

## Product Brief

# TRF6001 RF Transceiver for Bluetooth™ From Texas Instruments

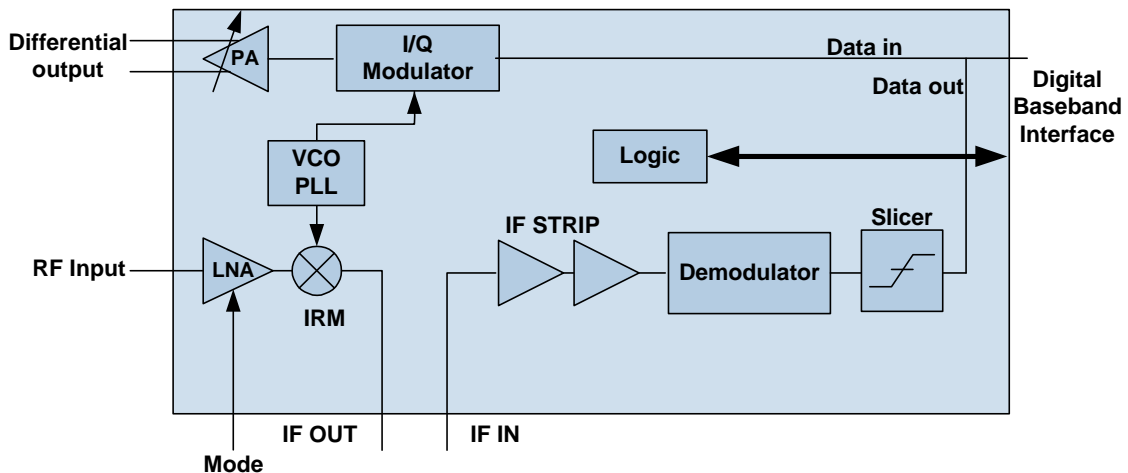
The TRF6001 device is an integrated high performance 2.4-GHz transceiver, ideally suited for Bluetooth applications. The BiCMOS device is a Class 2 radio targeted at high performance Bluetooth products with extended operating ranges.

Together with one of the Bluetooth baseband controllers from Texas Instruments, the TRF6001 RF transceiver forms a complete Bluetooth solution.

The highly integrated transceiver incorporates a dual gain low noise amplifier, an image reject mixer, a frequency synthesizer, a limiting amplifier, a received signal strength indicator (RSSI) output, a quadrature detector, an adaptive bit slicer, and a power amplifier with gain control and ramping. The TRF6001 RF transceiver also incorporates on-chip power down circuitry and voltage regulators.

### TRF6001 RF Transceiver Certified, March 2001

- Sensitivity: -85 dBm (0.1% BER)
- Dynamic Range: Over 75 dB
- Class 2, 3: +4 dBm Maximum Output Power
- TX Amplifier With Gain Control & Ramping
- No External Trimming
- Power Down Mode
- Integrated 1.8-V Regulator for Baseband Core Power Supply
- Adaptive Data Slicer
- Very Small Size BGA (Ball Grid Array) Package (5x5 mm)
- **Process:** RF BiCMOS



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