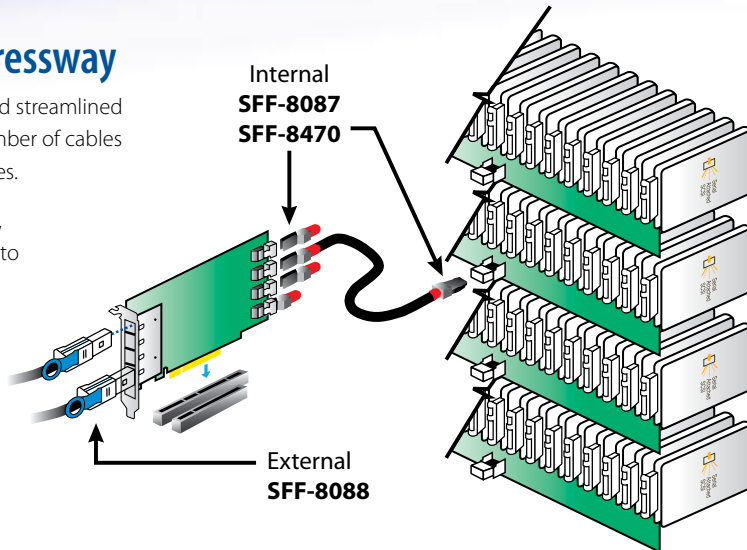
## Get Connected via the Multi-lane™ Expressway

AMCC's award winning Multi-lane design enables highly reliable and streamlined enterprise-class SATA storage solutions by greatly reducing the number of cables needed to connect controllers, backplanes, and standard SATA drives.

The Multi-lane SATA cable/connection system is fast, secure, simple, and clutter free. It combines the RAID controller's four SATA ports into a single locked connection. Four lanes of 3Gb/s SATA traffic travel through just one cable from the RAID controller to the system backplane or to up to four hard drives with a breakout cable.

### Multi-lane Benefits

- Four lanes of high speed SATA traffic through a single cable
- Increased system reliability
- Reduced cable count
- Streamlined storage
- Locked connections
- Improved airflow



Multi-lane SFF-8087 and SFF-8470 cables provide internal connectivity from the controller to drives and the backplane. Multi-lane SFF-8088 cables provide external connectivity from the controller to the 3ware Sidecar. NOTE: End-to-end Multi-lane connectivity requires a Multi-lane backplane

## Multi-lane SATA Cable and Connector Systems

### SFF-8087 to SFF-8087 (Multi-lane internal)



3ware Controller Model #  
9650SE (-4LPML, -8LPML, -12ML, -16ML)  
9590SE (all)  
9550SX (-12ML, 16ML)  
  
3ware order #  
CBL-SFF8087-05M (0.5 m)

### SFF-8087 to Discrete (Forward breakout cable)\*



3ware Controller Model #  
9650SE (-4LPML, -8LPML, -12ML, -16ML)  
9590SE (all)  
9550SX (-12ML, -16ML)  
  
3ware order #  
CBL-SFF8087OCF-05M (0.5 m)  
CBL-SFF8087OCF-10M (1.0 m)

### Discrete to SFF-8087 (Reverse breakout cable)\*



3ware Controller Model #  
9550SX (-4LP, -8LP, -12)  
9500S (-4LP, -8, -12)  
  
3ware order #  
CBL-SFF8087OCR-05M (0.5 m)  
CBL-SFF8087OCR-10M (1.0 m)

### SFF-8087 to SFF-8470 (Bi-directional Multi-lane hybrid cable)



3ware Controller Model #  
9650SE (-4LPML, -8LPML, -12ML, -16ML)  
9590SE (all)  
9550SX (-12ML, -16ML)  
(SFF-8087 on controller)  
  
3ware order #  
CBL-SFF8087IB-05M (0.5 m)  
CBL-SFF8087IB-06M (0.6 m)

### SFF-8470 to SFF-8087 (Bi-directional Multi-lane hybrid cable)



3ware Controller Model #  
9550SX-12MI  
  
3ware order #  
CBL-SFF8087IB-05M (0.5 m)  
CBL-SFF8087IB-06M (0.6 m)

### SFF-8470 to SFF-8470 (Multi-lane internal)



3ware Controller Model #  
9550SX-12MI  
  
3ware order #  
CBL-IB-05M (0.5 m)  
CBL-IB-10M (1.0 m)

### SFF-8470 to Discrete (Forward breakout cable)\*



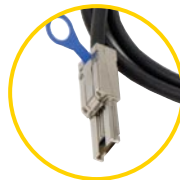
3ware Controller Model #  
9550SX-12MI  
  
3ware order #  
CBL-OCF-18 (0.5 m)  
CBL-OCF-10M (1.0 m)

### Discrete to SFF-8470 (Reverse breakout cable)\*



3ware Controller Model #  
9550SX (-4LP, -8LP, -12)  
9500S (-4LP, -8, -12)  
  
3ware order #  
CBL-OCR-18 (0.5 m)  
CBL-OCR-10M (1.0 m)

### SFF-8088 to SFF-8088 (Multi-lane external)



3ware Controller Model #  
9590SE-4ME (3ware Sidecar)  
  
3ware order #  
CBL-SFF8088-20M (2.0 m)

### Discrete SATA (Standard, point-to-point SATA cable)









3ware Controller Model #  
9650SE-2LP  
9550SX (-4LP, -8LP, -12)  
9500S (-4LP, -8, -12)  
8006-2LP  
  
3ware order #  
CBL-SATA-39 (39"/1m)

\*Breakout cables have a Multi-lane connector on one end and 4 discrete connectors on the other end  
• Forward breakout cables have a Multi-lane connector on the controller end and 4 discrete connectors to the drives  
• Reverse breakout cables have 4 Discrete connectors on the controller end and a Multi-lane connector to the drives

Note: Cable color may differ from colors shown above

# AMCC Cable Matrix

Controller	Connector to Connector Options		Cable P/N Options	Cable Description	Where Used
	To Controller	To Drives / Backplane			
<b>3ware 9650SE Internal RAID Controllers</b>					
9650SE-2LP 	Discrete	Discrete	CBL-SATA-39	39" (1m) standard, discrete, point-to-point SATA cable	Connects a controller's discrete SATA port(s) to the drives' or backplane's discrete SATA connector(s)
9650SE-4LPML, -8LPML, -12ML, -16ML 	SFF-8087	SFF-8087	CBL-SFF8087-05M	0.5 meter cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the backplane's SFF-8087 Multi-lane connector(s)
	SFF-8087	Discrete	CBL-SFF8087OCF-05M	0.5 meter forward breakout cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the drives' or backplane's discrete SATA connector(s)
			CBL-SFF8087OCF-10M	1.0 meter forward breakout cable	
	SFF-8087	SFF-8470	CBL-SFF8087IB-05M	0.5 meter converter cable (internal hybrid)	Connects the controller's SFF-8087 Multi-lane (ML) connector(s) to the backplane's SFF-8470 Multi-lane (MI) connector(s)
CBL-SFF8087IB-06M			0.6 meter converter cable (internal hybrid)		
<b>3ware 9590SE Internal RAID Controllers</b>					
9590SE-8ML, 12ML, 16ML 	SFF-8087	SFF-8087	CBL-SFF8087-05M	0.5 meter cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the backplane's SFF-8087 Multi-lane connector(s)
	SFF-8087	Discrete	CBL-SFF8087OCF-05M	0.5 meter forward breakout cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the drives' or backplane's discrete SATA connector(s)
			CBL-SFF8087OCF-10M	1.0 meter forward breakout cable	
	SFF-8087	SFF-8470	CBL-SFF8087IB-05M	0.5 meter converter cable (internal hybrid)	Connects the controller's SFF-8087 Multi-lane connector(s) to the drives' or backplane's discrete SATA connector(s)
CBL-SFF8087IB-06M			0.6 meter converter cable (internal hybrid)		
<b>3ware 9590SE with External Connectivity (Mac Only)</b>					
9590SE-4ME 	SFF-8088	SFF-8088	CBL-SFF8088-20M	2.0 meter cable	Connects the controller's SFF-8088 Multi-lane connector to the 3ware Sidecar's SFF-8088 Multi-lane connector
<b>3ware 9550SX Internal RAID Controllers</b>					
9550SX-4LP, -8LP, -12 	Discrete	Discrete	CBL-SATA-39	39" (1m) standard, discrete, point-to-point SATA cable	Connects the controller's discrete SATA port(s) to the drives' or backplane's discrete SATA connector(s)
	Discrete	SFF-8087	CBL-SFF8087OCR-05M	0.5 meter reverse breakout cable	Connects the controller's discrete SATA port(s) to the backplane's SFF-8087 Multi-lane connectors
			CBL-SFF8087OCR-10M	1.0 meter reverse breakout cable	
	Discrete	SFF-8470	CBL-OCR-18	0.5 meter reverse breakout cable	Connects the controller's discrete SATA connector(s) to the backplane's SFF-8470 Multi-lane connector(s)
CBL-OCR-10M			1.0 meter reverse breakout cable		
9550SX-12MI 	SFF-8470	SFF-8470	CBL-IB-05M	0.5 meter cable	Connects the controller's SFF-8470 Multi-lane connector(s) to the backplane's SFF-8470 Multi-lane connector(s)
			CBL-IB-10M	1.0 meter cable	
	SFF-8470	Discrete	CBL-OCF-18	0.5 meter forward breakout cable	Connects the controller's SFF-8470 Multi-lane connector(s) to the drives' or backplane's discrete SATA connector(s)
			CBL-OCF-10M	1.0 meter forward breakout cable	
	SFF-8470	SFF-8087	CBL-SFF8087IB-05M	0.5 meter converter cable (internal hybrid)	Connects the controller's SFF-8470 Multi-lane (MI) connector(s) to the backplane's SFF-8087 Multi-lane (ML) connector(s)
			CBL-SFF8087IB-06M	0.6 meter converter cable (internal hybrid)	
<b>3ware 9550SX-12ML, 16ML</b>					
9550SX-12ML, 16ML 	SFF-8087	SFF-8087	CBL-SFF8087-05M	0.5 meter cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the backplane's SFF-8087 Multi-lane connector(s)
	SFF-8087	Discrete	CBL-SFF8087OCF-05M	0.5 meter forward breakout cable	Connects the controller's SFF-8087 Multi-lane connector(s) to the drives' or backplane's discrete SATA connector(s)
			CBL-SFF8087OCF-10M	1.0 meter forward breakout cable	
	SFF-8087	SFF-8470	CBL-SFF8087IB-05M	0.5 meter converter cable (internal hybrid)	Connects the controller's SFF-8087 Multi-lane (ML) connector(s) to the backplane's SFF-8470 Multi-lane (MI) connector(s)
CBL-SFF8087IB-06M			0.6 meter converter cable (internal hybrid)		
<b>3ware 9500S Internal RAID Controllers</b>					
9500S-4LP, 8, 12 	Discrete	Discrete	CBL-SATA-39	39" (1m) standard, discrete, point-to-point SATA cable	Connects the controller's discrete SATA port(s) to the drives' or backplane's discrete SATA connector(s)
	Discrete	SFF-8087	CBL-SFF8087OCR-05M	0.5 meter reverse breakout cable	Connects the controller's discrete SATA port(s) to the backplane's SFF-8087 Multi-lane connectors
			CBL-SFF8087OCR-10M	1.0 meter reverse breakout cable	
	SFF-8470	SFF-8470	CBL-OCR-18	0.5 meter reverse breakout cable	Connects the controller's SFF-8470 Multi-lane (MI) connector(s) to the backplane's SFF-8087 Multi-lane (ML) connector(s)
CBL-OCR-10M			1.0 meter reverse breakout cable		
8006-2LP 	Discrete	Discrete	CBL-SATA-39	39" (1m) standard, discrete, point-to-point SATA cable	Connects a controller's discrete SATA port(s) to the drives' or backplane's discrete SATA connector(s)

## Multi-lane Quick Reference Chart

Cable/connector	Controller P/N Suffix	Connectivity	Also Known as
SFF-8470	MI	Internal	InfiniBand
SFF-8087	ML	Internal	Mini SAS 4i, Mini SATA Internal, iPass
SFF-8088	ME	External	Mini SAS 4x, Mini SATA External, iPass



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