

COMMUNICATION TRANSCIVER MODULE

Key Features

- Far field and near Field indication
- Transmitter chain health status
- VSWR status

Overview

Cyient's communication transceiver module serves as RF front end electronics designed to amplify low power signals for further processing. The receiver works in 118MHz to 136.992MHz and is capable of handling low power signals in the range of -107dBm to -13dBm. The COM Transmitter works in the same range as the receiver (118MHz to 136.992MHz) and is responsible for amplifying RF signal to 16W.

Technical Specifications

Transmitter

- Output power of 16W (CW)
- Duty cycle as 5sec ON, 15sec OFF and 15sec ON, 45sec OFF for 16W output power
- Minimum Gain is 40dB
- Harmonics less than -35dBc
- Superiors less than -35dBc
- Input and output return loss -10dB (Min)

Interfaces

- Digital interface and power supply for 40 Pin SMD connector
- RF Input/ output SMB connector

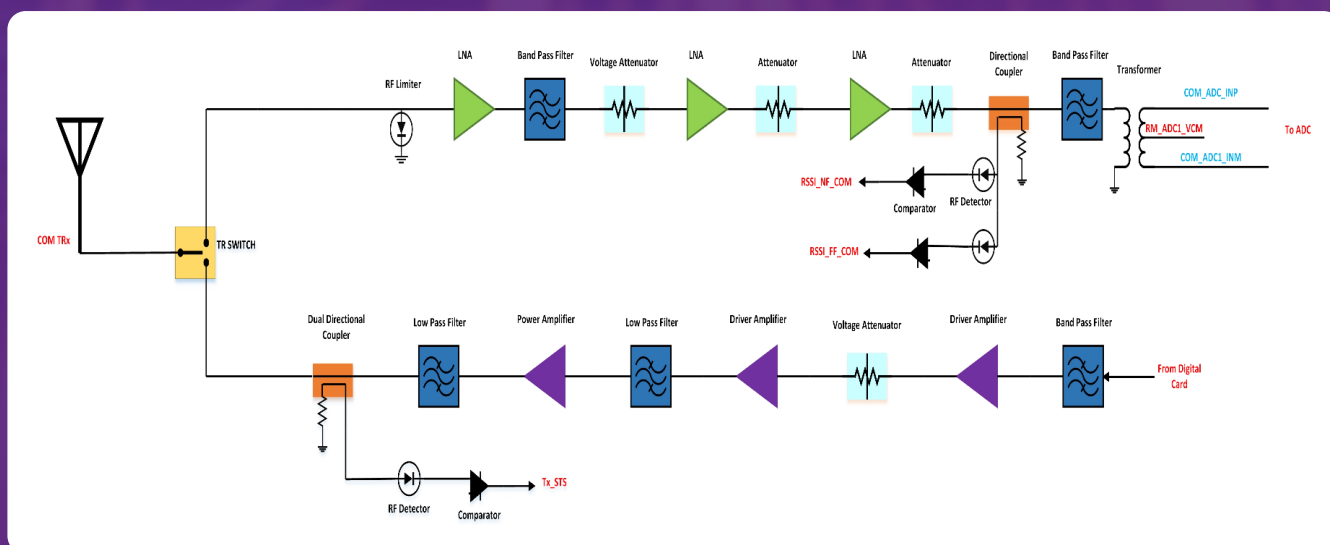
Receiver

- Sensitivity range -107dBm to -13dBm
- Receiver gain is 54dB
- Gain flatness is ± 2 dB
- Noise figure is less than 6dB
- Dynamic Range 96dB
- Harmonics less than -40dBc
- Superiors less than -40dBc
- Input and output return loss -10dB (Min)

Size

- (LXHXW): 235.14 mm X 133.59 mm X 2 mm

Block Diagram



Benefits

Overall "Low cost of ownership" to the customer due to

- Compact Design
- Receiver and Transmitter in Single PCB
- Easy to Detect the failures

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