

Product Name: ZX140QTS-RK Samtec Breakout Adapter – in-system rackmount – low profile

Product Description: 25pins per row x 2 rows -- > 50 pins Q-Strip Samtec breakout adapter designed for rackmount or low profile test and measurement applications; servers or networking hardware in any standard rackmount – Onboard QTS-025 Samtec connector, mating with QSS-025 connector series.

- 1- Each QTS-025 connector's signal is routed to onboard header.
- 2- Listed number adjacent to each header pin represents the associated Samtec QTS 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- Offering Low profile design, targeting in-system rackmount or low profile design test & measurement applications.
- 7- Ease of interface with single channel and differential scope probes.
- 8- Fully compatible with Single Ended , -D, and Differential Pair, -DP, Samtec connector QSS QTS series as well as cable assemblies; SQCD
- 9- Mates with any height and form factor QSS-025 connector series such as -D -DP, -RA, -EM configurations.
- 10- 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: QTS-025-xx 2rows x 25 pins/row
- Mates with: Any QSS-025-xx formfactor
- Pitch: 0.025" (0.635mm) 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 QSS025 - Also mates with ANY one bank of QSS050 QSS075 and SQCD
 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. Due to the module size, there are no listed reference designators on this module. The side with "Zebax.com" and Module name , ZX140QTS-RK" is the top side.

ZX140QTS-RK Header pin configuration

Top Header	3	7	11	15	19	23	27	31	35	39	43	47	GND
	1	5	9	13	17	21	25	29	33	37	41	45	49

Bottom Header	4	8	12	16	20	24	28	32	36	40	44	48	GND
	2	6	10	14	18	22	26	30	34	38	42	46	50

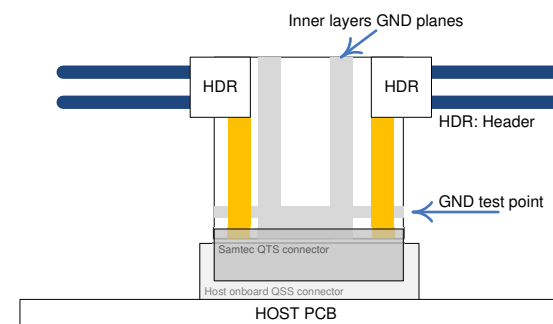
Header pin numbers refer to the SAMTEC QTS connector pin number

Notice

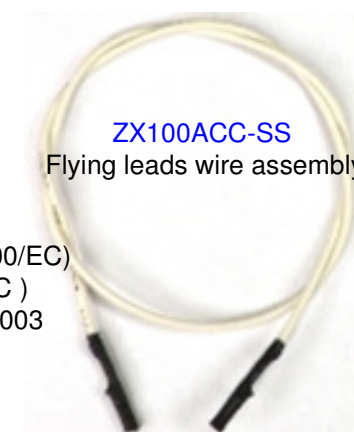
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ZX140QTS-RK simplified cross section diagram



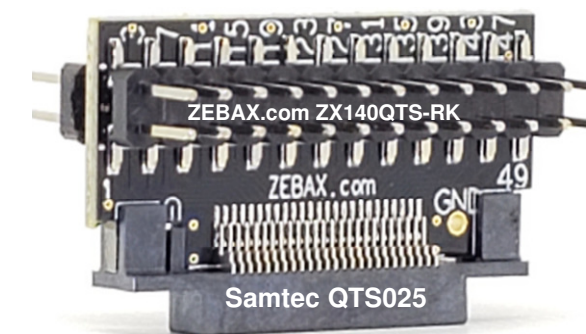
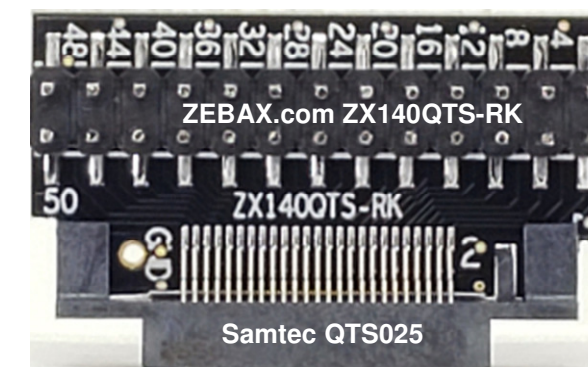
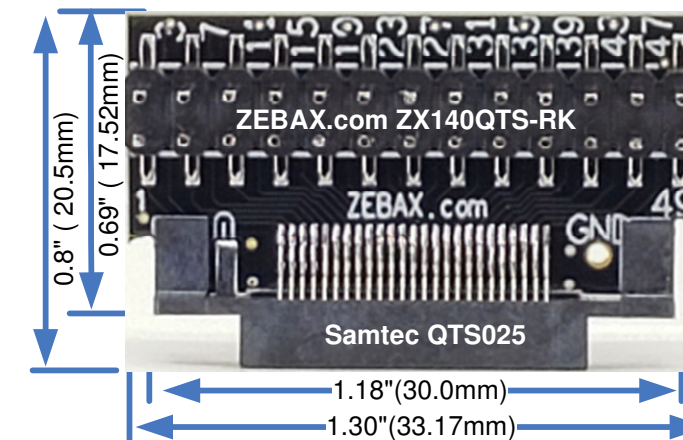
Note:
 Signal layers
 Ground layers, Please note – The GND test point is connector to:
 1- Top/Bottom GND fill
 2- The inner layers ground planes
 3- Samtec connector GND blade.



Compliance:

- ISO2001 certified
- RoHs - Lead Free
- EU RoHS2
- UL E111594 document
- ELV- Vehicle Directive (Directive 2000/EC)
- European Union Directive (203/11/EC)
- Halogen Free per IEC-61249-2.21 : 2003
- RoHs Directive 2011/65/EU
- WEEE Directive (2012/12/EU)

- Certificate of Compliance for Radioactive substances
- Certificate of Compliance for Asbestos
- Certificate of Compliance for Ozone Depleting Substances, ODS
- Certificate REACH SVHC
- Certificate of Compliance RoHS_EN_CoC



ZX140QTS-RK package includes:

Part number	Quantity	Description
ZX140QTS-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: ZX140QTS-RK

DESCRIPTION: In-system rackmount / low profile Samtec breakout adapter QTS-RK

CHECKED: M. MARINA
 DRAWN: MATTHEW
 REVISION: 1.0
 SHEET: 1 OF 1