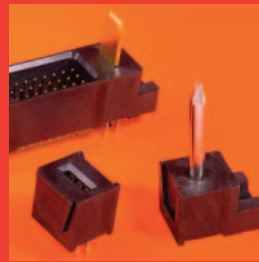
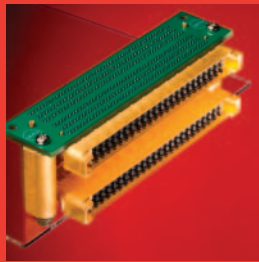
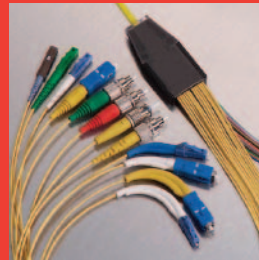


Product and Application Guide

Electronic, Electrical and Fiber Optic Interconnection Products and Systems



One Source.
Worldwide.





Who We Are

A World Leader In Interconnect Technology

Molex is the second largest connector manufacturer in the world with more than 100,000 quality products available through a network of direct sales representatives and authorized distributors. With worldwide design, engineering and manufacturing capabilities, we can support your needs through 58 manufacturing facilities in 19 countries.

Molex is at the forefront of nearly every electronic, electric and optical technology. While our interconnect products are integral to the success of thousands of applications in many industries, we also provide a variety of other solutions including heat sinks, antennas, switch products, industrial components, integrated I/O subsystems, cable assemblies — even structured cabling systems.

At Molex, we have become successful by building relationships and developing an in-depth knowledge of our customers' technological challenges, as well as each industry's current standards. In fact, Molex is an active participant in many domestic and international standards organizations — with many of our innovations eventually becoming the standard that others follow.

Molex products, combined with options in packaging and application equipment, provide the most innovative solutions at the lowest applied cost possible. As an end-to-end provider of interconnect-related technology, we can develop a completely integrated solution — from cables to connectors, from PCBs to bezels — under one global roof. Molex offers experience in all aspects of connector and connector-related technologies, including thermal management, antenna and integrated products such as switches, high performance cable assemblies and backplane assemblies.

1 PCB and Wire Connectors

With PCB and wire connectors ranging from 0.40 to 7.92 mm (.016 to .312") pitch and capable of handling from 2.0 to 7.0A, Molex offers a wide range of solutions for nearly every electronics need.

2 Custom Headers

Molex is your source for both high volume and smaller volume/prototype needs. We can provide a total header solution through our custom header program for products and options not found in our full-line catalog.

3 Power Connectors

Power connectors come in a variety of wire sizes for all operating voltages with current carrying capability from 5.0 to 115.0A per circuit. We ensure that all of our power connectors meet appropriate agency approvals and use superior materials and platings.

4 FFC/FPC Connectors

Molex offers a wide variety of connectors for flat flexible cable (FFC) and flexible printed circuitry (FPC). Our actuators—pre-assembled covers that secure the connection between the FFC/FPC and the connector terminals — are offered on 0.30, 0.50, 1.00, 1.25 and 2.54mm pitch.

5 Ribbon Cable Systems, Wire Traps, Cable Jumpers and Holders

Come to Molex for ribbon cable jumpers, high flex ribbon cable, wire traps and a variety of receptacles and headers for applications where a ribbon cable solution is appropriate. Wire trap connectors can help minimize harness assembly costs and provide secure cable retention over multiple cycles.

6 Backplane Connector Systems

Molex provides a variety of copper and optical backplane solutions. Backplane connectors are available in a wide range of speeds and standards and support applications that require very high interconnect density and high speed signal integrity.

7 Storage Network Interconnects

We offer several industry standard interconnect systems (from 1 to 10 Gbps) to attach storage units to a backplane or cable assembly. Molex also supplies additional integration services.

8 Sockets and Edgecard Connectors

From microprocessor, transistor and IC sockets to one-piece, board-to-board card-edge devices, Molex offers a wide range of sockets, edgecard, and internal memory interconnect systems in a variety of styles and pitches including low profile, through hole and SMT.

9 Memory Card Systems

Memory cards provide transportable, durable storage for everything from mobile phones, to set-top boxes to digital cameras. Molex has solutions for Cardbus, CompactFlash, MMC, SD, Mini-SD, Memory Stick, xD and SIM card readers.

10 I/O Connectors

ISO-certified manufacturing processes and rigorous product testing ensure the highest possible signal integrity in our I/O connectors. From USB to IEEE 1394b and from InfiniBand* to 10 Gigabit Ethernet, you will find an I/O solution that fits your application.

11 Modular Plugs and Jacks

Molex modular plugs and jacks offer exceptional performance for voice, data and high-speed networking applications and are offered in a variety of styles and configurations, including shielded and non-shielded, keyed and non-keyed, low-profile and ganged options with or without lightpipes.

12 RF Coaxial Connectors

As a leading innovator of today's RF/microwave technologies, Molex offers a complete family of standard products, as well as custom-made products for your specific application needs.

13 Fiber Optic Connectors and Cable Assemblies

When it comes to advanced fiber optic interconnect systems, Molex has what you need. Our extensive product offering includes a full range of single-fiber and multi-fiber passive optical interconnect solutions, including connectors, adapters, backplanes and value-added components such as FlexPlane™ assemblies and Optical Shuffle™.

14 Integrated Products: Harness Assemblies

From electrically characterized backplanes to full enclosure harnesses, Molex offers high-end design services for fully integrated solutions. Whether you're looking for automotive or non-automotive solutions, we can address your needs for higher signal density, higher speeds and power. Molex harness capabilities complement its connector offering by providing a total interconnect solution to meet your cost and performance needs.

15 Integrated Products: I/O Cable Assemblies, Modules and Cages

Molex has substantial experience in the production of I/O interconnects and cable assemblies. Our broad line of parallel and serial shielded I/Os offers maximum design flexibility and value. We can provide selected services or start-to-finish turnkey assistance. Servicing all applications from kilobits to gigabit, signal to power, Molex is a leader in the I/O cable assembly solutions.

16 Integrated Products: PCBA, Flex Circuit and Membrane Switch Assemblies

Our electro-mechanical technology ensures excellent quality, from adding plastic or metal brackets to providing total box builds. Flex circuit assemblies are highly customized to provide

customers with interconnect solutions. Our extensive switch product offering includes a complete line of assemblies and switches, serving virtually any market. Whether we're providing I/O cards, backplanes, membrane switches or partial box build services, Molex is your source for your fully integrated PCBA interconnect needs.

17 Structured Cabling Systems—Molex Premise Networks

We provide a comprehensive product portfolio, including UTP, FTP, STP and fiber optic cabling systems. All products comply with the relevant industry standards and our Category 6 system has been independently verified by Intertek ETL SEMKO. Our cabling systems are backed by a 25 year System Performance Warranty.

18 Automotive Connectors

For years, Molex has been providing vehicle manufacturers and their suppliers with comprehensive capabilities. We design connector systems for on-engine applications and under chassis applications for harsh environments.

19 Industrial Connectors

Industrial connectors and subsystems include hardened solutions for applications such as robotics, industrial computing and vision systems. Choose from terminal blocks, I/Os, solderless terminals, sealed connectors and much more.

20 Heat Sinks

Molex is a leader in thermal solution design and fabrication. From extrusions to stamped fin, skiving to integrated heat pipes and beyond, Molex has a product to fit your application. With years of OEM/ODM design experience, our thermal management teams are equipped to drive products quickly from concept to market.

21 Antennas

Molex manufactures antennas for high-volume mobile telecom customers, combining our manufacturing technology and antenna design expertise to produce antennas that improve signal quality, range and battery life. We also provide mid- and long-range internal antennas for wireless LAN and coaxial applications.

22 Application Tooling

Molex provides all the tooling necessary to apply our interconnect systems in the production environment, from hand-held devices, to manual press tools to semi-automatic bench tools to fully automatic and specialized machinery. Technologies include crimping, insulation displacement, wire processing and more.

* InfiniBand is a trademark of the InfiniBand Trade Association

Application Guide

Molex Product Family		Consumer				DataComm/Storage				Industrial				Networking/Telecom				Automotive									
		White Goods	Brown Goods	Multimedia	Medical	Military	Security/Alarms	Vending/Gaming	Business Machines	Storage	High-End Computer	Low-End Computer	Peripherals	Transportation	Construction/Mining	Energy/Power	Production Equipment	Environ. Equip. & Controls	Instrumentation	Infrastructure	Networking	Broadcast Equipment	Home/Office Equip.	Mobile Devices	Body Electronics	Comfort/Controls	Powertrain
PCB	Compression			X	X						X	X												X	X		
	Detachable B-to-B		X				X																		X	X	
	EBBI™/SCA-2	■							X	X	X						X	X	X								
	IEEE 1386							X	X	X	X	X					X	X	X								
	Plateau HS Mezz™	■							X	X	X	X								X	X	X					
	SliderZ™		X					X									X	X	X								
Wire Connectors	SlimStack™	■		X	X		X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X
	C-Grid®/SL™	■	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X				X			X	
	KK®	■	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X				X				
	MicroBlade™	■	X	X			X	X			X						X	X					X			X	
	MicroClasp™	■	X	X	X	X	X	X			X				X		X	X					X			X	
	Mi-II™	■	X	X			X	X									X						X				
	Milli-Grid™	■	X	X	X		X	X		X	X						X	X							X	X	
	Mini Mi-II™	■		X	X	X		X	X			X					X	X	X							X	
	Mini-Lock™	■	X	X	X	X		X				X						X					X				
	Mini-SPOX™	■		X				X	X									X	X								
	PanelMate™	■			X	X						X	X										X	X			
	PicoBlade™	■		X	X	X		X			X	X					X	X	X				X			X	
	Pico-Grid™	■				X					X	X															
	Pico-SPOX™	■		X	X	X		X	X			X	X					X	X				X			X	
Sherlock™	■		X	X	X		X	X			X						X	X									
Power	iCool™ VRM								X	X									X	X							
	Macro-Lock™	■	X	X			X						X				X	X					X		X	X	
	Micro-Fit 3.0™	■		X	X	X		X	X	X			X				X	X					X		X	X	
	Micro-Fit 3.0 BMI™	■					X	X	X				X				X	X					X				
	Mini-Fit BMI™	■	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Mini-Fit IDT™ (SMT)	■	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Mini-Fit Jr.™ /Mini-Fit HCS™	■	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Mini-Fit Sr.™	■	X							X	X			X	X	X				X	X	X					X
	Mini-Fit SMC™ / Mini-Fit CPI™	■							X	X	X			X	X	X	X	X	X	X	X	X					
	Mini-Fit TPA™	■												X	X	X	X	X							X	X	
	MLX™	■	X					X						X	X	X	X										
	MX150™/MX150L™	■	X			X								X	X	X	X	X							X	X	X
	Pin & Socket (.062 and .093)	■	X	X				X	X			X	X	X	X	X	X	X	X								
	Power Plus™ (SSI)							X		X	X	X						X	X	X	X			X			
	Power Dock™								X	X								X	X	X	X						
	RAST 5.0	■	X					X																			
	SPOX™	■		X	X			X	X			X	X					X	X								
Sabre™	■	X					X		X	X			X	X	X	X	X	X	X	X	X						
Terminal Blocks		X	X	X			X	X					X	X	X	X	X	X	X	X	X						
FFC/FFPC	BackFlip™		X	X	X			X		X	X	X												X	X	X	
	Easy-On™		X	X	X			X		X	X	X												X	X	X	
	Premo-Flex™		X	X	X			X	X	X	X						X	X						X	X	X	
Ribbon Cable	Picoflex™	■	X	X	X			X	X							X	X	X						X	X		
	QF-50™	■						X	X							X	X	X									
Ribbon Cable Jumpers	■	X		X			X	X								X	X	X						X	X		

■ Molex offers harness, I/O, PCBA or subassembly integrated solutions for these products.



Molex Product Family		Consumer							DataComm/Storage				Industrial			Networking/Telecom			Automotive									
		White Goods	Brown Goods	Multimedia	Medical	Military	Security/Alarms	Vending/Gaming	Business Machines	Storage	High-End Computer	Low-End Computer	Peripherals	Transportation	Construction/Mining	Energy/Power	Production Equipment	Enviro. Equip. & Controls	Instrumentation	Infrastructure	Networking	Broadcast Equipment	Home/Office Equip.	Mobile Devices	Body Electronics	Control/Controls	Powertrain	Safety/Chassis
Backplane	DIN 41612	X		X		X	X	X		X	X	X						X	X	X	X	X						
	GbX®								X	X								X	X									
	HDM®								X	X								X	X	X	X	X						
	MFB™							X	X	X	X	X						X			X	X						
	MZPT™							X	X	X	X	X						X			X	X						
	Omnigrig®			X		X				X								X	X	X				X				
	Plateau HS Dock™							X	X	X	X								X	X	X							
VHDM® Family							X	X										X	X	X								
Storage	SSA /IEEE 1394							X	X	X									X	X	X							
	Serial Attach SCSI							X	X	X									X	X	X							
	SCA-2							X	X	X									X	X	X							
	Serial ATA							X	X	X	X								X	X	X							
Socket/Edgecards	DDR DIMM/DDR2							X	X	X									X	X	X							
	DDR S.O. DIMM/DDR2			X	X			X	X										X	X	X							
	DIMM/Mini-DIMM		X	X	X			X	X	X	X							X	X	X	X	X						
	HiSpec™/HiSpecGS™							X	X										X	X	X							
	LGA Sockets		X	X				X	X	X	X	X							X	X	X	X						
	Micro-PGA							X	X	X	X								X	X	X							
	PCI/PCI Express							X	X	X							X	X	X									
	SIMM		X	X	X			X			X	X						X					X					
Memory Card Systems	CompactFlash*		X	X	X		X			X	X							X		X	X	X	X		X			
	Memory Stick†		X	X			X			X	X												X		X			
	Mini-SD/SD Card		X	X	X		X			X	X												X		X			
	MMC Card		X	X	X		X			X	X												X		X			
	PC Card/Cardbus‡						X			X	X							X		X	X	X						
	SIM Cards				X	X	X																	X				
	SmartCard		X	X	X		X	X																X				
Input/Output	10 Gigabit Ethernet							X	X		X								X	X		X						
	Circular (Euro-C™, Nano-C)												X	X	X	X	X	X										
	Commercial Micro-D			X	X			X	X										X									
	CRC™			X										X	X	X	X	X	X									
	DMS-59™						X		X											X			X					
	Ethernet						X	X	X	X										X	X							
	Fibre Channel							X	X		X									X	X	X	X					
	GBIC							X	X											X	X	X	X					
	HandyLink™			X	X		X												X				X	X	X			
	HDMI		X	X	X			X		X	X	X									X							
	HMC™												X	X	X	X	X											
	HSSDC2							X	X											X	X							
	HTC™												X	X	X	X	X											
	IEEE 1394		X	X	X			X	X	X	X								X				X		X			
	IEEE 1394b		X	X	X			X	X	X	X								X						X			
	InfiniBand§										X									X	X							
LaneLink™							X	X											X	X								
Leaf Style			X	X			X				X						X	X	X									

Input/Output continued on page 6

■ Molex offers harness, I/O, PCBA or subassembly integrated solutions for these products.

HDM, VHDM and GbX are registered trademarks of Teradyne Inc.

*CompactFlash is a registered trademark of the CompactFlash Association.

† Memory Stick is a trademark of Sony Corporation.

‡ PC Card and CardBus are registered trademarks of PCMCIA/JEITA.

§ InfiniBand is a trademark of the InfiniBand Trade Association.





Molex Product Family

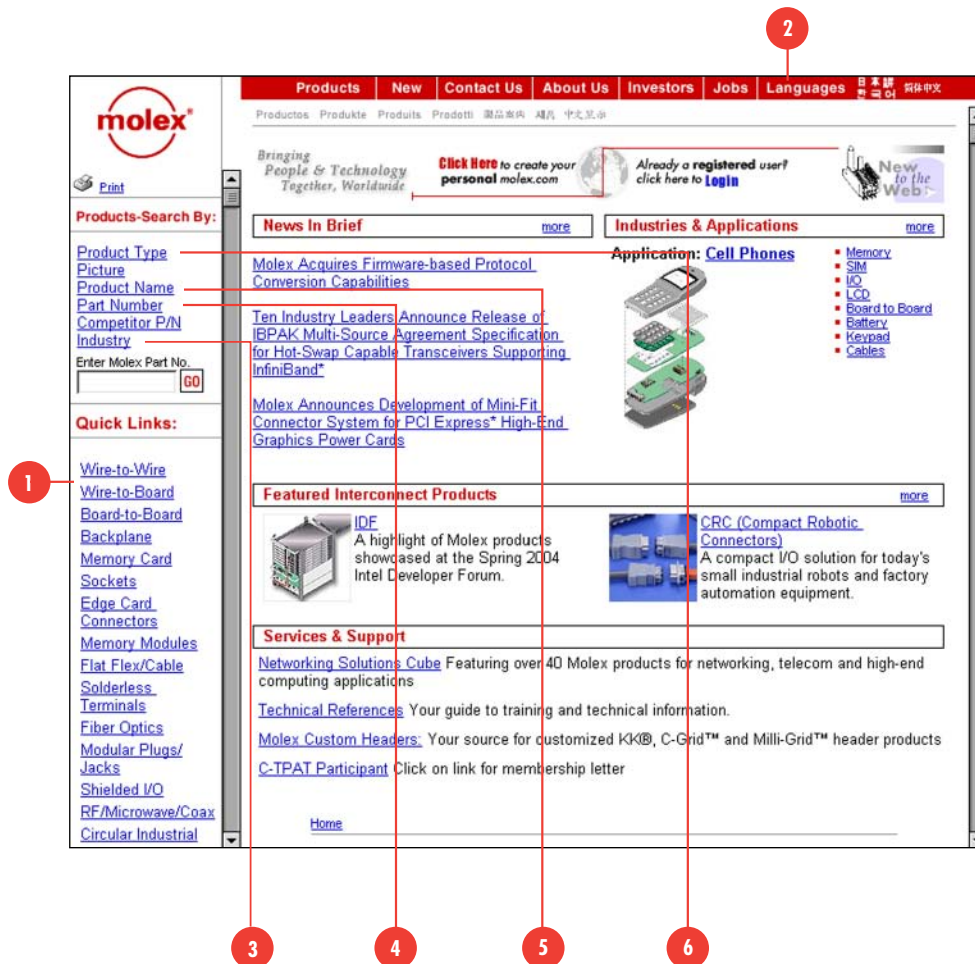
	Consumer						DataComm/Storage				Industrial				Networking/Telecom			Automotive									
	White Goods	Brown Goods	Multimedia	Medical	Military	Security/Alarms	Vending/Gaming	Business Machines	Storage	High-End Computer	Low-End Computer	Peripherals	Transportation	Construction/Mining	Energy/Power	Production Equipment	Enviro. Equip. & Controls	Instrumentation	Infrastructure	Networking	Broadcast Equipment	Home/Office Equip.	Mobile Devices	Body Electronics	Comfort/Controls	Powertrain	Safety/Chassis
Input/Output (Continued)																											
LFH™				X	X			X	X	X									X	X	X						
MicroCross™ DVI		X	X	X				X		X	X										X						
SCSI 760/320									X	X		X							X	X							
SFP, XFP, XPAK, XENPAK								X	X	X									X	X	X	X					
TDP™			X	X				X	X	X									X	X	X						
USB 2.0/USB OTG		X	X	X		X		X		X	X						X						X		X		
Ultra™ VHDCI		X	X	X		X		X	X	X	X						X		X	X			X		X		
Modular Jacks/Plugs																											
Cat 5e/6 Modular Jacks								X	X	X	X								X	X		X					
GigaJacks								X	X										X	X							
HyperJack™								X	X										X	X							
Modular Jacks with Lightpipes			X			X		X	X	X	X								X	X		X					
Modular Plugs		X	X			X	X	X		X	X							X	X	X	X	X					
RF																											
BNC/TNC			X	X	X	X		X	X	X	X							X	X	X	X	X	X				
Ganged RF				X	X				X									X	X	X	X						
MMCX/MCX			X	X	X	X	X	X	X	X								X	X	X	X		X				
SMA / SMB / SMP			X	X	X			X	X	X								X	X	X	X		X				
Type N, 7/16 DIN, BSA		X	X	X	X	X		X										X	X	X	X	X					
Fiber Optics																											
BLC, BSC Single-Fiber Backplane Systems								X	X										X	X	X						
Custom Cable Assemblies				X	X			X	X	X		X		X		X		X	X	X	X	X	X				
FlexPlane™								X	X										X	X	X		X				
HBMT and BMTP Multi-Fiber Backplane Systems								X	X										X	X	X						
Optical Shuffle™								X	X										X	X	X						
Single-Fiber and Multi-Fiber Connectors				X	X			X	X	X		X		X		X		X	X	X	X	X					
Integrated Products																											
Backplane/Midplane Assemblies			X	X				X	X	X									X	X							
Electro-Mechanical Assemblies	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Flex Circuit Assemblies				X		X	X	X	X	X	X								X	X	X		X		X		
Harnesses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
High Performance Adapters						X	X	X	X									X	X	X	X						
High Performance Cable Assemblies						X	X	X	X									X	X	X	X						
I/O Cable Assemblies			X	X	X	X	X	X	X	X	X	X			X	X	X		X	X	X	X	X		X		
PCB Assemblies				X		X	X	X	X	X	X	X						X		X	X	X	X	X	X	X	X
Switches and Tactile Domes	X	X	X	X		X	X	X		X												X	X				
Automotive																											
CMC												X	X											X		X	
SplashProof™/Mini SplashProof™												X	X		X										X		X
Industrial																											
Barrel - Ring Tongue - Splice												X	X	X	X	X	X									X	
Barrier Strips	X					X	X					X	X	X	X	X	X	X	X	X	X						
Battery Lugs												X	X	X												X	
EuroStyle® Terminal Blocks	X	X	X			X	X					X	X	X	X	X	X	X	X	X	X						
Heat Sealable												X	X	X	X	X										X	
Magnet Wire												X	X	X	X	X										X	
Quick Disconnect - Snap Plugs												X	X	X	X	X	X									X	
Misc.																											
Antennas										X													X				
CoolFin™ Heat Sinks		X	X				X	X	X	X	X										X	X					

Molex offers harness, I/O, PCBA or subassembly integrated solutions for these products.

How To Find What You Need

Molex.com is designed to help you get more done in less time. The site offers consistent navigation and improved search capabilities that enable you to search by application profile, keyword, picture, feature and part number. The site includes information on new products, 3D solid models, 2D drawings, product specifications, test results and sample requests. You can even set up your own personalized molex.com home page simply by registering—which will ensure you receive even more information on key applications in your market.

www.molex.com



- 1 Search By Product Feature**
Searching by multiple product features such as pitch, mated height, PCB thickness, current and wire size saves time by focusing only on the connectors that have the features you need.
- 2 Search In Your Language**
Search product information in the language of your choice. Molex.com offers search capabilities in English, Chinese, French, German, Italian, Japanese, Korean, Portuguese and Spanish.
- 3 Search By Industry**
You can search by industry such as Networking, Portables or Industrial. For a more detailed search once you select the application profile — notebooks, for example — you can select a specific product category such as "memory" or "microprocessors."
- 4 Search By Part Number**
Enter an entire or partial Molex part number to get the search results. Or search by competitor part number to find the Molex equivalent.
- 5 Search By Product Name**
This keyword listing allows you to link to the commercially used name for a connector family or category, such as Mini-Fit® or IEEE 1394.
- 6 Search By Picture**
Find a connector by first choosing a representative picture. A graphical interface lets you search to the series level.



Bringing People & Technology Together, WorldwideSM

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