Product Name: **ZX135CS Samtec Connector Saver - Breakout Adapter BSH – BTH 120**

Product Description: 120 pins x 2 rows, 120 pins Samtec Connector Saver - breakout adapter. Offering **both** BSH and BTH connectors on connector saver module with debug access point providing full feature breakout adapter.
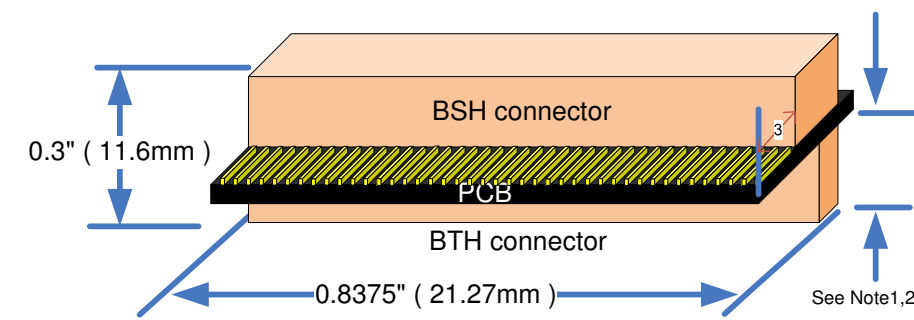
1- Each BSH signal is routed to associated BTH connector through board to board via. Pin 1 of BTH is connected to pin 1 of BSH connector.
2- All signals have 0.24" (6mm) trace access on both top and bottom layers of the PCB.
3- All traces are 50 Ohms impedance.
4- Four, 4, layers PCB design, inner layers are GND planes.
5- Accessible GND test points, The test points are connected to module GND planes.
6- Offering Extended height BTH connector (0.286" – 7.26mm) , providing interface clearance from host components.
7- Mated BSH-BTH (Host with ZX135CS) height 0.315" (8.00mm)
8- Ease of interface with single channel and differential scope probes.
9- User may relocate any BTH 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, DP, Samtec connector BSH BTH series as well as cable assemblies; HQCD , HQDP .

Application: Manufacturing test and re-use, bringup, testing , debugging
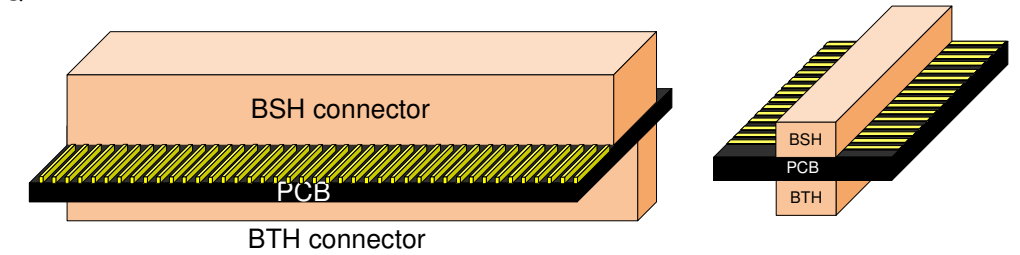
Mates with : Samtec BTH120 BSH120 BSH020(DP) BTH020(DP)
Compatible with – differential Pair (DP), unused signal can be left unconnected or Grounded for improved noise immunity.
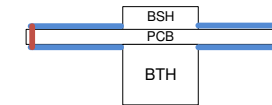
Pitch: 0.50mm (0.0197") High Speed connector

Access: All traces are 10mils (0.26mm) wide with 0.24" (6mm) length.

Picture below exhibits ZX135CS interface with host, enabling scope probe access. Typically HOST has onboard BSH. connector.

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

0.3" (11.6mm)

0.8375" (21.27mm)

See Note1,2

Notes:
1- BTH height 0.286" (7.26mm)
2- Mated BTH – BSH height 0.315" (8.00mm)
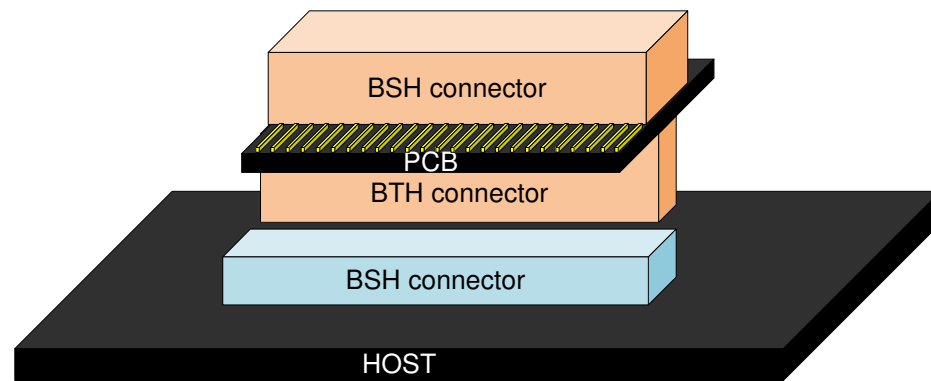3- PCB Extends 0.24" (6mm) from the BSH connector

Simplified Block DIagram

1- BSH & BTH connector pins are extended by 0.24" (6mm) to edge of the PCB.
2- Via at edge of the PCB , connects the top BSH pins to bottom BTH pins via extended PCB traces.
3- User may relocate any BTH signal to any BSH signal pin by cutting trace before the via and solder the pin to new location.
4- Scope probe wire as well as differential scope probe may be soldered to the traces for ease of test and measurement.
5- All traces are 10mils (0.26mm) wide.

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

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ASSEMBLY DRAWING

SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT

ITEM: ZX135CS

DESCRIPTION: Samtec Connector Saver - breakout adapter BSH BTH 120

CHECKED:
M. MARINA

DRAWN:
SLAVIK

REVISSION: 1.0

SHEET: 1 OF 1