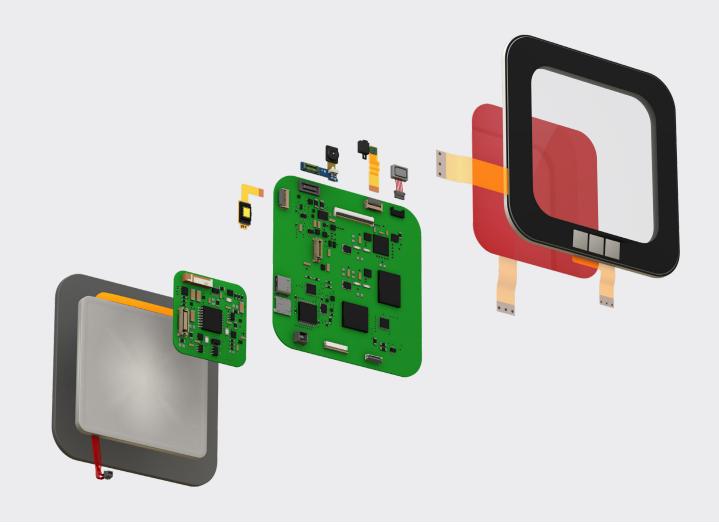
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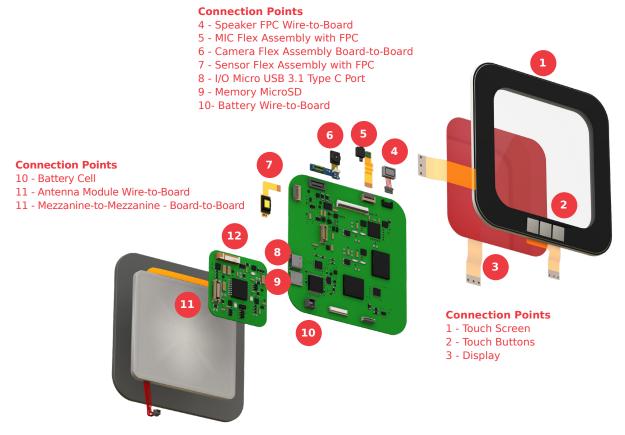
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EASY-ON FFC/FPC, SLIMSTACK BOARD-TO-BOARD AND WIRE-TO-BOARD CORE PRODUCTS





Key Microminiature Connection Points



An example of the key connections that drive micro products with Molex FFC, Board-to-Board and Wire-to-Board Connectors

Microminiature connectors initially designed for consumer handheld devices, are now being in applications across many industries. Furthermore, companies are looking for new ways to use technology to reach and engage with customers. These new application features have translated into more modularity and increased flexible printed assemblies for key features.

Why more applications across industries are using microminiature connectors:

- Increased user interface
- Feature-rich options
- Profile changes

In turn, feature-rich options and increased user interface result in:

- Increased flexible print assemblies
- Modular design (multiple PCB designs)

All of the above are increasing the amount of microminiature connection points in applications.

Key Microminiature Connection Points

SLIMSTACK BOARD-TO-BOARD CONNECTORS

SlimStack Board-to-Board Connectors offer a wide selection of low-profile, narrow width options in various mated heights and circuit sizes.

EASY-ON FFC/FPC CONNECTORS

Super-fine pitch and small-size FFC/FPC Connectors with ZIF, non-ZIF, slider, flip actuator and FPC-to-board styles and a variety of circuit sizes deliver both high reliability and speedy data rates.

SIGNAL WIRE-TO-BOARD CONNECTORS

Feature a wide variety of available wire-to-board signal connectors that provide excellent design flexibility and cost-savings.



Easy-On FFC/FPC Connector Core Products

Pitch (mm)	Orientation	Contact Position	Circuits	Series Name	Series No.	Image		
		Dual	4 to 32	<u>FBH1</u>	<u>503480</u>	-TIMMIN		
		Bottom	4 to 80	<u>FD19</u>	<u>505110</u>			
	Right-Angle		4 to 20		<u>52745</u>			
		Тор	21 to 30		<u>52435</u>			
0.50			30 to 50	Clidor	<u>54104</u>			
0.50			4 to 20	<u>Slider</u>	<u>52746</u>			
		Bottom	21 to 30		<u>52437</u>			
			30 to 50		54132			
	Vor	ficel	4 to 70	<u>V-Flip</u>	<u>501951</u>			
	Ver	lical	6 to 42	Slider	<u>52559</u>			
		Bottom	4 to 30	<u>FD19</u>	200528	- and the		
	Right-Angle	Тор	3 to 34		<u>52207</u>			
1.00		Bottom	4 to 30	<u>Slider</u>	<u>52271</u>			
	Ver	tical	5 to 30		<u>52610</u>	Constant of the second s		

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SlimStack Board-to-Board Connectors Core Products

	Mated Height	Mated Width	o i 11		Serie	s No.	
Pitch (mm)	(mm)	(mm)	Circuits	Series Name	Receptacle	Plug	Image
	0.60				<u>505066</u>	505070	
	0.70	•		<u>SSB RP</u>	505070	<u>505070</u>	
0.35	0.80	2.00	6 to 60		<u>505270</u>	505074	
	0.90				E0E412	<u>505274</u>	
	1.00				<u>505413</u>	<u>505417</u>	POWER SUPPLY
	0.60	2.00	8, 10	Battery (10.0A)	<u>505473</u>	<u>505476</u>	POWER SUPPLY
	0.70	2.60	20 to 60	<u>HRF (7L)</u>	<u>503304</u>	<u>503308</u>	
	0.70	2.60	6 to 18	<u>HRF (7S)</u>	<u>503548</u>	<u>503552</u>	۰ 🔅
0.40	0.75	2.50	8	<u>Battery (6.0A)</u>	<u>505004</u>	<u>505006</u>	POWER SUPPLY
	0.80	2.50	10 to 50	<u>B8</u>	<u>505550</u>	<u>505551</u>	
	1.50	3.40	10 to 100		<u>51338</u>	<u>55909</u>	
	1.80	4.20	10 10 100	J-Bend	<u>500913</u>	<u> </u>	~ ~
	2.00	3.40	12 to 80	<u>J-Denu</u>	<u>51338</u>	<u>501745</u>	
	2.30	4.20	12 10 00		<u>500913</u>	001140	
	6.00					<u>55091</u>	-
	7.00					<u>53625</u>	
	8.00				<u>52885</u>	<u>53647</u>	
	9.00					<u>53649</u>	• •
0.635	10.00	6.40	20 to 240	<u>0.635</u>		<u>53627</u>	
	12.00					<u>55091</u>	
	13.00					<u>53625</u>	
	14.00				<u>52901</u>	<u>53647</u>	
	15.00					<u>53649</u>	
	16.00					<u>53627</u>	

Pitch (mm)	Product Family	Terminal	Housing	Straight Plug Header	Right-Angle Plug Header	Plating	Lock Type	Circuit Sizes	Wire Gauge	Current (max.)	Voltage (max.)	Key Features
	Pico-Lock 1.00mm	<u>503765</u>	<u>503764</u>	N/A	503763	Gold	Side Positive	2, 3, 4, 5, 6	AWG 28-30	2.5A	150V	Space saving/ positive side locks/high current
		501334-0000		501331 (SMT)*		Tin					50V	Small pitch, wide variety Gold plating version available
		<u>501193-3000</u>	501330 (Single)*	<u>504449</u> (SMT)	<u>202396</u> (SMT)	Gold 0.1µm	Frict (2, 3, circu	, 4, 5		2.04		
		<u>501193-6000</u>	2, 3, 4, 5 circuíts 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	<u>203556</u> (SMT)	<u>203558</u> (SMT)	Gold 0.38µm	Inner Po (6, 7, 8, 11, 13, 14 circu	, 9, 10, 12, 4, 15				
		501193-5000	circuits 501330 (Single)*	203557 (SMT)	<u>203559</u> (SMT)	Gold 0.76µm						
1.00		501334-0000		<u>501940 (</u> SMT)*	<u>501953 (</u> SMT)*	Tin						
	Pico-Clasp*	<u>501193-3000</u>		<u>501940</u> (SMT)	<u>501953</u> (SMT)	Gold 0.1µm	Outer	3, 4, 5	AWG 28-32			
		501193-6000	<u>501939</u> (Single)*	203560 (SMT)	203562 (SMT)	Gold 0.38µm	Positive					
		<u>501193-5000</u>		<u>203561</u> (SMT)	203563 (SMT)	Gold 0.76µm						
		501193-3000		501190 (Dual, SMT)	501571 (Dual, SMT)	Gold 0.1µm						
		<u>501193-6000</u>	<u>501189 (</u> Dual, SMT)	2 <u>03564 (</u> Dual, SMT)	<u>203566 (</u> Dual, SMT)	Gold 0.38µm	Inner Positive 40, 50					
		<u>501193-5000</u>		203565 (Dual, SMT)	<u>203567 (</u> Dual, SMT)	Gold 0.76µm						

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Pitch (mm)	Product Family	Terminal	Housing	Straight Plug Header	Right-Angle Plug Header	Plating	Lock Type	Circuit Sizes	Wire Gauge		Voltage (max.)	Key Features
	<u>Pico EZmate</u>	<u>78172</u>	78172 (Single)	78171 (SMT)	N/A	Gold	Friction	2, 3, 4, 5, 6, 7		2.5A		High current (2P, AWG 28)
1.20	Pico-EZmate Slim	202655	202654 (Single)	202656 (SMT)	N/A	Gold	Friction	2	AWG 28-30	3.2A	50V	High current (2P, AWG 28)
	Pico Blade	50058/50079	- <u>51021</u> (Single)	<u>53398</u> (SMT) <u>53047 (</u> Through- hole)	53261 (SMT) 53048 (Through- hole)	. Tin Gold (R/A)	Friction	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 17 (53261, Tin)	AWG 28-32 (50058 Tin only) AWG 26-28 (50079, Tin/Gold)	2.5A	125V	Ultra small size, SMT and through-hole option wire-to-wire is also available
1.05		50125/50133 (Plug terminal)		51047 (Plug HSG)	N/A	Tin		2, 3, 4, 5, 6, 7, 8, 9, 10	AWG 28-32 (50133) AWG 26-28 (50125)	2.5A	125V	Wire-to-wire
1.25	Micro-Lock Plus 1.25mm*	Xa	505565 (Single)*	<u>505568</u> *	<u>505567</u> *	Tin Gold	Outer Positive	Single-row 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	- AWG 26-30	2.2A	501/	Small size, outer positive lock
		<u>505431</u>	505432 (Dual)*	505433 (Dual)*	505448 (Dual)*	(Contact Molex)	Inner Positive	Dual-row 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42			50V	Small size, inner positive lock
	<u>Board-in</u> <u>1.25mm</u>	50080 / 50061	51022 (Single)	N/A	N/A	Tin	N/A	2, 3, 4, 5, 6	AWG 28-32 (50061) AWG 26-28 (50080)	1.0A	125V	Board-in
	Pico-Lock 1.50mm	504052	504051 (Single)	N/A	504050 (SMT)	Gold	Side Positive	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	AWG 24-32	3.5A	150V	Low profile and high current
1.50	Pico-SPOX	<u>87421-0100</u> 87421-0000	<u>orior</u> (oligic)	87437 (SMT)	87438 (SMT)	Tin		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 24-26 (87421-0000) AWG 26-30 (87421-0100)			Ideal solution for higher current wire-to-board
		87421-0102	87420 (Single)				Friction	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 24-26 (87421-0002) AWG 26-30 (87421-0102)	2.5A 2	250V	configurations in tight packaging applications
*Color Var	iations Available	87421-0002 Natural	<u>87439 (</u> Single) Black	<u>202705 (</u> SMT)_ Red	<u>202706</u> (SMT) Blue	G	reen				<u> </u>	

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Pitch (mm)	Product Family	Terminal	Housing	Straight Plug Header	Right-Angle Plug Header	Plating	Lock Type	Circuit Sizes	Wire Gauge	Current (max.)	Voltage (max.)	Key Features
				502584 (SMT)*	502585 (SMT)* 503175 (Through- hole)*			2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 24-28 (502579)			Low insertion force, secure mating with audible click
	<u>CLIK-</u>	502579 (AWG 24-28)	<u>502578</u> (Single)*	503395 (Bottom entry, SMT)	N/A	— Tin	Inner Postive	3, 4, 6, 7, 8, 10	AWG 26-30 (503429)	0.04	100V	Bottom entry
	Mate*	5 <u>03429</u> (AWG 26-30)	503149 (Dual)	503154 (Dual, SMT)	503148 (Dual, SMT)		Inner Postive	Vertical 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34 Right-Angle 8, 10, 12, 14, 16, 18,		2.0A		Low insertion force, secure mating with audible click
1.50			502578 (Single)	505405 (SMT)	N/A	Gold		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 24-28 (502579) AWG 26-30			Gold plating version
		502579 (AWG 24-28) 503429 (AWG 26-30)	503149 (Dual)	505406 Dual (SMT)	N/A	GOIU		8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34	AWG 26-30 (503429)			
	<u>Spot-On</u> 1.50mm	201649	201647 (Single)	201648 (SMT) (Single with nail) 201645 (SMT) (Dual	a	Tin	Inner Positive	Single 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Dual 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32,	AWG 24-28	2.0A	100V	Potting height: 5.0mm SMT type, center nail for additional mechanical strength
			201644 (Dual)	201646 (SMT)				20, 20, 30, 32, 34, 36, 38, 40				Juongui
2.00	<u>Micro-Lock</u> <u>Plus</u> 2.00mm	<u>505572</u>	505570 (Single)	505575 (SMT)	505578 (SMT)	Tin Gold (Contact Molex)	Outer Positive	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	AWG 22-26 AVSS 0.3	3.0A	250V	Small size, oute positive lock

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			Header	Right-Angle Plug Header	Plating	Lock Type	Circuit Sizes	Wire Gauge	Current (max.)	(max.)	Key Features
			<u>151062</u> (SMT)	<u>151064</u> (SMT)	Gold / Tin	Outer Positive	2, 3, 4, 5, 6, 7, 8, 9, 10		2.5A	125V	Outer positive lock, audible click to
		<u>151100</u> (Single)	151063 (Through- hole)	<u>151065 (</u> Through- hole)	Gold / Tin	Outer Positive	2, 3, 4, 5, 6, 7, 8, 9, 10				ensure good mating
Milli-Grid		The Alberton	151117 (Through- hole)	151119 (Through- hole)	Gold / Tin	Friction	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50				Single-sided polarization, glow wire material
	<u>50394</u>	<u>151192 (</u> Dual)	<u>151118 (</u> SMT)	<u>151120 (</u> SMT)	Gold / Tin	Friction	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50	AWG 24-30	2.0A (Refer to Product Spec for rating chart)		
		51110 (Dual)	87831 (Through- hole)	87833 (Through- hole)	Gold / Tin	Friction	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50				N/A
			87832 (SMT)	N/A	Gold / Tin	Friction	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50				
<u>Milli-Grid</u> <u>BMI</u>		151014 (Dual) (Cable not included)	151013 (Through- hole)	N/A	Gold	N/A	6, 8, 10, 12, 14, 16, 18, 20				Allow misalignment c up to 1mm in) and Y directior
iGrid*	501647 (AWG 22-26)		L EU	Powell	Tin	Inner Positive	10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40	AWG 22-26 (501647) AWG 26-28 (501648) 2.0A		250V	Compact desig and anti-tangle internal lock
	<u>501648</u> (AWG 26-28)	<u>501646</u> (Dual)*	501645 (Through- hole)*	<u>501876 (</u> Through- hole)*							
	503095 (AWG 26-28)		503091(Through- hole)	N/A	Gold		14, 28	AWG 26-28 (503095)			Gold plating version
<u>Spot-On</u> 2.00mm	end	201200 (Single)	201201		Tin	Inner Positive	Single 2, 3, 4, 5, 6, 7, 8, 9, 10 11, 12, 13, 14, 15, 16 Dual 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40	AWG 22-26	2.5A	250V	Potting height 7.0mm SMT type, cent nail for addition mechanical strength
Ī	<u>iGrid</u> *	Image: Signal state sta	Willi-Grid Image: Source of the second s	Milli-Grid Isioes (Through-hole) Milli-Grid Isioes (Through-hole) 50394 Isine (Milli-Grid) 50394 Isine (Milli-Grid) 151192 (Dua) Isine (Milli-Grid) Milli-Grid Isine (Milli-Grid) Soli G47 (AWG) Isine (Milli-Grid) Soli G48 (AWG) Isine (Milli-Grid) Soli G49 Isine (Milli-Grid)	Mill-Grid BMI Solidat	Mill-Grid BM Sold A Sold	Mill-Grid SD34 Solid / Tim IS1100 (Single) Solid / Tim IS1085 (Through- hole) Gold / Tim IS1192 (Through- hole) Outer Positive Mill-Grid SD34 IS1100 (Single) IS1102 (Through- hole) Gold / Tim Friction IS1112 (Through- hole) IS1112 (Through- hole) Gold / Tim Friction IS1112 (Dual) IS1112 (Through- hole) Gold / Tim Friction IS1112 (Dual) IS1112 (SMT) Solid / Tim Friction IS1110 (Dual) B7832 (SMT) N/A Gold / Tim Friction IS1110 (Dual) B7832 (SMT) N/A Gold / Tim Friction IS1110 (Dual) B7832 (SMT) N/A Gold / Tim Friction IS1014 (Dual) B7832 (SMT) N/A Gold / Tim Friction IS1014 (Dual) B7832 (SMT) N/A Gold / Tim Priction IS1014 (Dual) B7832 (SMT) N/A Gold / Tim Priction IS1014 (Dual) S01645 (Through- hole) Tim Tim Priction IS01647 (AWG 26-28) S01646 (Dual)+ S01645 (Through- hole)+	Mill-Grid Solide Istical Solide	Mill Grid Single field Single field <td>All Single finance Single finance<td>All Order Solidadi (AMB) Solidadi (ABB) Solidadi (AB</td></td>	All Single finance Single finance <td>All Order Solidadi (AMB) Solidadi (ABB) Solidadi (AB</td>	All Order Solidadi (AMB) Solidadi (ABB) Solidadi (AB

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Pitch (mm)	Product Family	Terminal	Housing	Straight Plug Header	Right-Angle Plug Header	Plating	Lock Type	Circuit Sizes	Wire Gauge	Current (max.)	Voltage (max.)	Key Features
	Micro-Latch	50212/50372	51065 (Single)	5 <u>3253</u>	<u>53254</u>	Tin	N/A	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 24-30 (50212) AWG 22-26 (50372)	2.5A	125V	Low cost, longer market history
2.00	Decard in	50034	51015 (Straight)	N/A	N/A			2, 3, 4, 5, 6, 7, 8,	AWG 26-30	2.0A	125V	
	Board-in 2.00mm	<u>35021</u>	<u>35023</u> (Right- Angle)	N/A	N/A	Tin	N/A	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	AWG 24-30	2.5A	125V	Board-in
	<u>Mini-Lock</u>	50752 (AWG 20-26) with Retainer	51163 (with Retainer)	(H=11.5, Through- hole) (H=17.5, Through- hole) (H=17.5, Through- hole)	53426 (Through- hole)	Tin	Outer Positive	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 20-26	3.0A (50351) (50837) 3.5A (50752)	250V	Wide variety TPA version available, higher profile version available for potting treatment
		50351	51103 (Single)	N/A	N/A		Wire-to- Wire		AWG 22-28	(50709)		
2.50		<u>50837</u>	N/A	51198 Plug Housing	N/A							
	Mini-SPOX	5263	5264 (Single)	<u>5267</u>	<u>5268</u>	Tin	Friction	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	AWG 22-28	3.0A	250V	Low cost, longer market history
		Ma	No. 10	N/A	N/A		N/A	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18	AWG 20-24	4.0A	250V	
	Board-in 2.50mm	50097 35021	<u>51035</u> (Straight) <u>35022</u> (Right- Angle)	N/A	N/A	Tin	N/A	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16	AWG 22-28	3.0A	125V	Board-in