



Field Proven Chips and Modules

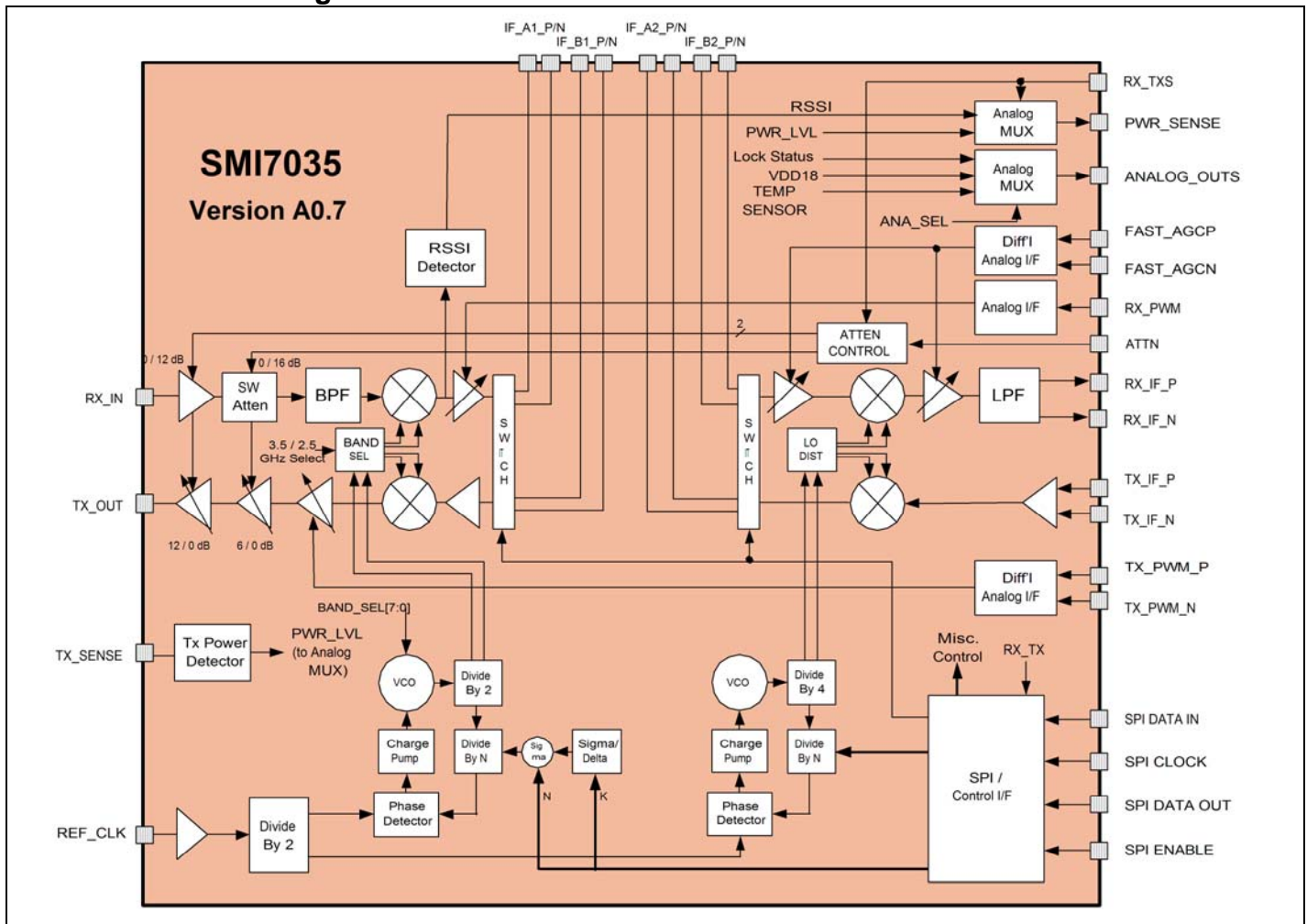


SMI7035 Broadband Wireless RFIC

SMI7035 IC Highlights

- Dual Band Transceiver RFIC for 802.16-2004: Half Duplex FDD Mode
TDD Mode
Supports multiple bandwidths
- 48 Pin QFN
- Enables Low Cost CPEs
- Frequency Coverage:
2.3 to 2.7 GHz
3.3 to 3.80 GHz

Functional Block Diagram



Preliminary Information

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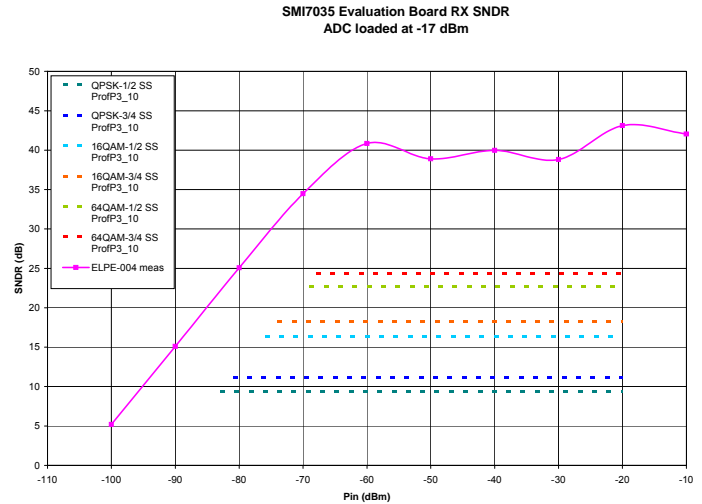


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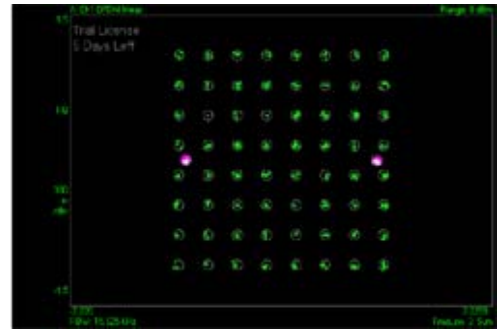
SMI7035 RFIC Receive Characteristics

- -100 to -20 dBm input range
- >110 dB gain control
- P1dB>-4 dBm (typical)
- NF 6 dB (typical)
- Input IP3:+6 dBm (typical)
- SNDR>31 dB (60 dB range)
- IF of 20 to 70 MHz supported
- On chip Image Reject BPF
- Image rejection of 32 dB (typical)



SMI7035 RFIC Transmit Characteristics

- >60 dB Gain Range
- SNDR>35 dB (-8 dBm out)
- LO leakage: 30 dB
- Image rejection: 43 dB
- Transmit noise power: -137 dBc/Hz (max Pout)



Transmit EVM

SMI7035 RFIC Integrated Synthesizer With VCO

- 32 MHz reference
- 125 kHz step size
- 0.9 deg. rms phase noise
- <85 usec settling time FDD mode
- <50 usec settling time TDD mode

SMI7035 Evaluation Board TX Phase Noise Measurement

