



# Industry leading 5G NR RFIC for 24 – 29.5 GHz



The worldwide 5G race pushes the industry to use more cost-effective solutions. The Sivers Semiconductors TRX BF/02 supports the full frequency range from 24 to 29.5 GHz with speeds up to 5 Gbit/s. The unique level of integration enables support for different markets and frequency bands using the same hardware. The perfect choice for licensed 5G.

The TRX BF/02, is a highly integrated 16+16 channel beam forming transceiver Radio Frequency Integrated Circuit (RFIC). With the Zero-IF/Low IF baseband interface, it can easily be integrated with any 5G mmWave modem.



FWA



5G MMWAVE



BACKHAUL



V2X

## Key features

- 24-29.5 GHz
- 3GPP compliant for 5G New Radio (NR) mmWave
- Supported throughput 5 Gbit/s
- Enables 256 QAM OFDM and beyond
- 16+16 Tx/Rx Array
- Direct conversion I/Q transceiver
- Zero-IF/Low IF with 1.2 GHz bandwidth
- Integrated beam book for instant beam steering/forming
- +25 dBm combined linear output power
- 7 dB Noise Figure
- Embedded Wafer Level Ball Grid Array (eWLB) packaged device
- Seamless modem integration through integrated analog baseband

The TRX BF/02 enables full transceiver design with a unique high level integration. It is also possible to tile several RFICs together in bigger arrays for longer reach and greater performance.

Less discrete components mean less cost and higher quality - critical parameters to consider when designing a Customer Premises Equipment (CPE). The transceiver supports full temperature range of -40 to +85 deg C, a unique wide band coverage of 24 – 29.5 GHz, superior link budget, flexible channelization and excellent Error Vector Magnitude (EVM) performance which enable 256 QAM OFDM modulation or more. All of which makes the TRX BF/02 uniquely well fitted for outdoor infrastructure 5G mmWave applications.

