

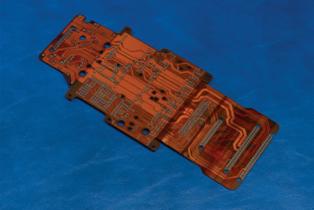
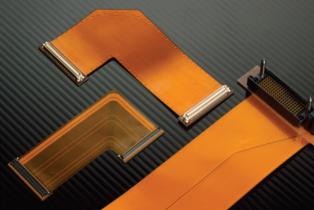
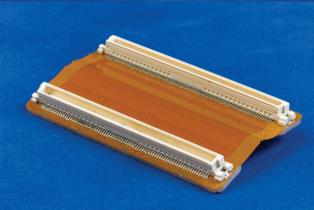


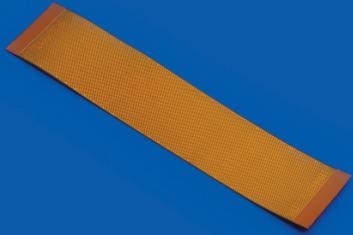
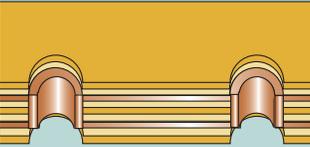
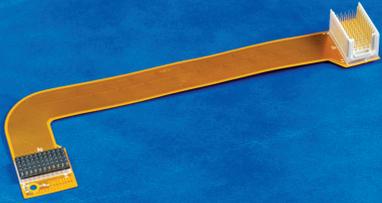
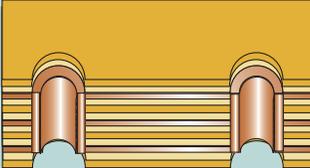
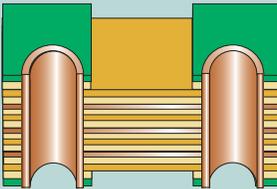
# Copper Flex Products

Molex Flexible Printed Circuit Technology is the answer to your most challenging interconnect applications. We are your total solution for Flexible Printed Circuitry because we design and manufacture both the flex and the connectors. A Flexible Printed Circuit (FPC or Flex) is an ultra-reliable technology. An FPC can be the best solution for creating products which are complex, small, lightweight or have harsh environmental conditions. Flex can be designed to meet a wide range of temperature and environmental extremes.

This custom solution has a variety of applications. An FPC can replace a traditional printed circuit board. Flex circuits are excellent for designs with high-density circuitry, and are more suited for dynamic applications such as hinge and drawer applications.

Most commonly, flex acts as an interconnect device. Flex circuits make electronic interconnection both simpler and more reliable. FPC interconnects are often used in applications where high signal speed, power distribution, heat, flexibility, or space savings are issues.

Product	Features	Flex Construction	Standard Interconnects
 <p><b>Rigid Flex</b></p>	<ul style="list-style-type: none"> <li>Surface mount on both sides</li> <li>Press-fit connector capability</li> <li>Elimination of connectors and cables for improved reliability</li> </ul>	<ul style="list-style-type: none"> <li>Rigid flex</li> <li>Combination of flexible polyimide and rigid FR4</li> </ul>	Plateau HS Mezz™, SlimStack™, 0.50mm (.020") stacking systems, VHDM®, I-Trac™, GbX®, Impact™, HDM®, HSD Press-Fit Power Connectors
 <p><b>High Speed Flex Assemblies</b></p>	<ul style="list-style-type: none"> <li>Typically 3 or more layers</li> <li>Large number of interconnect options</li> <li>High density routing</li> <li>Impedance controlled</li> <li>Low loss</li> </ul>	<ul style="list-style-type: none"> <li>Multi-layer</li> </ul>	Plateau HS Mezz, SlimStack, 0.50mm (.020") stacking systems, VHDM, C-Grid®, Milli-Grid™, EBBI™, PC Beam™
 <p><b>Flex Backplanes and Backplane Jumpers</b></p>	<ul style="list-style-type: none"> <li>High-performance materials</li> <li>Impedance Control</li> <li>Improves airflow within the system</li> </ul>	<ul style="list-style-type: none"> <li>Multi-layer</li> <li>Rigid flex</li> </ul>	VHDM, VHDM-HSD™, MZP™, PCI Express, SATA, SAS, MFB™, Omnigridd®
 <p><b>High Density Flex and Flex Jumpers</b></p>	<ul style="list-style-type: none"> <li>Typically 2 or more layers</li> <li>Tight line and space widths</li> <li>Reduces weight</li> <li>Better thermal characteristics than standard rigid board constructions</li> </ul>	<ul style="list-style-type: none"> <li>Double sided</li> <li>Multi-layer</li> <li>ZIF Jumpers</li> </ul>	C-Grid, Milli-Grid, SlimStack, 1.00 to .030mm (.039 to .012") board-to-board systems
 <p><b>Flex Interconnect Assemblies</b></p>	<ul style="list-style-type: none"> <li>Virtually unlimited variety of interconnect options</li> <li>Reduces assembly time</li> <li>Excellent thermal management</li> </ul>	<ul style="list-style-type: none"> <li>Single sided</li> <li>Single sided dual access</li> <li>Double sided</li> <li>Multi-layer</li> </ul>	C-Grid, Milli-Grid, SlimStack, 1.00 to .030mm (.039 to .012") board-to-board systems, MicroCross™ DVI, RJ-11, RJ-45, Mini-Fit®, Micro-Fit 3.0™, EBBI™, CradleCon™, LFH™, HDMI, USB
 <p><b>Power Flex</b></p>	<ul style="list-style-type: none"> <li>Eliminates wire harnesses</li> <li>Reduces package size</li> <li>Power and signal through one interface</li> <li>Up to 20.0A per circuit</li> <li>Low inductance</li> </ul>	<ul style="list-style-type: none"> <li>Single sided</li> <li>Single sided dual access</li> <li>Double sided (power and return)</li> </ul>	Power Edge™, Mini-Fit™, EXTreme Power Dock™

	Flex Construction	Description	
	<p><b>Single Sided</b></p>	<p>■ One conductive layer</p>	
	<p><b>S2 - Single Sided Dual Access</b></p>	<p>■ One conductive layer, access from both sides</p>	
	<p><b>Double Sided</b></p>	<p>■ Two conductive layers</p>	
	<p><b>Multi-Layer</b></p>	<p>■ More than two conductive layers</p>	
	<p><b>Rigid Flex</b></p>	<p>■ Combination of traditional PCB and Flex created into one continuous piece</p>	

<http://www.molex.com/product/ipd/copperflex.html>

Visit our website at [www.molex.com](http://www.molex.com)