

Product Name: ZX145QTE-020 Samtec Breakout Adapter
TE Mictor SB 0.8mm (0.032") centerline 40 Breakout Adapter

Product Description: 20x2, 40 pins breakout adapter supporting both Samtec and TE Mictor SB connector series :
 1- Samtec's HI-SPEED Header / Socket QTE Q-Strip Blade & Beam Design connectors.
 2- Tyco Electronics, TE, Mictor SB 0.80mm centerline (pitch) 40 positions Mictor-Strip connectors.

Fully compatible with 14x2 28 pins differential pairs, -DP , signaling applications for both TE Mictor SB as well as Samtec connector.
 ZX145QTE has onboard QTE connector, mating with Host QSE or TE Mictor SB receptacle connectors.

- Designed in 4 layer PCBoard
- No via on any signal traces
- Improved signal integrity and crosstalk.
- Matching connector's 50Ω impedance.
- Reference plane impedance 50Ω.
- High bandwidth applications.
- Mates with Samtec host QSE connectors.
- Mates with TE Mictor SB 0.80mm centerline receptacle connectors.
- GND test point for easy access

Application: Bringup, testing, emulation, development, modular design evaluations

Mates with : Samtec QSE-020-L-D QSE-014-01-**DP** connectors
 EQCD EQSD EQDP EQRF cable assembly
 and any **1 bank** of QSE-040 (-028 Differential pair, -DP), QSE-060 (-042), QSE-080 (-056) connectors.
 TE Mictor SB 0.8mm (0.032") centerline 40 positions (2 rows, 20 positions / row)
 1658043-1 , 1658012-1 , 1658462-1 TE Mictor SB 0.8mm (0.032")
 Table 2 lists 40 positions - 2 Rows x 20 Pins/Row TE Mictor SB 0.8mm (0.032") Pitch Connectors Part numbers
ZX145QTE mates with all listed receptacles of TE Mictor SB 0.80mm (0.032") centerline 40 positions connectors.
 Table 3 lists cross matrix compatibility between Samtec and TE Mictor SB 0.8mm (0.032) 40 positions connector.

Pitch: 0.80mm (0.0315") pitch High Speed connector

Headers: 0.1" (2.54mm) center, 0.025" (0.64mm) SQ with 0.23" (5.6mm) post height

ZX145QTE-020 pin configuration - Labeled header pin number refers to QTE pin.

Bottom	Headers	J3	4	8	12	16	20	24	28	32	36	40
			2	6	10	14	18	22	26	30	34	38
Top	Headers	J2	3	7	11	15	19	23	27	31	35	39
			1	5	9	13	17	21	25	29	33	37
TOP	QTE	J1										
BOTTOM												

40 positions - 2 Rows x 20 Pins/Row TE Mictor SB 0.8mm (0.032") Pitch Connectors Part numbers

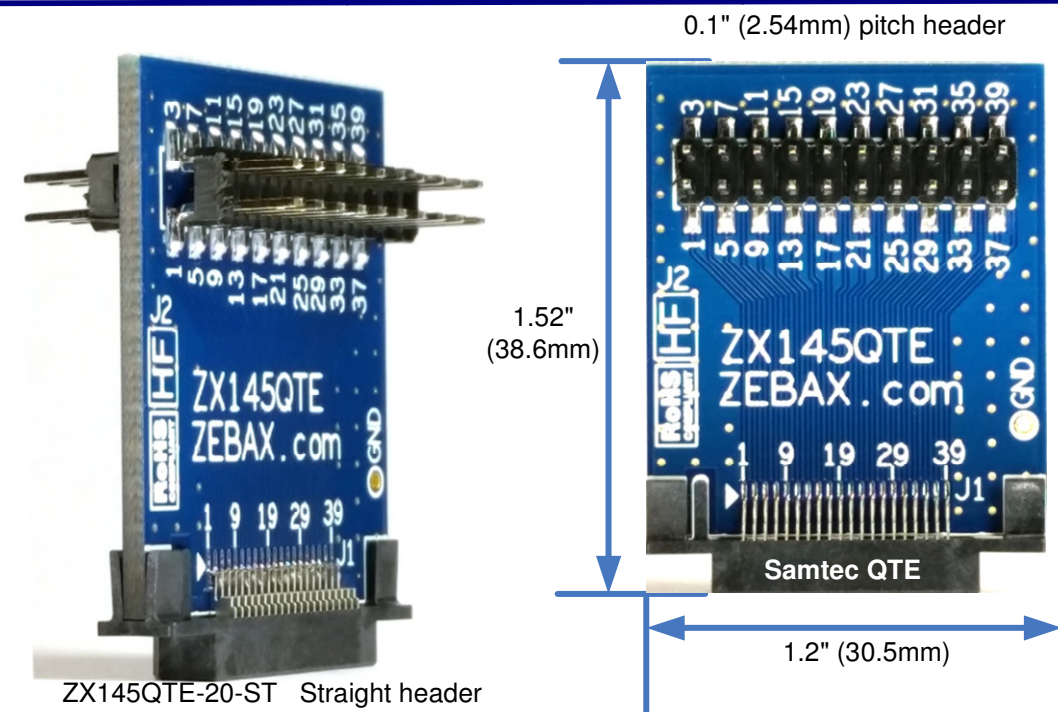
TE Mictor SD 0.8mm (0.032")	Description	Mated Stack Height
1658043-1 2-1658043-1 1658012-1 2-1658012-1 1658462-1 2-1658462-1	Receptacle	
1658044-1 2-1658044-1 1658013-1 2-1658013-1 1658463-1 2-1658463-1	Plug	5mm (0.197")
4-1658044-1 6-1658044-1 4-1658013-1 6-1658013-1 4-1658463-1 6-1658463-1		8mm (0.315")
1658045-1 2-1658045-1 1658014-1 2-1658014-1 1658464-1 2-1658464-1		11mm (0.433")
1658046-1 2-1658046-1 1658015-1 2-1658015-1 1658465-1 2-1658465-1		14mm (0.551")
4-1658046-1 6-1658046-1 4-1658015-1 6-1658015-1 4-1658465-1 6-1658465-1		16mm (0.63")
1658437-1 2-1658437-1 1658438-1 2-1658438-1 1658439-1 2-1658439-1		19mm (0.748")
4-1658437-1 6-1658437-1 4-1658438-1 6-1658438-1 4-1658439-1 6-1658439-1		22mm (0.866")
1658047-1 2-1658047-1 1658016-1 2-1658016-1 1658466-1 2-1658466-1		25mm (0.984")
4-1658047-1 6-1658047-1 4-1658016-1 6-1658016-1 4-1658466-1 6-1658466-1		30mm (1.181")
1658048-1 2-1658048-1 1658017-1 2-1658017-1 1658467-1 2-1658467-1		
1658049-1 2-1658049-1 1658018-1 2-1658018-1 1658468-1 2-1658468-1		
1658050-1 — 1658019-1 — 1658469-1		
1658051-1 — 1658020-1 — 1658470-1		

All above listed TE Mictor SB 0.80mm (0.032") centerline (pitch) are compatible with Samtec QStrip QTE QSE connectors
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ZX145 Samtec Qstrip QTE QSE cross matrix compatibility with TE Mictor SB 0.8mm (0.032") Pitch Connectors

TE Mictor SD 0.8mm (0.032")			Samtec QStrip QTE QSE			Description	Mated Stack Height
Gold Flashing	10 μ" Gold Plating	30 μ" Gold Plating	Gold Flashing	10 μ" Gold Plating	30 μ" Gold Plating		
1658043-1	1658012-1	1658462-1	QSE-020-01-F-D-A	QSE-020-01-L-D-A	QSE-020-01-C-D-A	Receptacle	
1658044-1	1658013-1	1658463-1	QTE-020-01-F-D-A	QTE-020-01-L-D-A	QTE-020-01-C-D-A	Plug	5mm (0.197")
1658045-1	1658014-1	1658464-1	QTE-020-02-F-D-A	QTE-020-02-L-D-A	QTE-020-02-C-D-A		8mm (0.315")
1658046-1	1658015-1	1658465-1	QTE-020-03-F-D-A	QTE-020-03-L-D-A	QTE-020-03-C-D-A		11mm (0.433")
1658437-1	1658438-1	1658439-1	QTE-020-09-F-D-A	QTE-020-09-L-D-A	QTE-020-09-C-D-A		14mm (0.551")
1658047-1	1658016-1	1658466-1	QTE-020-04-F-D-A	QTE-020-04-L-D-A	QTE-020-04-C-D-A		16mm (0.63")
1658048-1	1658017-1	1658467-1	QTE-020-05-F-D-A	QTE-020-05-L-D-A	QTE-020-05-C-D-A		19mm (0.748")
1658049-1	1658018-1	1658468-1					22mm (0.866")
1658050-1	1658019-1	1658469-1	QTE-020-07-F-D-A	QTE-020-07-L-D-A	QTE-020-07-C-D-A		25mm (0.984")
1658050-1	1658019-1	1658469-1					30mm (1.181")

Note:
 1- Stack Height : Receptacle with the listed Plug
 2- **Any** listed Samtec QTE Plug is compatible with **Any** TE Mictor SD 0.8mm (0.032") pitch Receptacle connector.
 3- **Any** Listed TE Mictor SD 0.8mm (0.032") pitch Plug is compatible with **Any** Samtec QStrip QSE connector.

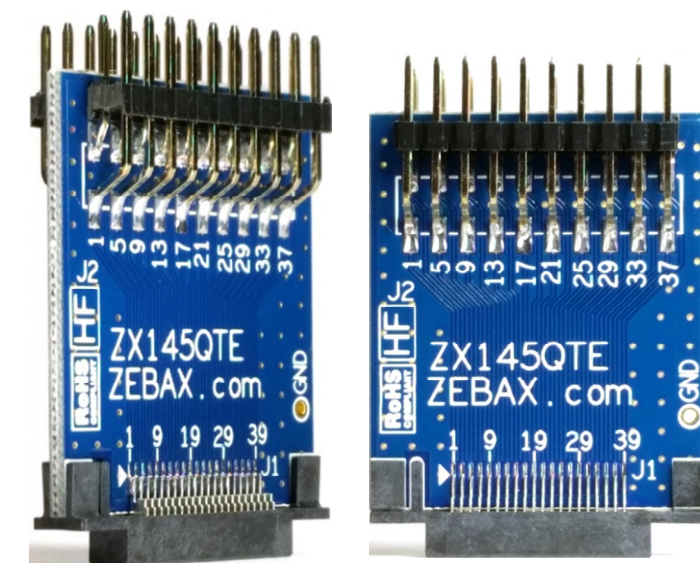


ZX145QTE-20-ST Straight header

NOTE:

- 1- GND test point is connected to inner GND planes as well as the Samtec/TE edge connector GND tab
- 2- ZX145QTE has onboard QTE connector, mating with Host QSE or TE Mictor SB receptacle connectors.

Ordering INFO:
 Part Number
 ZX145QTE-20-X options
 RA : Right Angle header (Standard)
 ST : Straight header



ZX145QTE-20-RA : Right Angle header (Standard)

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

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT	ASSEMBLY DRAWING	
	ITEM: ZX145QTE-020	
DESCRIPTION: Samtec breakout adapter QTE 020 014 TE Mictor SB 0.80mm 40 breakout adapter		
CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 1 OF 1