RSL Pin-Out

Quality form (QCF39)

Certificate Number FM 55022

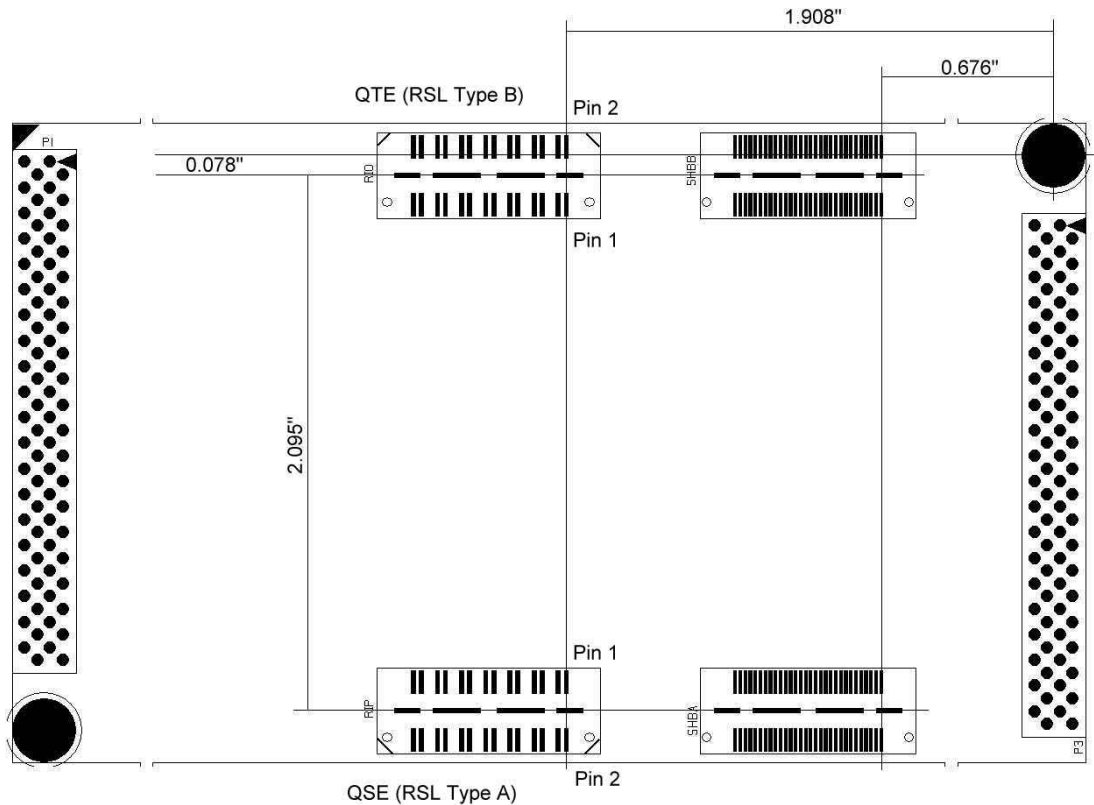This document describes the orientation, connector type, and pin-outs for the RSL interfaces.

The drawing below shows the TIM module incorporating two SHB and two RSL connectors.

Unlike the SHB, the RSL signals are not bi-directional. To prevent inadvertent connection from Tx to Tx (and Rx to Rx), different connector genders are used. Type A uses the Samtec QSE-014 connector whereas Type B uses the QTE-014. A connecting cable will therefore have a different gender at each end, and also be a straight 1-to-1 connection.

If TIM board space permits, an additional connector should be fitted on the underside of the module, directly beneath the connector on the top. The underside connector should have the same gender as the corresponding one on top. Connectivity is such that a single via should allow connection to both pins. So that pin 1 (top) will connect to pin 27 (bottom) etc.

RSL Type A

Pin No	Pin Name	Signal Description	Pin No	Pin Name	Signal Description
1	RxLink0p	Receive Link 0, positive	2	TxLink0p	Transmit Link 0, positive
3	RxLink0n	Receive Link 0, negative	4	TxLink0n	Transmit Link 0, negative
5	RxLink1p	Receive Link 1, positive	6	TxLink1p	Transmit Link 1, positive
7	RxLink1n	Receive Link 1, negative	8	TxLink1n	Transmit Link 1, negative
9	RxLink2p	Receive Link 2, positive	10	TxLink2p	Transmit Link 2, positive
11	RxLink2n	Receive Link 2, negative	12	TxLink2n	Transmit Link 2, negative
13	RxLink3p	Receive Link 3, positive	14	TxLink3p	Transmit Link 3, positive
15	RxLink3n	Receive Link 3, negative	16	TxLink3n	Transmit Link 3, negative
17	Reserved	Reserved	18	Reserved	Reserved
19	Reserved	Reserved	20	Reserved	Reserved
21	Reserved	Reserved	22	Reserved	Reserved
23	Reserved	Reserved	24	Reserved	Reserved
25	Reserved	Reserved	26	Reserved	Reserved
27	Reserved	Reserved	28	Reserved	Reserved

RSL Type B

Pin No	Pin Name	Signal Description	Pin No	Pin Name	Signal Description
1	TxLink0p	Transmit Link 0, positive	2	RxLink0p	Receive Link 0, positive
3	TxLink0n	Transmit Link 0, negative	4	RxLink0n	Receive Link 0, negative
5	TxLink1p	Transmit Link 1, positive	6	RxLink1p	Receive Link 1, positive
7	TxLink1n	Transmit Link 1, negative	8	RxLink1n	Receive Link 1, negative
9	TxLink2p	Transmit Link 2, positive	10	RxLink2p	Receive Link 2, positive
11	TxLink2n	Transmit Link 2, negative	12	RxLink2n	Receive Link 2, negative
13	TxLink3p	Transmit Link 3, positive	14	RxLink3p	Receive Link 3, positive
15	TxLink3n	Transmit Link 3, negative	16	RxLink3n	Receive Link 3, negative
17	Reserved	Reserved	18	Reserved	Reserved
19	Reserved	Reserved	20	Reserved	Reserved
21	Reserved	Reserved	22	Reserved	Reserved
23	Reserved	Reserved	24	Reserved	Reserved
25	Reserved	Reserved	26	Reserved	Reserved
27	Reserved	Reserved	28	Reserved	Reserved