

**Product Name: ZX102QTH-S Samtec low profile Breakout Adapter**

**Product Description:** 60pins per row x 2 rows -- > 120 pins Samtec breakout adapter designed for low profile test and measurement applications; servers or networking system – Onboard QTH-060 Samtec connector, mating with QSH-060 connector series.

- 1- Each QTH-060 connector's signal is routed to onboard header.
- 2- Listed number adjacent to each header pin represents the associated Samtec QTH pin number.
- 3- All traces are 50 Ohms impedance controlled.
- 4- Four layers PCB design, inner layers are GND planes.
- 5- One accessible GND test point, The test point is connected to module's GND planes and direct interface to the connector GND blade.
- 6- Exposed copper area are provided for GND probe soldering, if required.
- 7- Offering Low profile design, targeting in-system rackmount or low profile design test & measurement applications.
- 8- Ease of interface with single channel and differential scope probes.
- 9- Fully compatible with Single Ended , -D, and Differential Pair, -DP, Samtec connector QSH QTH series as well as cable assemblies; HQCD , HQDP
- 10- Mates with any height and form factor QSH-060 connector series such as -D -DP, -RA, -EM configurations.
- 11- Flying lead wire assembly may be used for board to board interface – See ordering information, see [ZX100ACC-SS](#)

**Electrical:**  
 Insertion loss > -2dB @3GHz  
 Trace impedance: 50 Ω  
 Operating Temperature: -55°C to +125°C  
 Samtec Connector:

Onboard Connector: QTH-060-xx 2rows x 30 pins/row  
 Mates with: Any QSH-060-xx formfactor  
 Pitch: 0.0197" ( 0.50mm ) pin to pin pitch  
 Plating: Gold Flash  
 Header:  
 Pitch: 0.1" ( 2.54mm ) pin to pin pitch  
 Pin: Square 0.025" ( 0.635mm )  
 Height: 0.24" ( 6mm )  
 Plating: Gold Flash

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

**Mates with :** Samtec QSH060 QSH020(DP) - Also mates with ANY one bank of QSH060, QSH090, QSH120 : QSH020(DP) QSH040(DP) QSH060(DP) QSH080(DP) HFHM2 HQCD, HQDP  
 Compatible with – differential Pair (DP), unused signal can be left unconnected or Grounded for improved noise immunity.

**Signal assignments:** Table below exhibits the assigned Samtec pin numbers associated with the headers for top and bottom sides of the module.

ZX102QTH-S header pin assignments J1: QTH060																	
Bottom	Headers	J5	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
		J4	6	14	22	30	38	46	54	62	70	78	86	94	102	110	118
	Headers	J3	7	15	23	31	39	47	55	63	71	79	87	95	103	111	119
		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

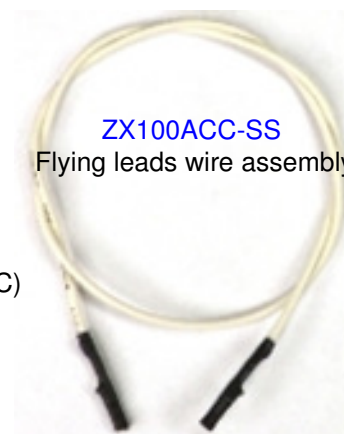
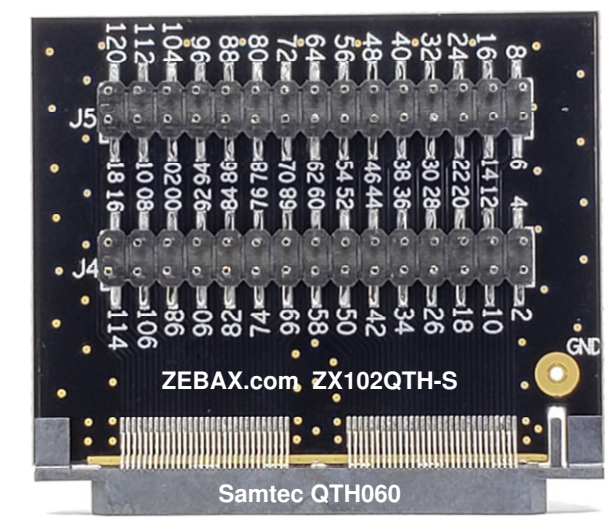
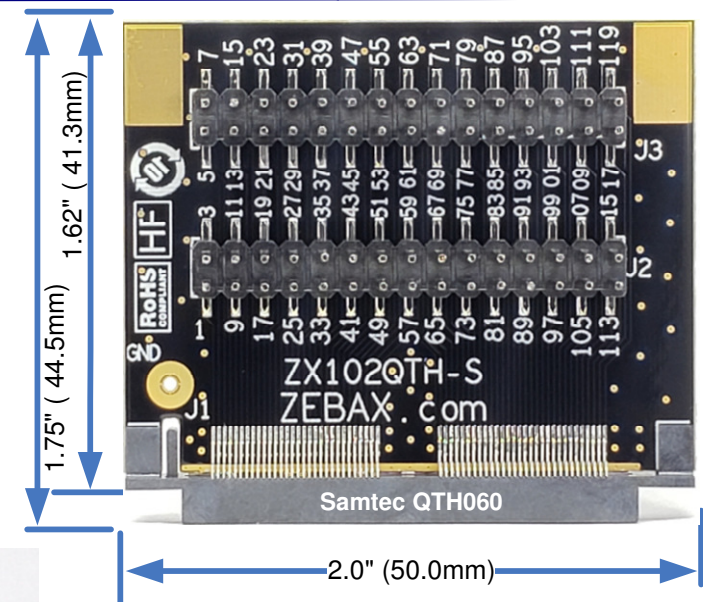
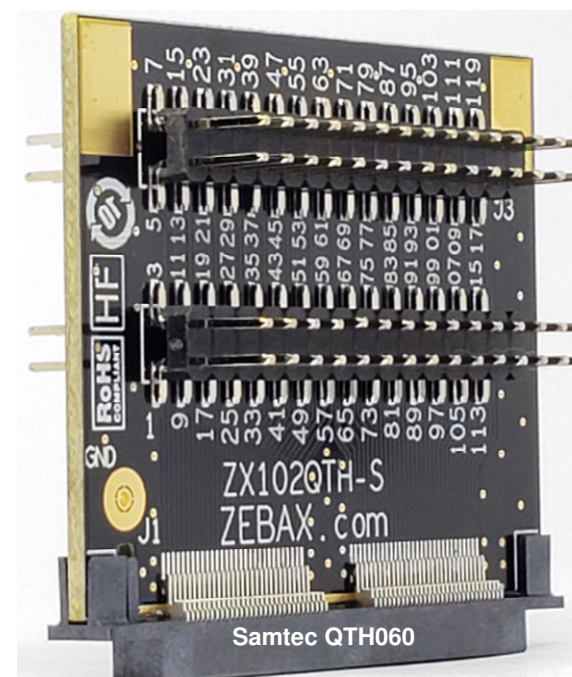
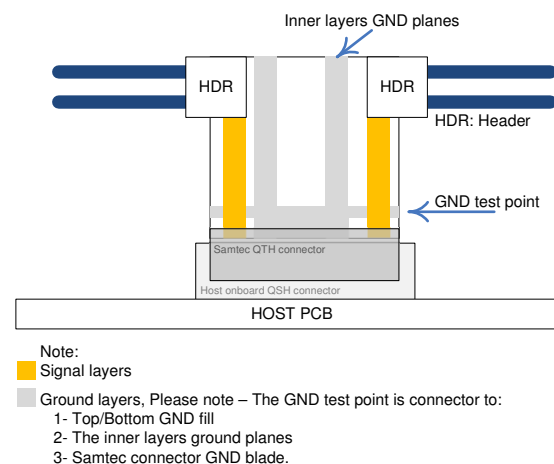
Header pin numbers refer to the SAMTEC QTH connector pin number

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ZX102QTH-S simplified cross section diagram



**ZX102QTH-S package includes:**

Part number	Quantity	Description
ZX102QTH-S	1	Samtec Breakout Adapter module
ZX100ACC-SS	0	Flying leads wire assembly

[ZX100ACC-SS site page](#) for ordering the flying leads wire assembly

**Note**

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

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT	<b>ASSEMBLY DRAWING</b>	
	ITEM: ZX102QTH-S	
<b>DESCRIPTION: Samtec QTH low profile breakout adapter</b>		
CHECKED: M. MARINA	DRAWN: MATTHEEW	REVISION: 1.0 SHEET: 1 OF 1