

# Product Brief



MICROWAVE & HIGH RELIABILITY PRODUCTS

## SMI7336 2x2 Multi-band MIMO

### Dual-channel RF transceiver for TDD and HFDD applications

#### Product Description

SMI7336 is a dual-channel RF transceiver for TDD and HFDD applications. The transceiver supports a full 2 x 2 MIMO configuration with two independent transmit and receive chains. The transceiver uses direct-conversion architecture. The received RF signal is down converted to baseband. Internal switches allow adjustment of the amplitude and phase of the baseband signal to achieve optimal channel balance. The LO is generated by an internal fractional-N synthesizer capable of <100 Hz steps. The internal registers are loaded via a standard SPI interface.

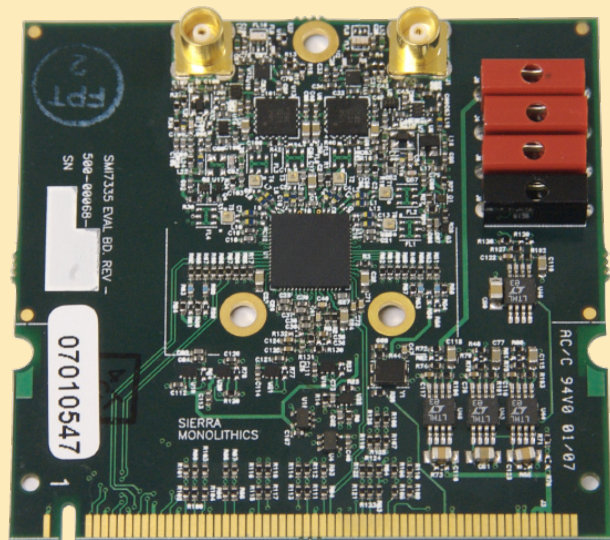
#### Product Highlights

- ▶ 354 to 870MHz and 2.12 to 3.48GHz frequency coverage
- ▶ Full 2x2 MIMO functionality
- ▶ Supports Wave 2 WiMAX Forum certification
- ▶ EVM<-36db (typical) at 354 to 870MHz and EVM<-32db (typical) at 2.12 to 3.48GHz.
- ▶ DC power, 2.8V and 1.8V Supplies, 280mW in TX mode, 290 mW in RX mode (2x1 config)
- ▶ Direct conversion architecture for lowest cost
- ▶ Supports BW's of 3.5, 5, 7, 8.75, 10, 14 and 20 MHz
- ▶ On-chip peak and log amp detectors

#### Applications

- ▶ HFDD radios
- ▶ TDD radios

#### Evaluation Board

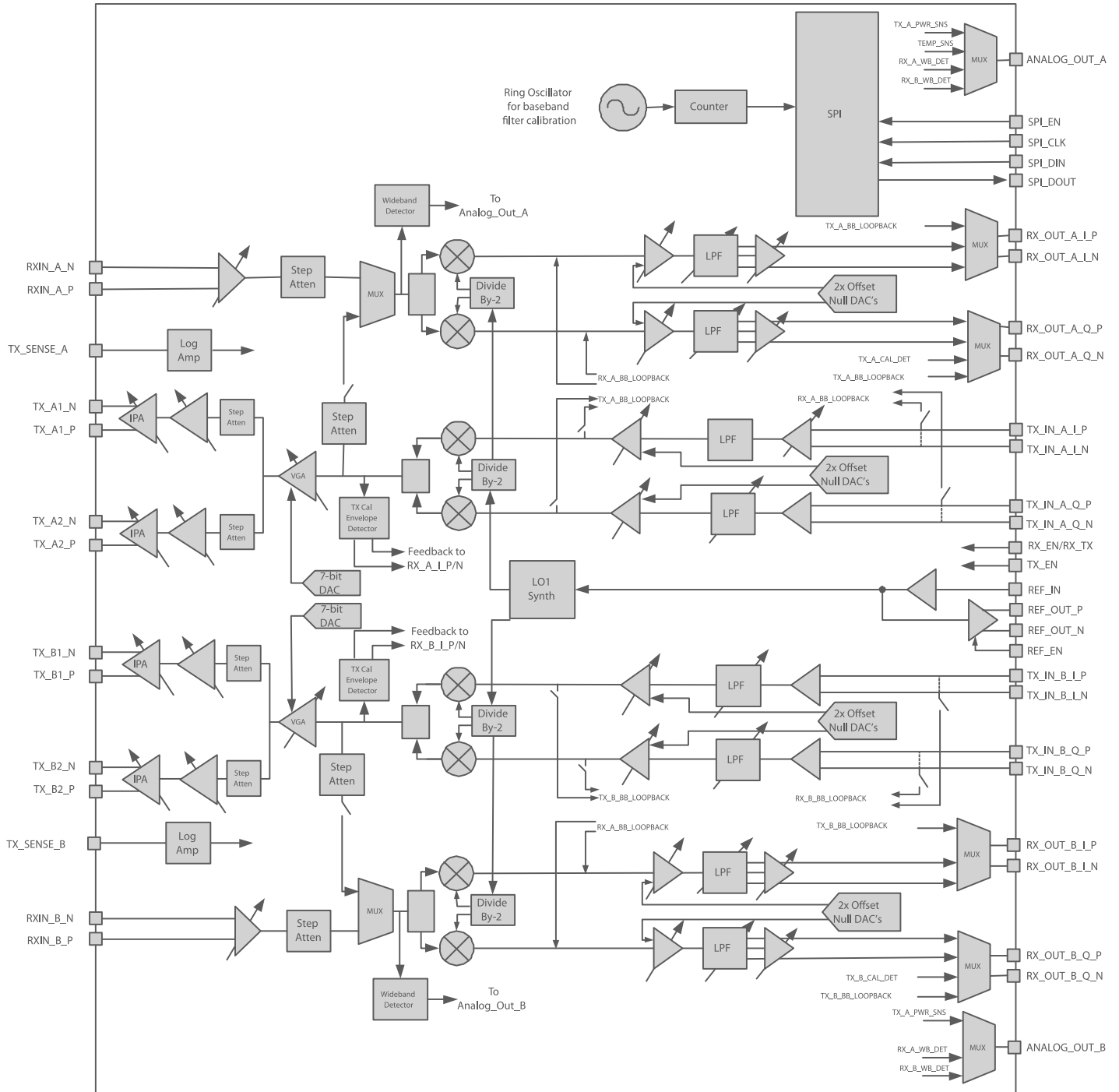


#### Package

8mm x 8mm 64 lead QFN

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## SMI7336 Block Diagram — 2x2 MIMO RFIC



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