

Product Name: ZX146QTE-040 Samtec Breakout Adapter
TE Mictor SB 0.8mm (0.032") centerline 80 Breakout Adapter

Product Description: 40x2, 80 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) 80 positions Mictor-Strip connectors.

Fully compatible with 28x2 56 pins differential pairs, -DP , signaling applications for both TE Mictor SB as well as Samtec connector.
ZX146QTE has onboard QTE connector, mating with Host QSE or TE Mictor SB receptacle connectors.

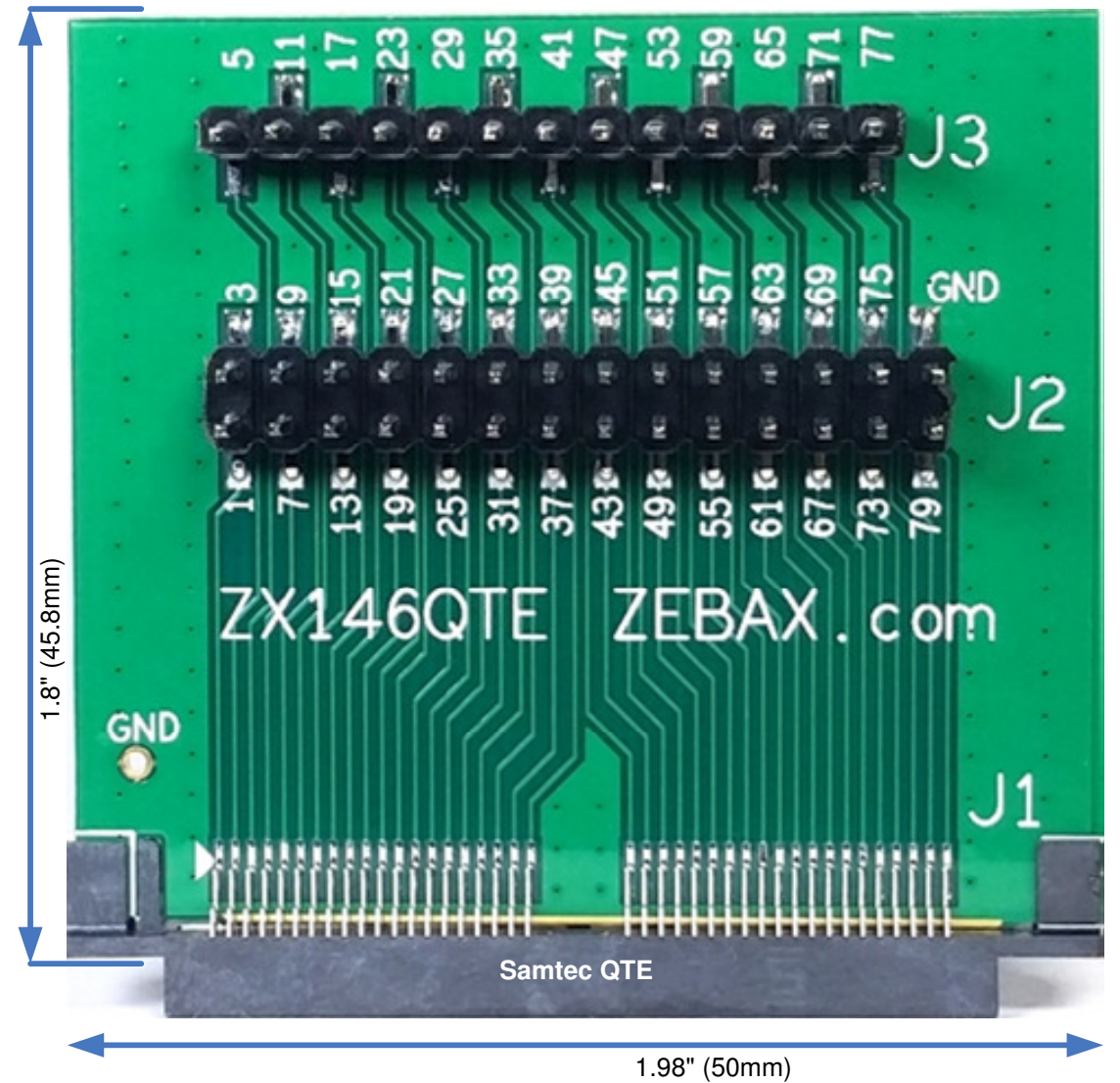
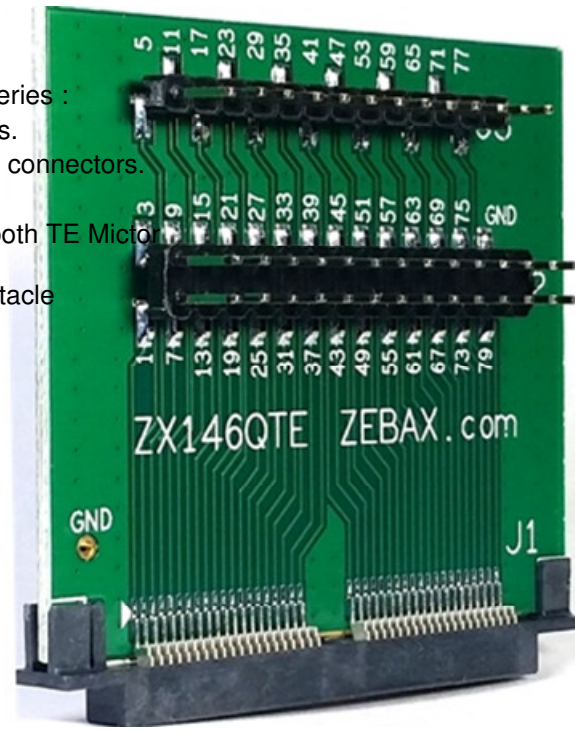
- Designed in 4 layer PCBoard
- No via on any signal traces
- Improved signal integrity and crosstalk.
- Matching connector's 50Ω impedance.
- Reference plane impedance 50Ω.
- High bandwidth applications.
- Mates with Samtec host QSE connectors.
- Mates with TE Mictor SB 0.80mm centerline receptacle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

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

Mates with : Samtec QSE-040-L-D QSE-028-01-DP connectors
EQCD EQSD EQDP EQRF cable assembly
and any **2 banks** of QSE-060 (-042 Differential pair, -DP), QSE-080 (-056) connectors.
TE Mictor SB 0.8mm (0.032") centerline 80 positions (2 rows, 40 positions / row) Receptacles, 1658043-2 , 1658012-2 , 1658462-2
Table 2 lists 80 positions - 2 Rows x 40 Pins/Row TE Mictor SB 0.8mm (0.032") Pitch Connectors Part numbers
ZX146QTE-040 mates with all listed Receptacles of TE Mictor SB 0.80mm (0.032") centerline 80 position connectors.
Table 3 lists cross matrix compatibility between Samtec and TE Mictor SB 0.8mm (0.032) 80 positions connector.

Pitch: 0.80mm (0.0315") High Speed connector

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



ZX146QTE-040 pin configuration - Header pin numbers refer to SAMTEC connectors pin number	
TOP BOTTOM	QTE
J1	5 11 17 23 29 35 41 47 53 59 65 71 77
J2	1 7 13 19 25 31 37 43 49 55 61 67 73 79

80 positions - 2 Rows x 40 Pins/Row TE Mictor SB 0.8mm (0.032") Pitch Connectors Part numbers		
TE Mictor SD 0.8mm (0.032")	Description	Mated Stack Height
1658043-2 2-1658043-2 1658012-2 2-1658012-2 1658462-2 2-1658462-2	Receptacle	
1658044-2 2-1658044-2 1658013-2 2-1658013-2 1658463-2 2-1658463-2	Plug	5mm (0.197")
4-1658044-2 2-1658044-2 4-1658013-2 2-1658013-2 4-1658463-2 2-1658463-2		8mm (0.315")
1658045-2 2-1658045-2 1658014-2 2-1658014-2 1658464-2 2-1658464-2		11mm (0.433")
4-1658045-2 2-1658045-2 4-1658014-2 2-1658014-2 4-1658464-2 2-1658464-2		14mm (0.551")
1658046-2 2-1658046-2 1658015-2 2-1658015-2 1658465-2 2-1658465-2		16mm (0.63")
4-1658046-2 2-1658046-2 4-1658015-2 2-1658015-2 4-1658465-2 2-1658465-2		19mm (0.748")
1658437-2 2-1658437-2 1658438-2 2-1658438-2 1658439-2 2-1658439-2		22mm (0.866")
4-1658437-2 2-1658437-2 4-1658438-2 2-1658438-2 4-1658439-2 2-1658439-2		25mm (0.984")
1658047-2 2-1658047-2 1658016-2 2-1658016-2 1658466-2 2-1658466-2		30mm (1.181")
4-1658047-2 2-1658047-2 4-1658016-2 2-1658016-2 4-1658466-2 2-1658466-2		
1658048-2 2-1658048-2 1658017-2 2-1658017-2 1658467-2 2-1658467-2		
4-1658048-2 2-1658048-2 4-1658017-2 2-1658017-2 4-1658467-2 2-1658467-2		
1658049-2 2-1658049-2 1658018-2 2-1658018-2 1658468-2 2-1658468-2		
4-1658049-2 2-1658049-2 4-1658018-2 2-1658018-2 4-1658468-2 2-1658468-2		
1658050-2 — 1658019-2 — 1658469-2 —		
4-1658050-2 — 4-1658019-2 — 4-1658469-2 —		
1658051-2 — 1658020-2 — 1658470-2 —		
4-1658051-2 — 4-1658020-2 — 4-1658470-2 —		

ZX146 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		
1658043-2	1658012-2	1658462-2	QSE-040-01-F-D-A	QSE-040-01-L-D-A	QSE-040-01-C-D-A	Receptacle	
1658044-2	1658013-2	1658463-2	QTE-040-01-F-D-A	QTE-040-01-L-D-A	QTE-040-01-C-D-A	Plug	5mm (0.197")
1658045-2	1658014-2	1658464-2	QTE-040-02-F-D-A	QTE-040-02-L-D-A	QTE-040-02-C-D-A		8mm (0.315")
1658046-2	1658015-2	1658465-2	QTE-040-03-F-D-A	QTE-040-03-L-D-A	QTE-040-03-C-D-A		11mm (0.433")
1658437-2	1658438-2	1658439-2	QTE-040-09-F-D-A	QTE-040-09-L-D-A	QTE-040-09-C-D-A		14mm (0.551")
1658047-2	1658016-2	1658466-2	QTE-040-04-F-D-A	QTE-040-04-L-D-A	QTE-040-04-C-D-A		16mm (0.63")
1658048-2	1658017-2	1658467-2	QTE-040-05-F-D-A	QTE-040-05-L-D-A	QTE-040-05-C-D-A		19mm (0.748")
1658049-2	1658018-2	1658468-2					22mm (0.866")
1658050-2	1658019-2	1658469-2	QTE-040-07-F-D-A	QTE-040-07-L-D-A	QTE-040-07-C-D-A		25mm (0.984")
1658051-2	1658020-2	1658470-2					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.

NOTE:
1- GND test point is connected to inner GND planes as well as the Samtec/TE edge connector GND tab
2- ZX146QTE has onboard QTE connector, mating with Host QSE or TE Mictor SB 0.80mm centerline receptacle connectors.

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

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SPECIFIED DIMENSIONS ARE INCHES (MMD). ROHS COMPLIANT	ASSEMBLY DRAWING	
	ITEM: ZX146QTE-040	
DESCRIPTION: Samtec breakout adapter QTE 040 TE Mictor SB 0.80mm 80 breakout adapter		REVISION: 1.0
CHECKED: M. MARINA	DRAWN: SLAVIK	SHEET: 1 OF 1

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