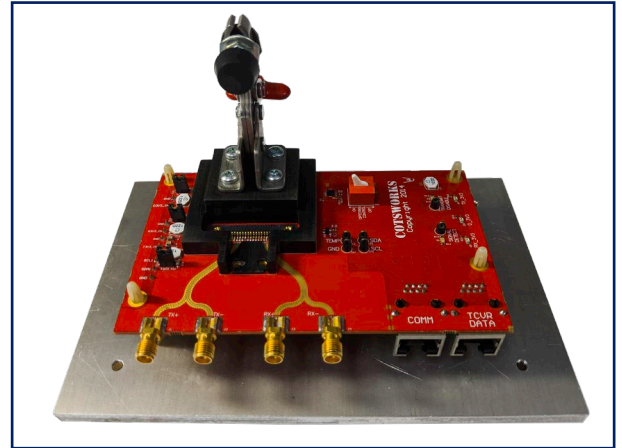


### Features:

- 4 SMA electrical interfaces
- Designed to work with COTSWORKS RJ-10G and RJ-5G-C transceivers
- Clampdown feature standard on all boards
- Spring header receptacles for fast and easy transceiver mounting
- Convenient test points for DDMI interface
- Easy to read LED indicators for visual function verification
- Easy access signal detect test points
- Easy access TX Disable D.I.P. switches
- Modified RJ test boards are available and made to fit customer requested shapes, sizes, and I/O



**This high performance evaluation board allows for fast and reliable testing without the need for a final board design.**



COMMERCIAL  
AEROSPACE



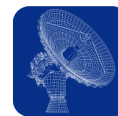
MILITARY  
AEROSPACE



MILITARY  
TACTICAL



SUBSEA  
NETWORKING



RADAR &  
SENSING



OIL &  
EXPLORATION

### General Description

This electrical interface board is ideal for testing all features of the COTSWORKS RJ-10G and common pinout transceivers.

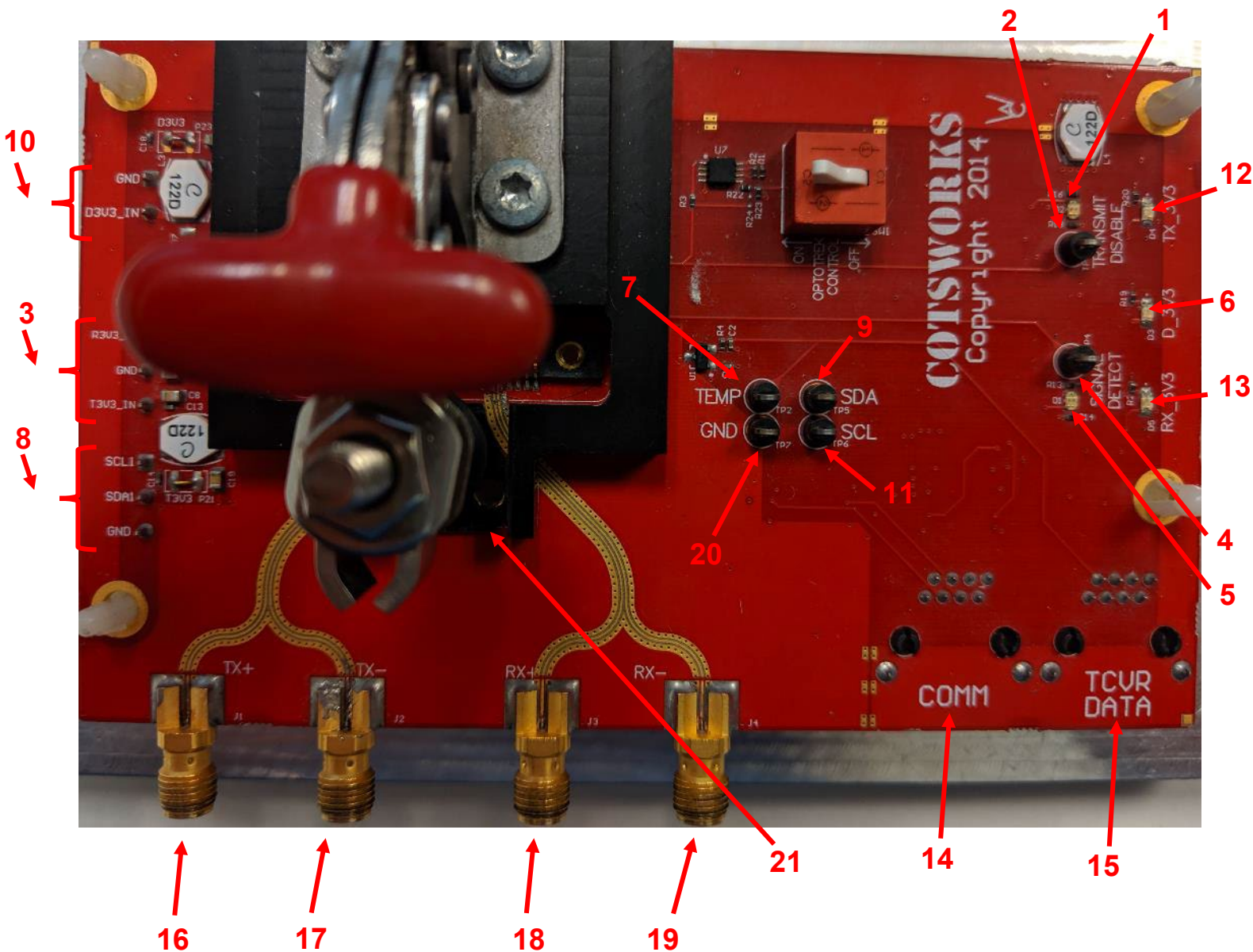
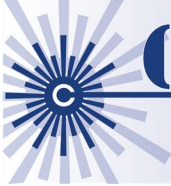
RJ common pinout transceiver test board is designed to simplify early level testing without having to integrate the transceiver into a host board from pattern generation through electrical connectors

This test board can become an interposer board, routing the electrical connection from our Transceiver Platform parts to a customer specified connector on a customer PCB.

### Absolute Maximum Ratings

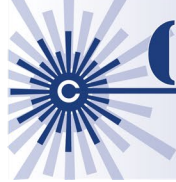
PARAMETER	SYMBOL	MIN.	MAX.	UNIT	NOTES
Maximum Supply Voltage	V <sub>CC</sub>	-	3.47	V	
Storage Temperature	T <sub>sto</sub>	-55	105	°C	
Operating Temperature	T <sub>OP</sub>	-55	105	°C	





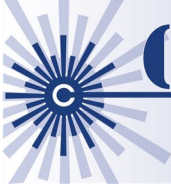
1	<b>TX Disable Indicator</b>	The LED will turn red if the transmitter is disabled. This means the TX_DIS pin on the DUT is driven to Vcc. The LED will turn green if the transmitter is enabled. This means the TX_DIS pin on the DUT is driven to GND.
2	<b>TX Disable Test Point</b>	This test point can be used to measure the voltage on the TX_DIS pin on the DUT. It can also be used to drive the TX_DIS pin on the DUT. If the test point is connected to GND, the Transmitter will be enabled. If the test point is connected to Vcc, the Transmitter will be disabled.
3	<b>Transceiver Power</b>	Connect the supplied 4-pin power cable to 3.3V. Transceiver power is used to power the DUT and does not power the components on the eval board.



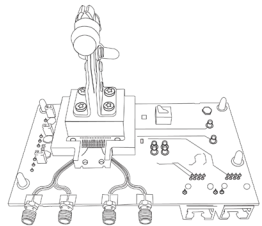
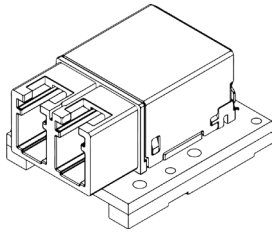


4	<b>Signal Detect Test Point</b>	This test point can be used to measure the voltage on the SD pin on the DUT. If the voltage is measured high, the receiver of the DUT is receiving a signal. If the voltage is measured low, the receiver of the DUT is not receiving a signal.
5	<b>Signal Detect Indicator</b>	The LED will turn red if the receiver of the DUT is not receiving a signal. The LED will turn green if the receiver of the DUT is receiving a signal.  <i>If testing an RJ-RX2, this Indicator corresponds to channel 1.</i>
6	<b>Digital Power Indicator</b>	The blue LED will turn on if there is 3.3V on the digital power plane supplied from location 16. Digital power is used to power the components on the eval board and does not power the DUT.  <i>If testing an RJ-RX2, this test point corresponds to channel 2.</i>
7	<b>Temperature Test Point</b>	This test point can be used to measure the voltage from the temperature sensor on the eval board.
8	<b>I2C Interface</b>	If supported by the DUT, communication through the I2C bus can be established through a 3-pin connector in this location.
9	<b>SDA Test Point</b>	If supported by the DUT, communication through the I2C bus can be established through this test point.
10	<b>Digital Power</b>	Connect the supplied 2-pin power cable to 3.3V. Digital power is used to power the components on the eval board and does not power the DUT.
11	<b>SCL Test Point</b>	If supported by the DUT, communication through the I2C bus can be established through this test point.
12	<b>TX Power Indicator</b>	The blue LED will turn on if there is 3.3V on the TX power plane supplied from location 4. TX power is used to power the TX on the the DUT.
13	<b>RX Power Indicator</b>	The blue LED will turn on if there is 3.3V on the RX power plane supplied from location 4. RX power is used to power the RX on the the DUT.
14	<b>Communication I/O</b>	A standard OTS Ethernet communication cable with an RJ can be used for communication with the DUT and eval board EEPROM through I2C. Contact COTSWORKS for the pinout details.
15	<b>Transceiver I/O</b>	A standard OTS Ethernet communication cable with an RJ can be used for communication with features of the DUT. Contact COTSWORKS for the pinout details.
16	<b>TX- Input</b>	Provide inverted input signal for the optical transmitter through a 50Ω SMA cable. Check DUT datasheet for input signal specifications.
17	<b>TX+ Input</b>	Provide non-inverted input signal for the optical transmitter through a 50Ω SMA cable. Check DUT datasheet for input signal specifications.
18	<b>RX+ Output</b>	Non-inverted output signal from the optical receiver. Connect 50Ω SMA cable.
19	<b>RX- Output</b>	Inverted output signal from the optical receiver. Connect 50Ω SMA cable.
20	<b>Ground Test Point</b>	This test point is connected to circuit ground.
21	<b>DUT connection point</b>	Connection point for RJ DUT. Place screw posts from DUT inside the through holes on securing fixture, place DUT pins on corresponding pins from 20-pin header on test board, and secure in place with plunger for connection.





### Test Board Modification into Interposer Board

		<p>Possible Modifications Include</p> <ul style="list-style-type: none"> <li>• Custom form factors, connectors, and layout</li> <li>• Ruggedization for shock, vibration, and environmental requirements</li> </ul>
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## Ordering Information

TESTBD-RJ-10	-XX
<p><b>RJ Transceiver Eval Board Common Pinout</b></p>	<p><b>Plate Option</b></p> <p>P: Plate Stand Included</p> <p>NP: Plate Stand Not Included</p>

**Example part number:** TESTBD-RJ-10-P [RJ Transceiver Eval Board Common Pinout with plate stand.]

Contact [sales@COTSWORKS.com](mailto:sales@COTSWORKS.com) for mechanical dimensional information, Interposer Board modifications, and other configuration options.

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