

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







EXTreme Ten60Power™

Hybrid Power and Signal Connectors

molex

Designed for board-to-board, wire-to-board and panel-toboard applications, EXTreme Ten60Power™ hybrid powerand-signal solutions provide up to 260.0A per linear inch, fast response times and easy-to-configure modules

Features and Benefits

Wire-To-Board And Panel-To-Board Plug And Harness Solutions

General

Available in 2 through 6 power circuits: 0, 12, 18, and 24 signal circuits	Configurable for optimizing design requirements
Robust, high-current contact blades with 7.50mm power pitch	Provides 50.0A of current per blade, 260.0A per linear inch
Rated for resistance to arcing in hot-pluggable applications	Prevents electrical interruptions
Multiple mating levels available on plug power and signal contacts	Provides Last-Mate-First-Break (LMFB) or First- Mate-Last-Break (FMLB) capability
Available as separate components	Allows pick-and-place harness assembly and maintenance
Complete plug and harness solutions available	Removes the burden of plug and harness assembly from the customer
8 to 16 AWG power receptacle terminals, 22 to 28 AWG signal receptacle terminals	Maximum flexibility in wire gauge design requirements



Power-only and hybrid power-and-signal configurations	Maximizes number of configurations for optimized flexibility in design requirements
Right-angle and vertical PCB plug mating possible	Optimizes flexibility in design requirements

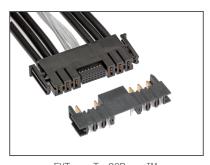
Panel-to-Board

of back of the panel

Power-only and hybrid power-and-signal configurations	Maximizes number of configurations for optimized flexibility in design requirements
Panel mount receptacle harness mates to standard EXTreme Ten60Power right-angle plug	Allows bling mating via proven EXTreme Ten60Power alignment guides
Panel mount housing flange mounts to either the front	Allows multiple chassis mounting arrangements



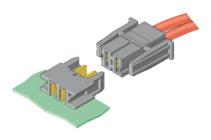
EXTreme Ten60Power™ Wire-to-Board 2-Power Receptacle Harness and Right-Angle Header



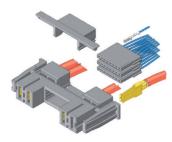
EXTreme Ten60Power™ Wire-to-Board 6-Power 24-Signal Harness and Right-Angle Header



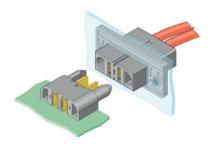
EXTreme Ten60PowerTM
Panel-to-Board 4-Power Harness and
Right-Angle Header



Wire-to-Board Power Only



Wire-to-Board Hybrid Power and Signal



Panel-to-Board Power Only

EXTreme Ten60Power™

Hybrid Power and Signal Connectors



Features and Benefits

Board-To-Board Solutions

General

General	
Low-profile design: 10.00mm height	Enhances system airflow
Standard power blades are rated up to 60.0A per blade at a 30°C T-rise	Provide 260.0A per linear inch, ensuring maximum current-to-length ratio
Available in 1- through 9-circuit split-blade power modules: 1- through 10-circuit standard power blade modules, 6- though 60-circuit signal modules; either endmount or top-mount guidance	Modules can be configured to accommodate virtually any design application
Modular assembly (modules can be arranged in virtually any configuration and added together)	Additional circuit configurations can be achieved
Right-angle and vertical orientations available	Accommodates either coplanar or perpendicular applications
Rated for resistance to arcing in hot-pluggable applications	For a wide range of applications
Robust, high-current contact blades in DC (5.50mm) and AC (7.50mm) power pitches	Provides excellent design flexibility
Multiple mating levels available on power and signal contacts	Last-Mate-First-Break (LMFB) or First-Mate-Last-Break (FMLB) capability
Split-Blade Power Modules (1 through 9 circuits)	
Isolated split mated contacts with dielectric LCP plastic (each split-blade terminal carries a 30.0A current rating at 30°C T-rise)	Shortens the distance between energized power contacts resulting in faster response times, lower overall impedance, and capacitance benefits. Increases power contact granularity if the customer does not need the standard, full 60.0A current rating for all power contacts
Modular design; custom hybrid assemblies based on standard power and signal components	Integrates into hybrid EXTreme Ten60Power assemblies along with standard power modules and signal modules to meet customers' specific requirements
3-Row Signal Module (Original Version)	
2.54 by 2.54mm pitch signal spacing	Provides design flexibility
5-Row Signal Module (High-Density Signal Version)	
2.00 by 1.65mm pitch signal spacing	Saves over 10.00mm space when using a 25-signal module versus the original EXTreme Ten60Power High-Current Connector with 24-signal modules. For use in more critical space-constrained applications

Applications

Datacommunication Equipment

Through-hole versions available in right-angle plug and receptacles; press-fit

versions available in right-angle plug and receptacles and vertical receptacles

High-End Servers

Rack Servers

Telecommunication Equipment

Hubs

Cellular Base Stations

Switches

Routers

Consumer Electronics

Appliances

Entertainment Systems

 HVAC



Provides excellent design flexibility



Telecom Routers

Servers

EXTreme Ten60Power™

Hybrid Power and Signal Connectors



Specifications

Reference Information

Packaging: Tray UL File No.: E29719

CSA File No.: LR-19980_A_ Class 6233-81 CSA tested to UL-1977 and CSA C22.2 No. 182.3-M1987

TUV: R 72081037 Designed In: Millimeters

Electrical

Voltage (max.):

Power — 600V

Signal — 250V

Current (max.):

Power:

Board-to-Board — 60.0A

Wire-to-Board — 50.0A

Panel-to-Board — 50.0A

Signal — 2.5A

Dielectric Withstanding Voltage: 1500V

Insulation Resistance (min.): 5000 Megohms

Mechanical

Pitch:

Original 3-Row Connectors:

Power — 5.50mm (DC) or 7.50mm (AC)

Signal — 2.54 by 2.45mm

High-Density Signal 5-Row Connectors:

Power — 5.50mm (DC) or 7.50mm (AC)

Signal — 2.00 by 1.65mm

Mating Force (max. per circuit):

Power Contacts:

Vertical Receptacle — 764g

Right-Angle Receptacle — 460g

Signal Contacts — 75g

Un-mating Force (min. per circuit):

Power Contacts:

Vertical Receptacle — 340g

Right-Angle Receptacle — 235g

Signal Contacts — 30g

Durability: 200 Cycles

Physical

Housing: 30% glass-filled LCP or PBT

Contact:

Power Contacts — Copper (Cu) Alloy

Signal Contacts — Copper (Cu) Alloy

Plating:

Contact Area — Select Gold (Au)

Solder Tail Area — Tin (Sn)

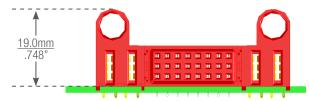
Underplating — Nickel (Ni)

Flammability Rating: 94V-0

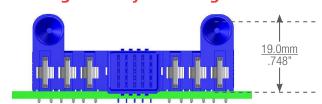
RoHS Compliant: Yes

Operating Temperature: -40 to +105°C

Top Guide Length Reduction Comparison - Orignal 3-Row vs. High Density 5-Row Signal Module



3- Row Optional Top Guides on Power Modules reduces the overall length by 13.60mm



5- Row Optional Top Guides on Power Modules reduces the overall length by 13.60mm

Ordering Information

Series No.	Component	Orientation	Interface	Power Blade Style	Function
<u>172452</u>	Plug Right Angle	- Right Angle	Wire-to-Board Harness	Standard	Power Only
<u>172453</u>					Hybrid
<u>172457</u>			Panel-to-Board Harness		Power Only
<u>172458</u>					
46437		Board-to-Board		Hybrid	
<u>171088</u>			Board-to-Board	Split Blade	
<u>172509</u>		When to Donal House	Wire-to-Board Harness		Power Only
<u>172510</u>			Wire-to-Board Harriess		Hybrid
<u>172511</u>	Vertical Receptacle	Vertical Panel to Deard Harrage	Standard	Power Only	
<u>172512</u>		vertical	Panel-to-Board Harness		
<u>46562</u>		Doord to Doord			
<u>171089</u>			Board-to-Board	Split Blade	Hybrid
<u>46436</u>	Dial	Dight Angle		Standard	
<u>171090</u>		Right Angle		Split Blade	
<u>46708</u>	TPA Retainer	-			-
<u>46709</u>	Signal Wafer		-	-	Signal Only
<u>173693</u>	Power Terminal				Power Only