

Product Name: ZX103-RK Samtec Breakout Adapter - In-system rackmount / low profile

Product Description: 60pins per row x 2 rows -- > 120 pins Samtec breakout adapter designed for in-system rackmount low profile test and measurement applications; servers or networking systems. ZX103-RK has onboard QTH-060 and QSH-060 Samtec connectors, mating with QSH-060 and QTH-060 connector series.

- 1- Passthrough design where pin 1 of the QTH plug (header) is connected to pin 1 of QSH socket (receptacle).
- 2- Each QTH-060 connector's signal is routed to onboard QSH-060 connector via onboard headers.
- 3- Listed number adjacent to each header pin represents the associated Samtec QTH-QSH pin number.
- 4- All traces are 50 Ohms impedance controlled.
- 5- Four layers PCB design, inner layers are GND planes.
- 6- Two accessible GND test points, The test points are connected to module's GND planes and direct interface to the connector GND blades (tabs).
- 7- Exposed copper area are provided for GND probe soldering, if required.
- 8- Offering in-system rackmount low profile design test & measurement applications.
- 9- Ease of interface with single channel and differential scope probes.
- 10- Fully compatible with Single Ended , -D, and Differential Pair, -DP, Samtec connector QSH QTH series as well as cable assemblies; HQCD , HQDP
- 11- Mates with any height and form factor QSH-060 QTH-060 connectors series such as -D -DP, -RA, -EM configurations.
- 12- 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 60 pins/row
QSH-060-xx 2rows x 60 pins/row
Mates with: Any QSH-060-xx and QTH-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 QTH060 QSH060 QTH040(DP) QSH040(DP) - Also mates with ANY two banks of QSH090, QSH120 : 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.

ZX103-RK header pin assignments - J1: QTH060 J6: QSH60														
Bottom	Headers	J5	8	16	24	32	40	48	56	64	72	80	88	96
			6	14	22	30	38	46	54	62	70	78	86	94
		J4	4	12	20	28	36	44	52	60	68	76	84	92
Top	Headers	J3	7	15	23	31	39	47	55	63	71	79	87	95
			5	13	21	29	37	45	53	61	69	77	85	93
		J2	3	11	19	27	35	43	51	59	67	75	83	91

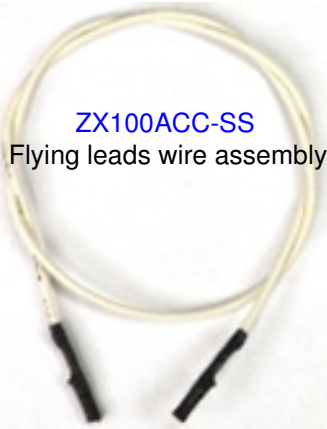
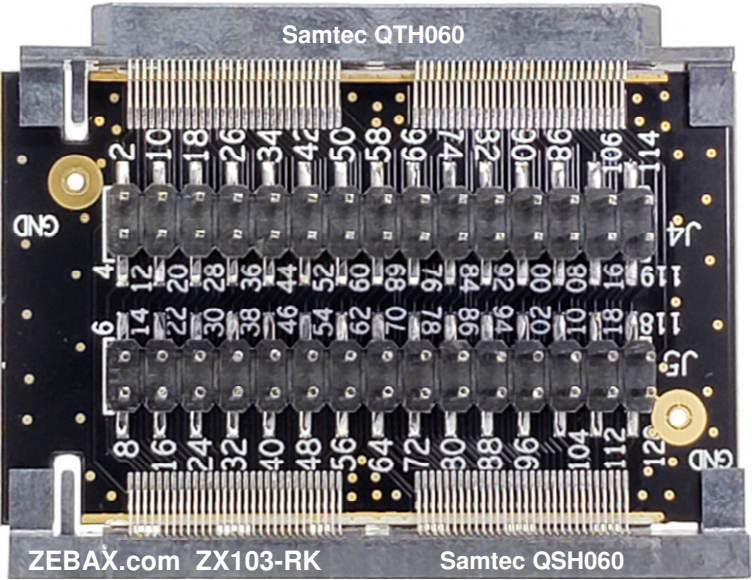
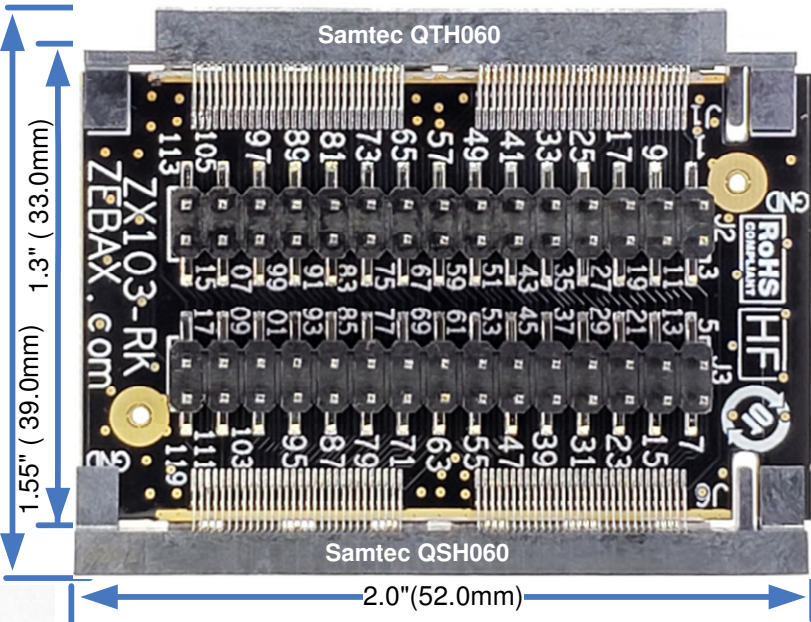
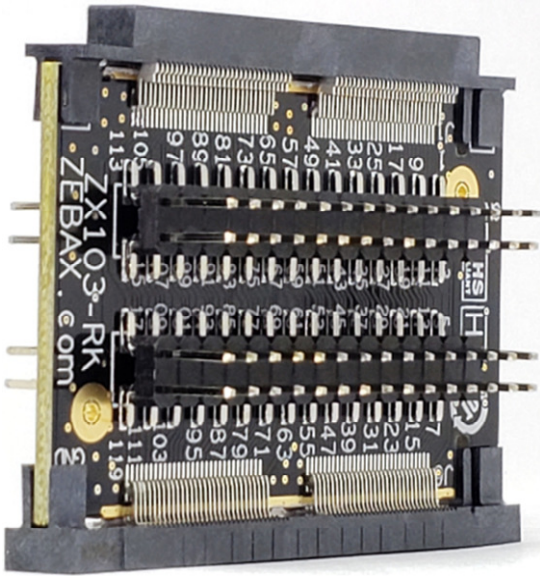
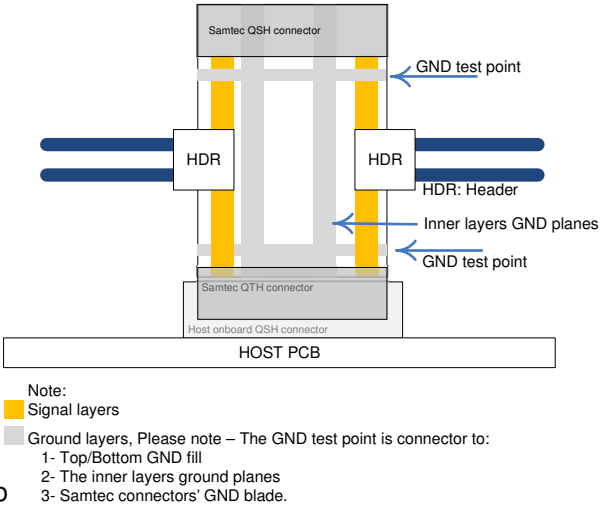
Header pin numbers refer to the SAMTEC QSH - QTH connectors pin numbers - Pin 1 of QSH is connected to Pin 1 of QTH

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ZX103-RK simplified cross section diagram



ZX103-RK package includes:

Part number	Quantity	Description
ZX103-RK	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		ASSEMBLY DRAWING
		ITEM: ZX103-RK
DESCRIPTION: Samtec in-system rackmount low profile Breakout Adapter		
CHECKED: M. MARINA	DRAWN: MATTHEEW	REVISION: 1.0
		SHEET: 1 OF 1