

**Product Name:** ZX147-QTE-060 Samtec Breakout Adapter  
**TE Mictor SB 0.8mm ( 0.032" ) centerline 120 positions Breakout Adapter**

**Product Description:** 60x2, 120 pins breakout adapter supporting :  
 1- Samtec's HI-SPEED Header / Socket QSE Q-Strip Blade & Beam Design connectors.  
 2- Tyco Electronics, TE, Mictor SD 0.8mm centerline ( pitch ) 120 positions Mictor-Strip connectors.

**Fully compatible with 56x2 112 pins differential pairs, -DP**

- Onboard Samtec QTE conector, interfacing to Samtec QSH as well as TE Mictor SD 0.8mm 120 position
- 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
- GND test point for easy access

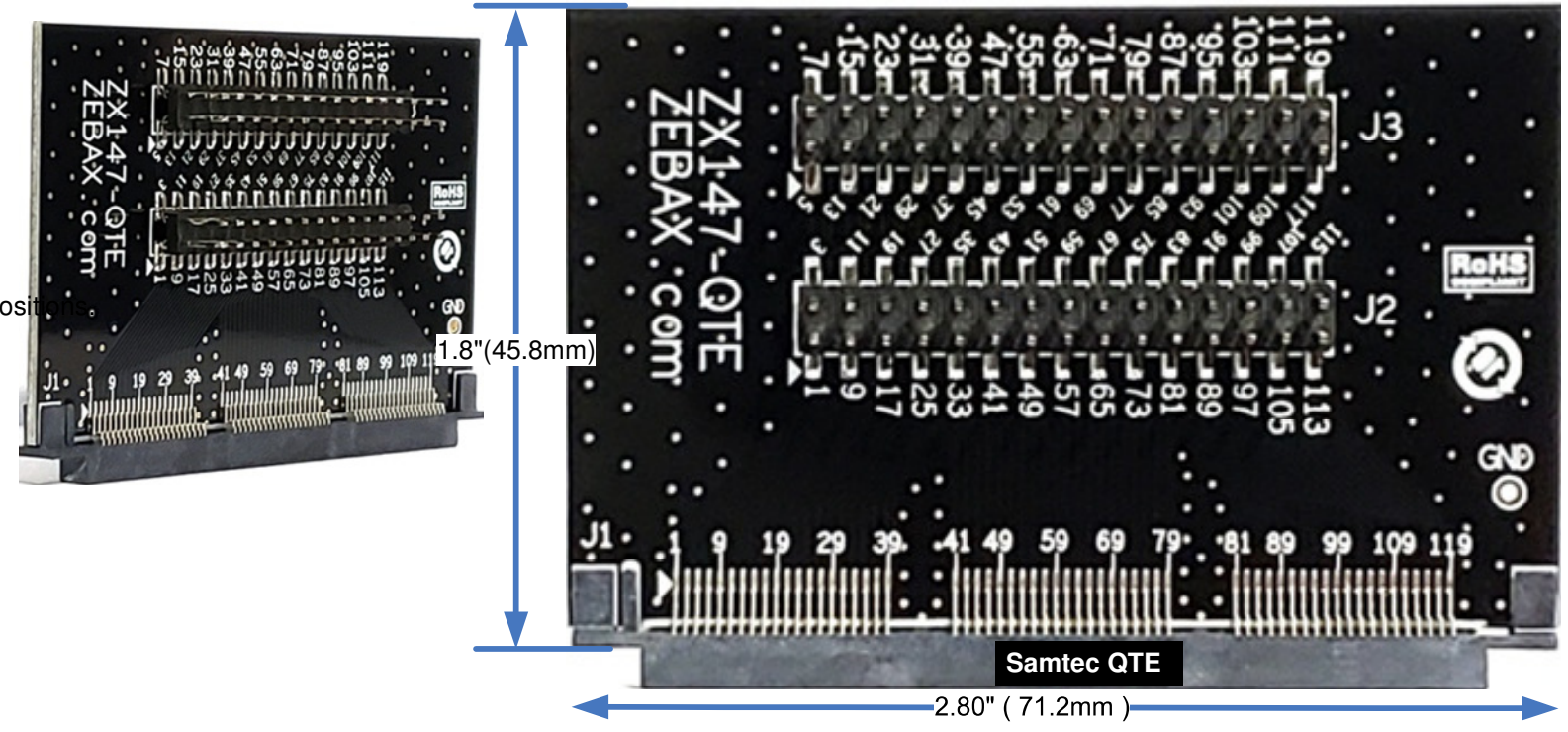
**Application:** Bringup, testing, emulation, development, modular design evaluations

**Mates with :** Samtec QSE-060-L-D QSE-042-01-DP connectors  
 EQCD EQSD EQDP EQRF cable assembly  
 and any **3 banks** of QSE-080 QSE-080 (-056 Differential pair, -DP) connectors.  
**TE Mictor SD 0.8mm ( 0.032" ) centerline 120 positions ( 2 rows, 60 positions / row )** Receptacles.  
 Table 2 lists 120 positions - 2 Rows x 60 Pins/Row TE Mictor SB 0.8mm ( 0.032" ) Pitch Connectors Part numbers  
**ZX147-QTE-060 mates with all listed Receptacles** of TE Mictor SD 0.80mm ( 0.032" ) centerline 120 position connectors.  
 Table 3 lists cross matrix compatibility between Samtec and TE Mictor SD 0.8mm ( 0.032 ) 80 positions connector.

**Headers:** 0.1" (2.54mm) center, 0.025" (0.64mm) SQ with 0.23" (5.6mm) post height  
**Pitch:** 0.80mm (0.0315") High Speed connector

ZX147-QTE-QSE-060 pin configuration																	
TOP	QTE											J6					
BOTTOM																	
Layer																	
Bottom	Headers	J5	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
			6	14	22	30	38	46	54	62	70	78	86	94	102	110	118
	J4		4	12	20	28	36	44	52	60	68	76	84	92	100	108	116
			2	10	18	26	34	42	50	58	66	74	82	90	98	106	114
Top	Headers	J3	7	15	23	31	39	47	55	63	71	79	87	95	103	111	119
			5	13	21	29	37	45	53	61	69	77	85	93	101	109	117
	J2		3	11	19	27	35	43	51	59	67	75	83	91	99	107	115
			1	9	17	25	33	41	49	57	65	73	81	89	97	105	113
TOP	QSE											J1					
BOTTOM																	

Labeled header pin number refers to QTE / QSE pin.  
 \*Pin 1 of QSE is connected to Pin 1 of QTE



**NOTE:**  
 1- GND test point is connected to inner GND planes as well as the Samtec/TE edge connector GND tab  
 2- ZX147-QTE has onboard QTE connector, mating with Host QSE or TE Mictor SB 0.80mm centerline receptacle connectors.

120 positions - 2 Rows x 60 Pins/Row TE Mictor SB 0.8mm ( 0.032" ) Pitch Connectors Part numbers		
TE Mictor SD 0.8mm ( 0.032" )	Description	Mated Stack Height
1658043-3 2-1658043-3 1658012-3 2-1658012-3 1658462-3 2-1658462-3	Receptacle	
1658044-3 2-1658044-3 1658013-3 2-1658013-3 1658463-3 2-1658463-3	Plug	5mm ( 0.197" )
4-1658044-3 6-1658044-3 4-1658013-3 6-1658013-3 4-1658463-3 6-1658463-3		8mm ( 0.315" )
4-1658045-3 2-1658045-3 1658014-3 2-1658014-3 1658464-3 2-1658464-3		11mm ( 0.433" )
4-1658046-3 2-1658046-3 1658015-3 2-1658015-3 1658465-3 2-1658465-3		14mm ( 0.551" )
4-1658046-3 6-1658046-3 4-1658015-3 6-1658015-3 4-1658465-3 6-1658465-3		16mm ( 0.63" )
1658437-3 2-1658437-3 1658438-3 2-1658438-3 1658439-3 2-1658439-3		19mm ( 0.748" )
4-1658437-3 6-1658437-3 4-1658438-3 6-1658438-3 4-1658439-3 6-1658439-3		22mm ( 0.866" )
1658047-3 2-1658047-3 1658016-3 2-1658016-3 1658466-3 2-1658466-3		25mm ( 0.984" )
4-1658047-3 6-1658047-3 4-1658016-3 6-1658016-3 4-1658466-3 6-1658466-3		30mm ( 1.181" )
1658048-3 2-1658048-3 1658017-3 2-1658017-3 1658467-3 2-1658467-3		
1658049-3 2-1658049-3 1658018-3 2-1658018-3 1658468-3 2-1658468-3		
1658050-3 — 1658019-3 — 1658469-3		
1658051-3 — 1658020-3 — 1658470-3		

ZX147 Samtec Qstrip QTE QSE cross matrix compatability with TE Mictor SB 0.8mm ( 0.032" ) Pitch Connectors							Description	Mated Stack Height
TE Mictor SD 0.8mm ( 0.032" )			Samtec QStrip QTE QSE					
Gold Flashing	10 μ" Gold Plating	30 μ" Gold Plating	Gold Flashing	10 μ" Gold Plating	30 μ" Gold Plating	Plug		
1658043-3	1658012-3	1658462-3	QSE-060-01-F-D-A	QSE-060-01-L-D-A	QSE-060-01-C-D-A			
1658044-3	1658013-3	1658463-3	QTE-060-01-F-D-A	QTE-060-01-L-D-A	QTE-060-01-C-D-A			
1658045-3	1658014-3	1658464-3	QTE-060-02-F-D-A	QTE-060-02-L-D-A	QTE-060-02-C-D-A			
1658046-3	1658015-3	1658465-3	QTE-060-03-F-D-A	QTE-060-03-L-D-A	QTE-060-03-C-D-A			
1658437-3	1658438-3	1658439-3	QTE-060-09-F-D-A	QTE-060-09-L-D-A	QTE-060-09-C-D-A			
1658047-3	1658016-3	1658466-3	QTE-060-04-F-D-A	QTE-060-04-L-D-A	QTE-060-04-C-D-A			
1658048-3	1658017-3	1658467-3	QTE-060-05-F-D-A	QTE-060-05-L-D-A	QTE-060-05-C-D-A			
1658049-3	1658018-3	1658468-3						
1658050-3	1658019-3	1658469-3	QTE-060-07-F-D-A	QTE-060-07-L-D-A	QTE-060-07-C-D-A			
1658051-3	1658020-3	1658470-3						

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.

**ZEBAX TECHNOLOGIES**  
 SANTA CRUZ, CA U.S.A (831) 222-0717  
 WWW.ZEBAX.COM

SPECIFIED DIMENSIONS ARE INCHES (MMD). ROHS COMPLIANT	ASSEMBLY DRAWING	
	ITEM: ZX147-QTE-060	
DESCRIPTION: Samtec breakout adapter QTE 060 TE Mictor SD 0.80mm 120 breakout adapter		
CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 1 OF 1

ALL ZEBAX TECHNOLOGIES DESIGN SPECIFICATIONS, DRAWINGS, PUBLICATIONS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." ZEBAX MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NO INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.  
 Information furnished is believed to be accurate and reliable. However, Zebax Technologies assumes no responsibility for the consequences of use of such information or for any infringement of patents or other rights that may result from its use. Specifications mentioned in this publication are subject to change without notice. This publication replaces all other information previously published. Zebax Technologies products are not authorized as in life support devices or systems.