



Mezzostak®

Product Presentation

Basics Portfolio



Agenda



1. Value Proposition
2. Product Overview
3. Product Specifications
4. Features & Benefits
5. Markets & Applications
6. Marcomm Collaterals

Mezzostak®



Value Proposition

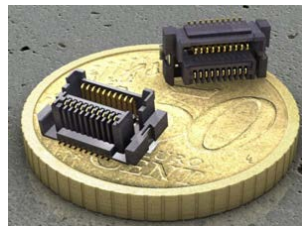
The **robust** Mezzostak® 0.5mm fine pitch mezzanine connector with the **innovative hermaphroditic design** provides a **precise mating** interface with **extra housing guidance** and the **comprehensive range** in terms of position and stack height is able to satisfy all needs

Reduced product mix of the Mezzostak® **simplifies** customer connector qualification, documentation and maintenance. Two versions offer a choice between supplemental PCB hold-downs and pegs for short overall length.

Product Overview

2.0mm, 3.0mm, 3.5mm Portfolio

Connector 1 height	Stack Height	Connector 2 height
2.0mm	4.0mm	2.0mm
2.0mm	4.5mm	2.5mm
2.0mm	5.0mm	3.0mm
2.0mm	5.5mm	3.5mm
2.5mm	6.0mm	3.5mm
3.0mm	6.0mm	3.0mm
3.0mm	6.5mm	3.5mm
3.5mm	7.0mm	3.5mm



Product Specifications

Product Facts

- 0.5mm high density contact pitch in two rows
- 7 Stack heights: 4mm to 7mm (0.5mm increments)
- 6 Sizes: 20 to 70 positions (10 position increments)
- Hermaphroditic design “mates to itself”
- Vertical VS vertical mating configuration
- Housing and terminal profile guarantees support of up to 5Gbps
- guidance “scoops” feature of housing
- Polarization feature of housing
- Available in UL94V-0 flammability rated LCP
- PCB locator pegs option
- RoHS compliance

Specifications

- Product Spec. : GS-12-577
- Packaging Spec. : GS-14-1320

Performance Characteristics

- Durability: 50 mating cycles
- Mating Force: 42 g per contact pair max
- Temperature range: -40°C to 125°C
- Processing temperature: 260°C peak for 30 seconds
- Current Rating: 0.5A DC per contact
- DWV: 500V
- Voltage ratings: 50V
- Contact Resistance: 30 mΩ max.
- Signal Integrity:
 - Different pairs; 7mm stack height; Connectors with SMT pads and anti-pads/voids underneath)
 - 5+Gbs capable
 - Impedance: 100Ω +/- 10 @ 50 ps edge
 - Insertion loss: <1dB to 5+ GHz
 - NEXT and FEXT: <=1.0 @ 50 ps edge (10-90%)
- Wipe length: 1-0mm min
- SMT lead co-planarity: 0.08mm max

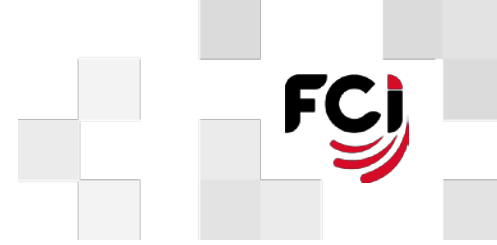
Materials

- Housing LCP UL94-V0; black color
- Contact : Copper alloy
- Plating: Performance-based with Gold

Features & Benefits

Features	Benefits
0.5mm high density contact pitch in two rows 7 Stack heights: 4mm to 7mm (0.5mm increments) 6 Sizes: 20 to 70 positions (10 position increments)	Comprehensive range of sizes and stack heights support diverse electronic packaging schemes
Hermaphroditic design “mates to itself”	Consolidates connector selection and documentation Reduces component engineering costs
Vertical VS vertical mating configuration	Suitable for parallel board stacking applications
Housing and terminal profile guarantees support of up to 5Gbps	Compatible with PCIe® Gen high speed performance on selected stack heights
guidance “scoops” feature of housing	permit easy- mating even when mis-alignment
Polarization feature of housing	prevents mis-mating
Available in UL94V-0 flammability rated LCP	High flammability rating
PCB locator pegs option	Facilitate ease and accuracy during manual assembly
RoHS compliance	Meet environmental, health and safety requirements

Mezzostak®



Main Markets & Applications

Point of sale/retail equipment



Digital Video Camera



Surveillance system



Mezzostak®



Main Markets & Applications

Available on FCI

- Technical Data Sheet

- Product Specifications

MEZZOSTAK® 0.5MM MEZZANINE CONNECTORS

Hermaphroditic, "mates-to-itself" design improves business

OVERVIEW

Reliable 0.5mm fine pitch mezzanine connector suitable for a wide range of high reliability applications and demanding environments.

Innovative hermaphroditic design provides a precise mating interface with extra housing guidance.

Reduced product mix simplifies customer connector qualification, documentation and maintenance.

Two versions offer a choice between supplemental PCB hold-downs and pins for short overall length.



FEATURES & BENEFITS

- Hermaphroditic design "mates to itself"
- Consolidates connector selection and documentation
- Reduces component engineering costs
- Easy, reliable mating
 - Guided "snaps" permit easy mating when mis-aligned
 - Polarization prevents mis-mating
 - Dual-pins, long wipe contacts
- High on-mating force ensures connection security
- High Speeds, including PCIe™, supported by signal integrity reports and 5-parameter models
 - 0.5mm high density contact pitch in two rows
 - 12 Stack heights (from 1 to 12mm (0.5mm increments))
 - 6 Stack 20 to 95 positions (10 position increments)

TARGET MARKETS/APPLICATIONS

- Portable and mobile electronic equipment
- Medical and instrumentation
- Non-O-Side/ retail equipment
- Hand-held terminals
- Automatic identification and data capture
- Sensors
- Military
- Communications and networking
- Data and mass-storage
- Motor vehicle
- Metering and energy

NUMBER	QTY	PRODUCT SPECIFICATION	FCI	
GS-12-877			1 of 17	B
Mezzostak™ 0.5 BTB Connector System			APPROVED BY	DATE
			S. Stoner	27 May 10
UNRESTRICTED				



1.0 OBJECTIVE

This specification defines the performance, test, quality, and reliability requirements of the Mezzostak™ 0.5 BTB Connector System as well as Lead-Free product that meets the requirement of the European Union Directive of Restriction for Hazardous Substances (Directive 2002/95/EC).

2.0 SCOPE

This specification is applicable to the termination characteristics of the Mezzostak™ 0.5 BTB connector system, which provides for parallel interconnection of printed wiring boards in low power applications.

Main Markets & Applications







Available on FCI

- Part Numbers & Drawings

Narrow By [Expand](#) Start > 0.5 mm (0.020 in.) >

[Search Again](#)

Results 1 - 20 of 41. Result page: 1 2 3

Part Number	Image	Status	Product Name
10106813-021112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 20 positions, Standard length with pegs and hold-downs, Half of mated height equals 2 mm
10106813-023112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 20 positions, Standard length with pegs and hold-downs, Half of mated height equals 3 mm
10106813-024112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 20 positions, Standard length with pegs and hold-downs, Half of mated height equals 3.5 mm
10106813-031112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 30 positions, Standard length with pegs and hold-downs, Half of mated height equals 2 mm
10106813-033112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 30 positions, Standard length with pegs and hold-downs, Half of mated height equals 3 mm
10106813-034112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 30 positions, Standard length with pegs and hold-downs, Half of mated height equals 3.5 mm
10106813-041112LF		ACTIVE	0.5 mm Pitch Hermaphroditic Mezzanine Connector, 40 positions, Standard length with pegs and hold-downs,

- Video

<http://portal.fciconnect.com/Comergent/fci/fcires/videos/MEZZOSTACKFCIversion.swf>

