



Serial ATA\* –

The Next Generation

Storage Interface



\*Serial ATA is a trademark of the Serial ATA Trade Association

## INTRODUCTION

Molex's leadership in designing and specifying the standard for interconnect products that support the new Serial ATA platform has helped ensure that customers enjoy leading-edge technology interconnect solutions for desktop, server and notebook storage.

Supporting the 1.8", 2.5" and 3.5" form factors with both cabled and direct docking system, Molex's Serial ATA connectors ensure the most stringent demands in performance are met with the best cost/performance ratio.



## Serial ATA\* The Next Generation Storage Interface

We have a full range of desktop, server and notebook storage interconnects to suit your needs. For desktop, we offer a range of device and system plugs, as well as a range of signal and power cable assemblies. Our solutions for Server applications include device plugs and vertical backplane receptacles configured to your requirements. Our Notebook solutions include low-profile hard drive device plugs and docking receptacles.

Contact our sales representative for enquiries or visit our website at [www.molex.com](http://www.molex.com) for more information.



## SERIAL ATA\* SOLUTIONS FOR DESKTOP STORAGE

Host Connector Options

System Plug

Device Plug

Disk Drive

Signal Cable Straight

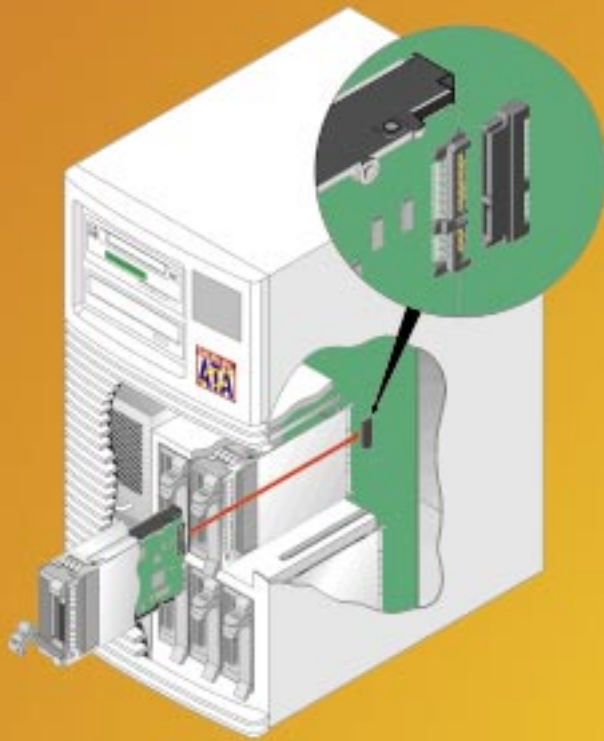
Power Cable Assembly Pigtail Version

System Plug Reverse	System Plug Standard	Footprint A – Straight Vertical Signal Plug	Footprint B – Staggered Vertical Signal Plug	Device Plug
Signal Cable Straight Generation 2 speed	Signal Cable Straight Generation 1 speed	Power Cable Assembly Dual-ended version	Power Cable Assembly Pigtail version	



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## SERIAL ATA\* SOLUTIONS FOR SERVER STORAGE



Device Plug



Vertical Backplane Receptacle

## SERIAL ATA\* SOLUTIONS FOR NOTEBOOK STORAGE



Docking Receptacle



Device Plug

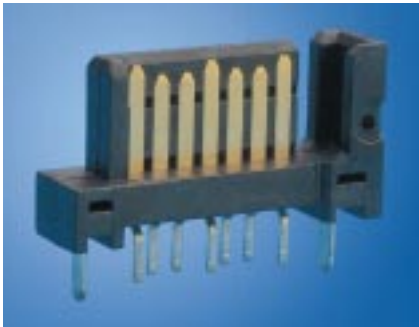
## DESKTOP STORAGE



**System Plug Reverse  
Right Angle**  
67490-0220  
67490-0221



**System Plug Standard  
Right Angle**  
67490-9220  
67490-9221



**Footprint A  
Straight  
Vertical Signal Plug**  
67491-0010  
67491-0011



**Footprint B  
Staggered  
Vertical Signal Plug**  
67491-0030  
67491-0031



**Signal Cable Straight  
Meets Generation 2 speed**  
88750-5300 (0.5m, 19.7")  
88750-5400 (1.0m, 37.4")



**Signal Cable Straight  
Grey  
Meets Generation 1 speed**  
88750-5310 (0.5m, 19.7")  
88750-5410 (1.0m, 37.4")



**Power Cable Assembly  
Dual-ended Version**  
88751-1310 (0.15m, 6")  
88751-1311 (0.15m, 6")



**Power Cable Assembly  
Pigtail Version**  
88751-1410 (1.5m, 59.1")  
88751-1411 (1.5m, 59.1")

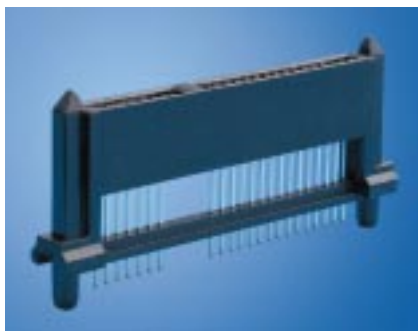


**Device Plug**  
87679-0001

## SERVER STORAGE



Device Plug  
87679-0001



Vertical Backplane  
Receptacle  
Extended Height  
(Through Hole)  
87678-0001



Vertical Host Receptacle  
Standard Height  
(Through Hole Press-Fit)  
87701-0002



Vertical Host Receptacle  
Standard Height  
SMT  
87713-0001



## NOTEBOOK STORAGE



Docking Receptacle  
Right Angle  
67492-0220  
67492-0221



Device Plug  
87703-0001



## SERIAL ATA\* ATTRIBUTES

Attributes	Serial ATA	Parallel ATA	SCSI	Fiber Channel
Low Cost	Yes	Yes	No	No
Simple Protocol	Yes	Yes	No	No
Long Cable	1m	No	Yes	Yes
Hot Plug	Yes	No	Yes	Yes
Small, Flexible Cable	Yes	No	No	Yes
Low Pin Count	Yes	No	No	Yes

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## DESKTOP STORAGE

	Signal Plug		Cable Receptacle		Device Plug
	Right Angle	Vertical	Signal	Power (Crimping Type) Housing and Terminal	
<b>Electrical</b>					
Current	1.5A				
Initial Contact Resistance	30 milliohms max.				
Dielectric Withstanding Voltage	500V AC for 1min. at sea level				
Insulation Resistance	1000 Megohms min.				
<b>Physical</b>					
Housing	High Temperature Thermoplastic		Thermoplastic		High Temperature Thermoplastic
Contact	Copper Alloy				
Plating – Contact	Selective Gold				
Operating Temperature	-25 to +85°C				-40 to +105°C
<b>Reference Information</b>					
Packaging	Tray (Bag or Box for Signal Cable and Power Cable Assemblies)				

## SERVER STORAGE

	Device Plug	Vertical Backplane Receptacle		
		Standard Height Through Hole Press-Fit	Standard Height SMT	Extended Height Through Hole
<b>Electrical</b>				
Current	1.5A			
Initial Contact Resistance	30 milliohms max.			
Dielectric Withstanding Voltage	500V AC for 1min. at sea level			
Insulation Resistance	1000 Megohms min.			
<b>Physical</b>				
Housing	High Temperature Thermoplastic			
Contact	Copper Alloy			
Plating – Contact	Selective Gold			
Operating Temperature	-40 to +105°C			
<b>Reference Information</b>				
Packaging	Tray			

## NOTEBOOK STORAGE

	Device Plug	Docking Receptacle
<b>Electrical</b>		
Current	1.5A	
Initial Contact Resistance	30 milliohms max.	
Dielectric Withstanding Voltage	500V AC for 1min. at sea level	
Insulation Resistance	1000 Megohms min.	
<b>Physical</b>		
Housing	High Temperature Thermoplastic	
Contact	Copper Alloy	
Plating – Contact	Selective Gold	
Operating Temperature	-40 to +105°C	
<b>Reference Information</b>		
Packaging	Tray	



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