



Power Products Presentation

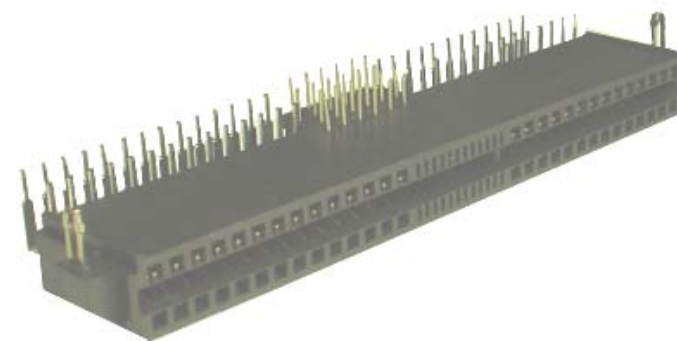
TTI Webcast

Scott Kleinle

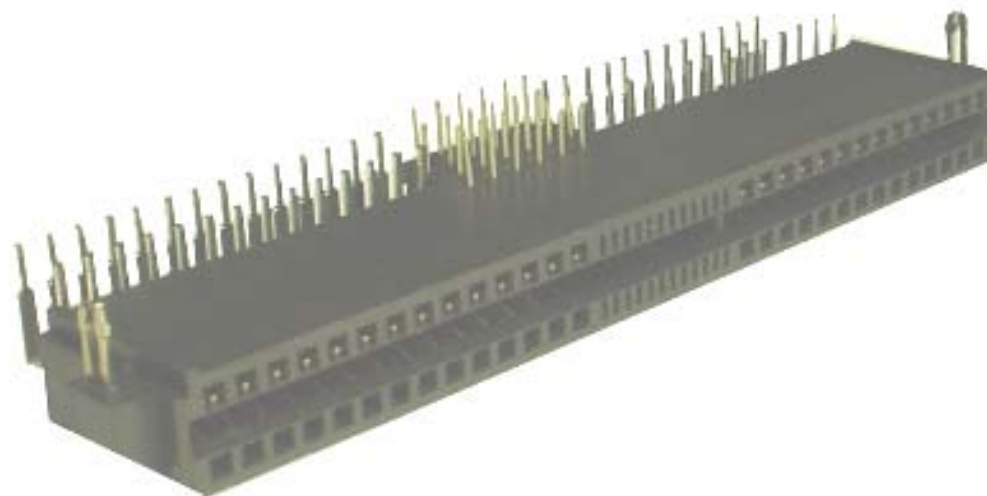
September 2006

FCI Confidential

Power Supply Interconnect



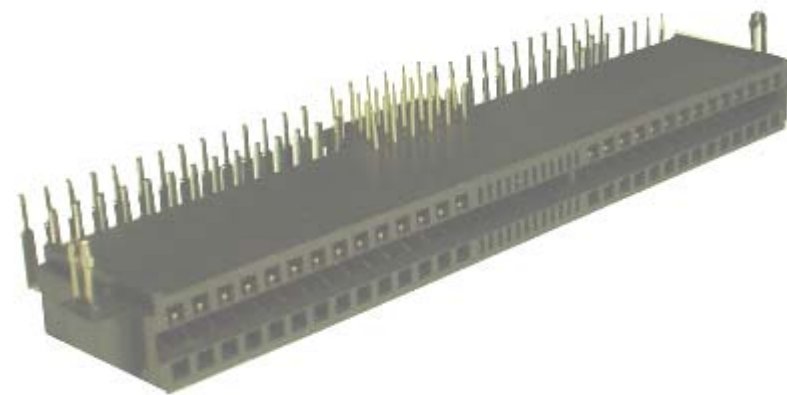
Power Card Edge



Power Card Edge Product Features



- *Low Profile: 9mm or less*
- *Single-piece solution*
- *Target Applications: 1U Servers & Power Supplies*
- *Integrated solution with signal and power*
- *Signal contacts 1.27mm pitch*
- *Power contacts: 2.54mm pitch*
- *Current rating: 7 Amps (min) per power pin (Still Air, 30°C Rise)*
- *Right Angle, Vertical & Straddle Mount Available*
- *AC Pass-thru*
- *RoHS compatible*

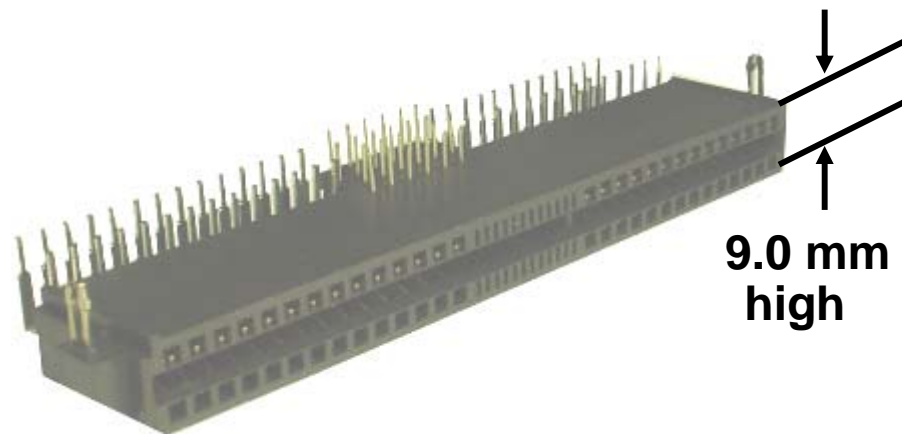


Power Card Edge



Low Profile Solution for 1U server & power supplies

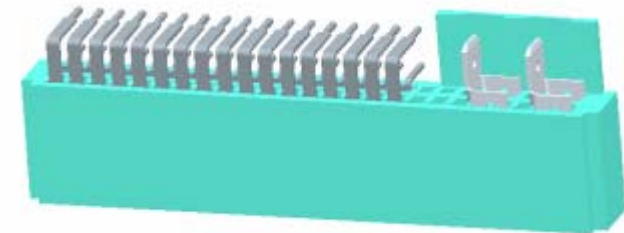
Right-Angle Options



9.0 mm
high

Base number: 10028886

- 5 power + 12 signal + 5 power
- 7 power + 12 signal + 7 power
- 10 power + 12 signal + 10 power
- 14 power + 12 signal + 14 power



Base number: 10055090

With AC Power port



Base number: 10035388

- 2x14, 2x17, 2x22, 2x24, 2x25,
- 2x28, 2x29, 2x31, 2x32 power

Power Card Edge



Low Profile Solution for 1U server & power supplies

Vertical Options

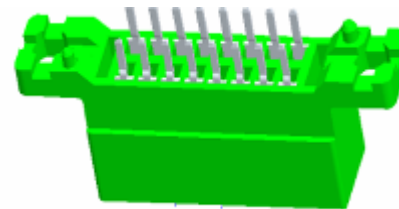
- 10046971 series

- 2x19, 2x32, 2x35 power



- 10046972 series

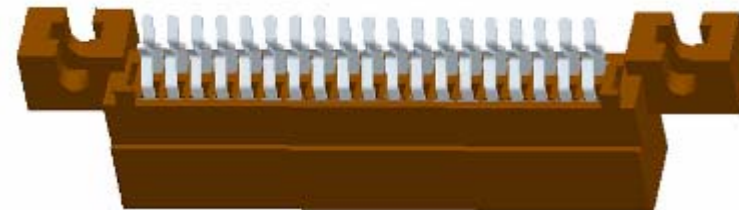
- 2x8 power



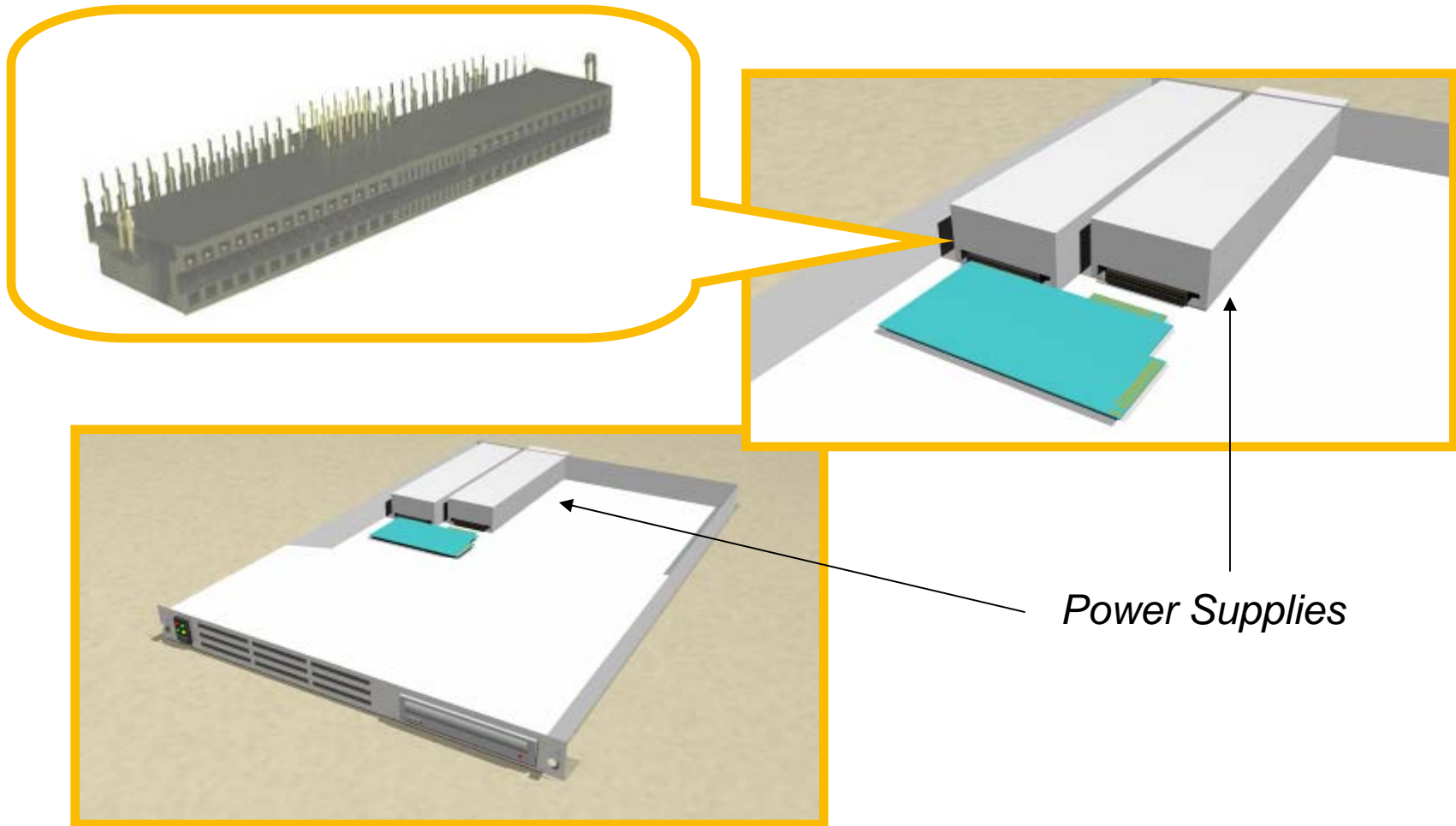
Straddle-Mount Options

- 10034908 series

- 2x19, 2x23 power



Power Card Edge - 1U Server Application



Power Supplies



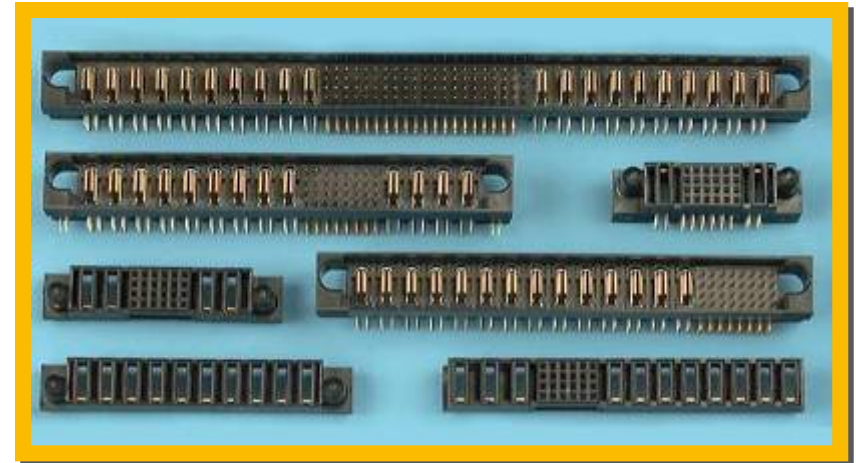
PwrBLADE®

Power Distribution Connector System

PwrBlade® Features & Benefits



- *Application: Single connector provides power and signal contacts for power distribution and power control*
- *Variable power and signal locations possible throughout the connector*
- *48A rating per individual power contact; 30A per contact for multiple power contacts (Still Air, 30°C Rise)*
- *60A per UL test guidelines*
- *Rugged blind-mate design*
- *Wide variety of configurations for custom designs: 1-20 power contacts, 0-148 signal contacts*
- *Available in solder and press-fit*
- *Coplanar & Backpanel Configurations*
- *FMLB contacts, allow up to 3 levels of power + signal sequencing (2 levels for power and 2 levels for signal)*
- *AC cable port option - segregated AC input contacts (cable pass-through)*



Data Sheets:

950562-002 SSI applications

950562-006 R/A press-fit

950562-008 PwrBlade system

PwrBlade® Applications in Servers

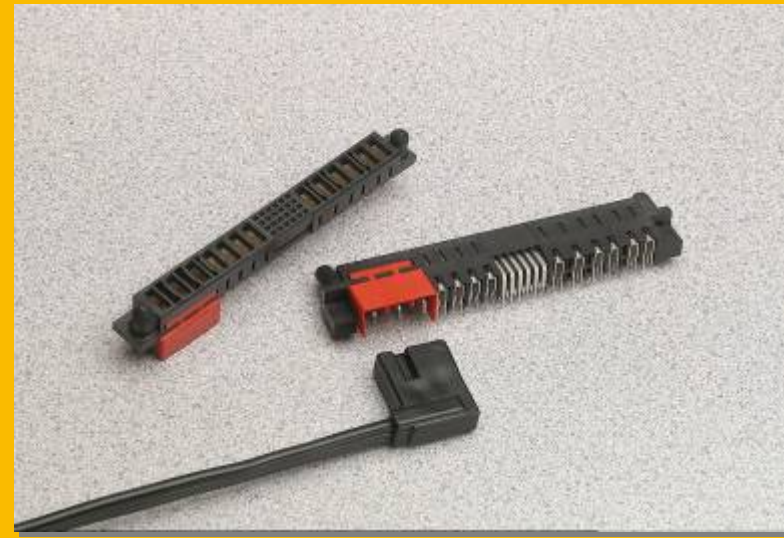


Applicable SSI Specification	Server Connector Options		Power Supply Connector Options	
	Receptacle Option	P/N	Header Option	P/N
Distributed Power Supply (DPS) Contact Configuration: 1 Power + 24 Signal + 1 Power	Right-angle Vertical, press-fit	51416-001 51666-001	Right-angle Vertical Vertical, press-fit	55415-001 51952-001 51952-002
High End Power Supply (HPS) Contact Configuration: 12 Power + 24 Signal	Vertical Vertical, press-fit	51261-XX001 51617-XX002	Right-angle	51219-XX002
Midrange Power Supply (MPS) Contact Configuration: 6 Power + 24 Signal + 5 Power	Right-angle Vertical, press-fit	51625-XX001 51667-XX001	Right-angle Vertical Vertical, press-fit	51624-XX001 51860-001 51860-002

PwrBlade® is not just a board connector



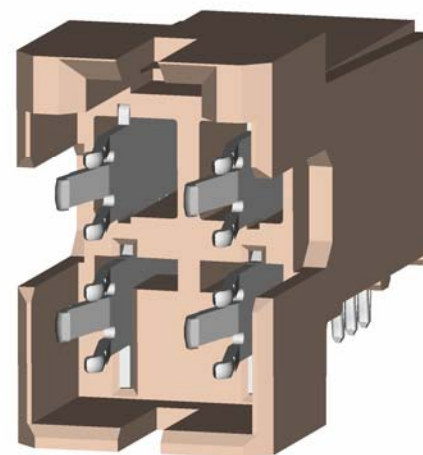
BUS Bar Connectors



Pass Through AC Modules

*The PwrBlade® system solution allows for industry standard SSI power supply interconnect and also allows for custom AC, DC implementations in **back-panel, mezzanine, and cable** power solutions as well as integration into a **BusBar** assemblies.*

Backplane-To-Card Power



AirMax VS[®] Power Modules



- *1x2 or 2x2 configurations currently available*
- *Coplanar & Backpanel configurations now available*
- *Same receptacle used with either header (vertical & r/a receptacles tooled)*
- *Multiple mating lengths available (controlled on the receptacle side)*
- *80 amps total current carrying capacity for either configuration (single connector powered, double sided 5oz copper traces)*
- *150 volt rating per UL and IEC between any adjacent conductors*
- *Press-fit “eye of needle” contacts*
- *0.65-0.80mm plated thru holes (0.85mm drill)*
- *Stackable with AirMax[®] High speed products*
- *Product information currently available*
 - *Product customer drawings*
 - *Simplified Pro/E models*
 - *Product Specification: GS-12-220*
 - *Application Specification: GS-20-023*



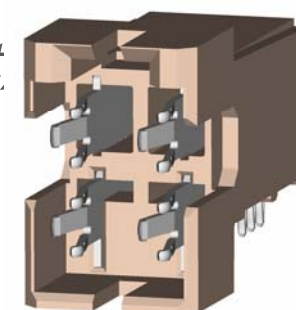
Data sheet: 950535-005

Product brochure: 950535-012

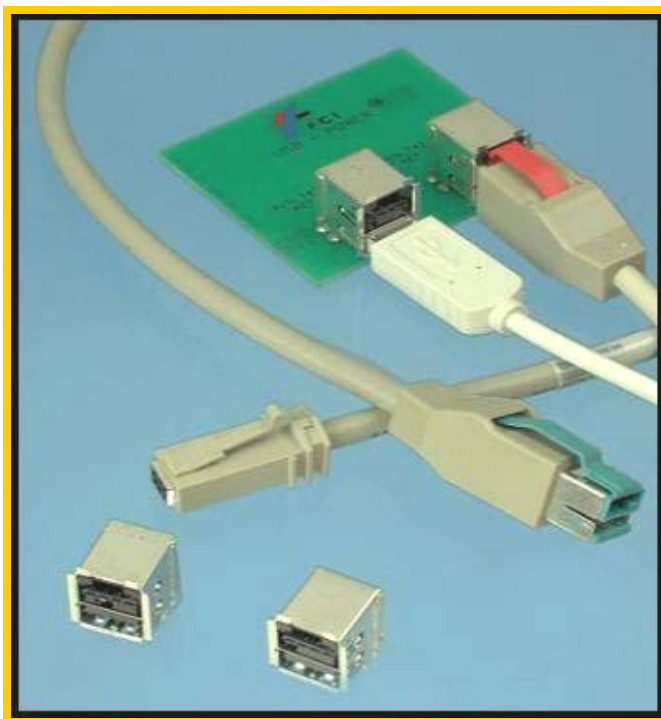
2mm High Power Product Features



- Available in both *Hard-Metric and Future-Bus* product configurations
- Right angle header on daughter-card to be offered in 1x2 and 2x2 press-fit configurations (same 2x2 receptacle to be used for both)
- Same press-fit hole size as Metral (0.65-0.80 finished hole diameter)
- Current carrying capacity (single 12mm module, all lines powered):
 - 2x2 configuration: 60A (15A per line); verified by prototypes
 - 1x2 configuration: 72A (36A per line); not yet verified
- Voltage rating: 150 V per UL 60950 and IEC 664-1 & 61984 specifications (1.6mm minimum creepage and clearance distances)
- Receptacle is UL 60950 compliant (Finger Probe)
- 3 possible mating lengths (2 longest being tooled initially) equal to those of Standard Metral 8.0, 6.5, and 5.0mm header pins; mating length is controlled on the receptacle side
- Same module size as 5-row Metral (10.8mm press height)
- All footprint hole spacing is on even multiples of 2mm



Power I/O



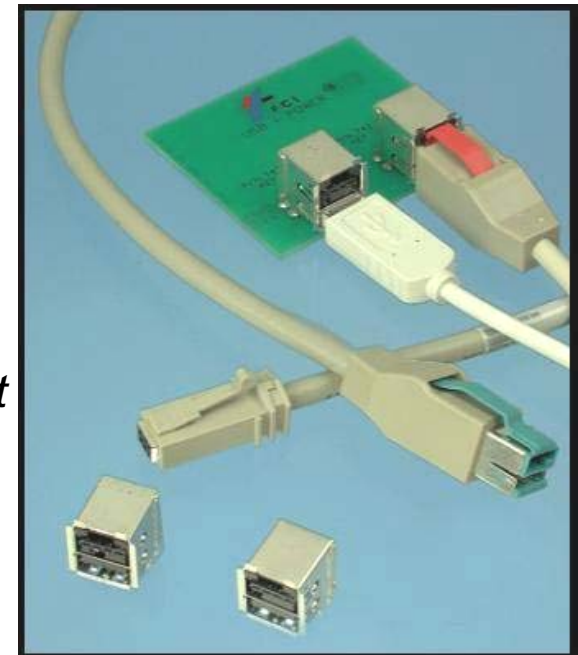
USB + Power



USB + Power Connectors



- *Adds 4 pins to USB for extra power or signal needs*
 - *Max 5A at 5v, 12v or 24v*
 - *Standard USB is Max 0.5A at 5v*
- *USB + power can eliminate the need for an independent power supply on some peripheral devices.*
- *Color and Mechanical keying for different voltage levels*
- *Active Latch allows more rugged use*
- *Allows standard use of USB port if extra power is not required.*
- *Applications:*
 - *Point of Sale (POS) - retail probes/scanners*
 - *Medical equipment.*
 - *Industrial processing / inventory equipment.*
- *Receptacles - 55917 series*
 - *Replaces previous 74239 and 53528.*
- *Plug Kits - 74233 series*



Summary



- *FCI has a long heritage of innovating and enabling the market as demonstrated by the FCI developed and licensed PwrBlade® product*
- *FCI has a full range of products from low profile, to industry standards, to high current, to BusBar and even Power I/O solutions*
- *FCI strives for modular designs that allow the designer flexible, cost effective solutions that are available in most cases from multiple sources*

www.fciconnect.com



Thank You