

Product Name: ZX104CS TE Mictor Connector Saver - Breakout Adapter Mictor Plug Receptacle - 38 - Page 1/2

Product Description: 19pins x 2 rows, 38 pins TE Connector Saver - breakout adapter designed for TE Mictor 0.64mm positions Mictor connectors. Onboard Mictor Plug and Receptacle with debug access point providing full feature breakout adapter.

- 1- Each Mictor Receptacle signal is routed to associated Mictor Plug connector through board to board via.
Pin 1 of Plug is connected to pin 1 of Receptacle connector.
- 2- All signals have 0.3" (7.6mm) trace length on both top and bottom layers of the PCB.
- 3- All traces have 10mils (0.26mm) width, enabling soldering of any probe wires (36AWG solid copper – See package includes)
- 4- All traces are designed 50 Ohms impedance controlled.
- 5- Four, 4, layers PCB design, inner layers are GND planes with direct connection to Mictor Receptacle-Mictor Plug ground blades.
- 6- Two accessible GND test points, The test points are connected to module GND planes.
- 7- Mated Mictor Receptacle-Plug (Host with ZX104CS) height 0.260" (6.6mm)
- 8- Ease of interface with single channel and differential scope probes.
- 9- User may relocate any Plug signal by cutting trace before the via and solder to new location or external test equipment.
- 10- Fully compatible with Single Ended , SE, and Differential Pair designs as well as 3rd parts Mictor cable assemblies
- 12- Mates with any height and formfactor Mictor Receptacle Plug connector series.
- 13 – Accessible GND test point with direct interface to the integral metal plane (GND blade)
- 14- The module is shipped with 12pc of probing wires – See ordering information, see [ZX00BC2PH1](#)

Electrical: Insertion loss -2dB @8GHz
 Trace impedance: 50 Ω
 Operating Temperature: -55 °C to +125 °C
 Trace width: 10mils (0.26mm)
 Trace Length: 0.3" (7.6mm)
 Trace to Trace via: 30mils (0.8mm) from end of PCB trace
 PCB Clearance : 8mm from Host PCB (Receptacle on host)
 36AWG Bare copper wire : 0.014mm diameter - See package includes for details

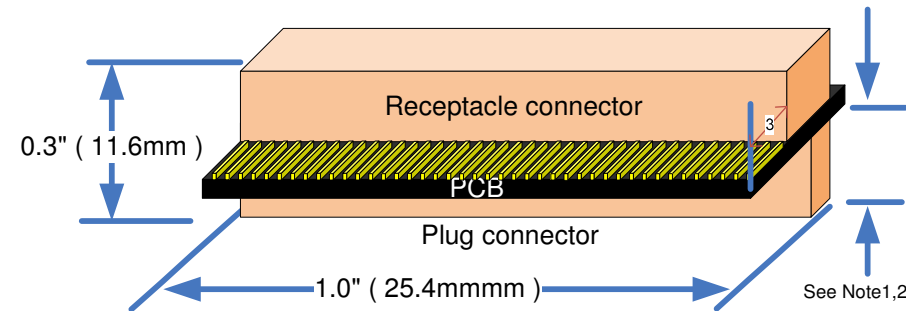
Application: Manufacturing test and re-use, bringup, testing , debugging

Mates with : Any Tyco's 38 pin (2 rows 19 pins/row) Mictor Socket offered at any height
 2-767004-2 767096-8 767096-1 767110-1 767114-1 767114-8
 767181-1 767054-1 767171-1 767081-1 767115-1
 2-5767004 5767096-8 5767096-1 5767110-1 5767114-1 5767114-8
 5767181-1 5767054-1 5767171-1 5767081-1 5767115-1
 767130-1 767146-1 767146-8 767094-1 767178-1 767178-8 767154-1 767153-8 767095-1
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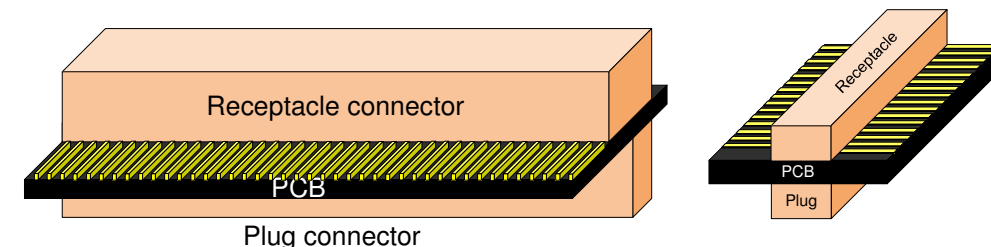
767044-1 767007 767056 767111 767116 767117 767118 767119 5767006 5767044

Compliance:

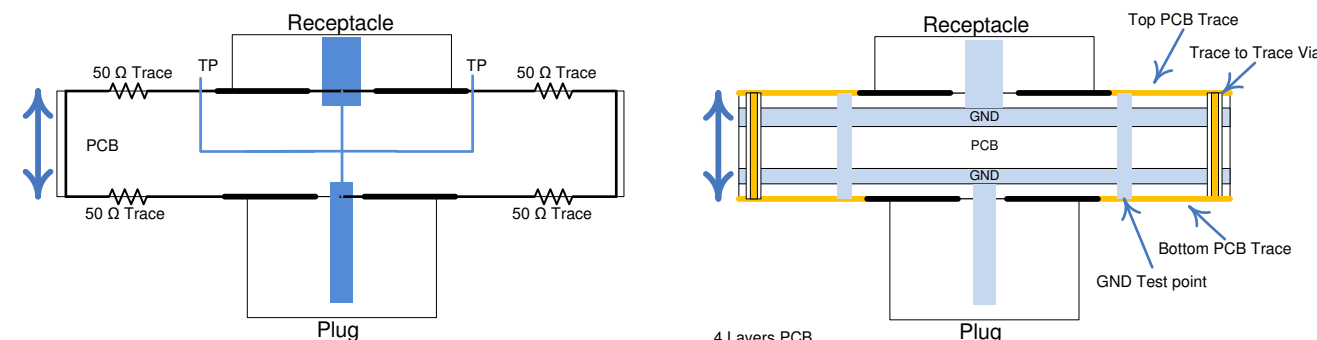
- ISO2001 certified
- RoHs - Lead Free
- EU RoHS2
- UL E111594 document
- ELV- Vehicle Directive (Directive 2000/EC)
- European Union Directive (203/11/EC)
- Halogen Free per IEC-61249-2.21 : 2003
- RoHs Directive 2011/65/EU
- WEEE Directive (2012/12/EU)
- Certificate of Compliance for Radioactive substances
- Certificate of Compliance for Asbestos
- Certificate of Compliance for Ozone Depleting Substances, ODS
- Certificate REACH SVHC
- Certificate of Compliance RoHS_EN_CoC



- Notes:**
- 1- Mictor Plug height 0.260" (6.6mm)
 - 2- Mated Mictor Plug – Receptacle height 0.260" (6.6mm)
 - 3- PCB Extends 0.3" (7.6mm) from the Mictor Receptacle connector



Simplified Block Diagram – ZX104CS



All traces are controlled 50 Ω impedance
 TP – The GND Test Point , is direct connection to Receptacle Plug Blades , TOP and Bottom GND Fills as well as the GND stitching vias

4 Layers PCB
 2 inner layers are Ground planes
 GND Test Point , TP, provides direct connection to Receptacle Plug Blades , TOP and Bottom GND Fills & the GND stitching vias

ZX104CS package includes:

Part number	Quantity	Description
ZX104CS	1	Connector Saver Breakout Adapter module
ZX00BC2PH1	12	36AWG Bare Copper wire to pin header wire assembly

Note
 ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated.

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WWW.ZEBAX.COM		
SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT		ASSEMBLY DRAWING
		ITEM: ZX104CS
DESCRIPTION: TE Mictor Connector Saver - breakout adapter Receptacle Plug 38		
CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0
		SHEET: 1 OF 2

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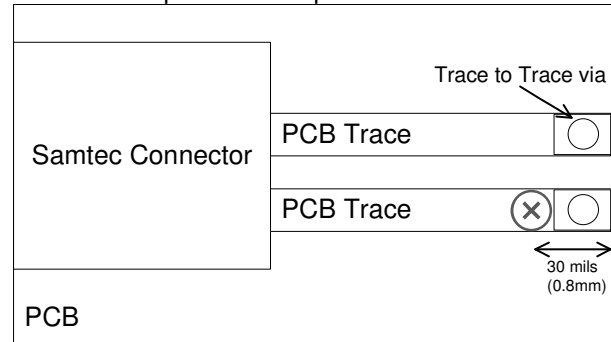
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Pitch: 0.64mm (0.025") centerline contact spacing connector, Legacy Mictor High Speed connector

Access: For signal measurements: 1- Recommendation: Use 36AWG solid copper wire with pin header, see [ZX00BC2PH1](#)
For signal relocation: 1- Cut the trace to the connecting via (30 mils [0.8mm] before end of trace)
2- Using 36AWG solid copper wire, make the required connections. See figure below

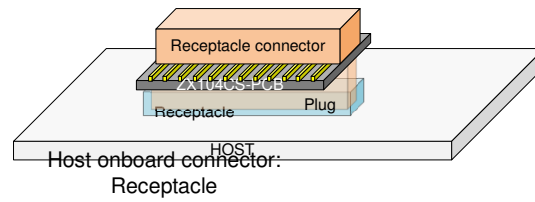
ZX104CS – portion of Top View



Note: The hole for the Via may not be visible on Zebax Connector Saver breakout adapter designs. The via is located 30 mils (0.8mm) from end of the trace as marked

(X) Ideal location to cut the trace

Typical ZX104CS interface with host



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	ITEM: ZX104CS

DESCRIPTION: TE Mictor Connector Saver - breakout adapter
Receptacle Plug 38

CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 2 OF 2
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