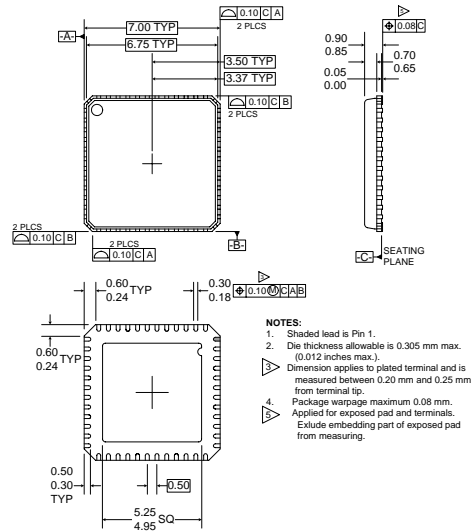


Typical Applications

- GSM/DCS Handsets
- GSM/DCS/PCS Handsets
- Quad-Band GSM Handsets
- Multi-Band EDGE<sub>RX</sub> Handsets
- Multi-Band GPRS Handsets

Product Description

The RF6001 is a combination synthesizer and signal processing IC, which along with the RF2710/RF2716 Very-Low-IF Receive IC, constitutes RFMD's low-cost GSM transceiver solution. The high-performance fractional-N synthesizer offers numerous features including a fully digital GMSK modulator with provisions for an analog I/Q interface and extremely low current consumption. The signal processor section provides a digital receive filter path designed to complement the RF2710/RF2716. The IF inputs are digitized, filtered and downconverted to baseband I and Q signals. The flexible baseband interface can be configured for either analog or digital operation. Chip functionality is controlled through a three-wire serial data interface (SDI) bus.



Optimum Technology Matching® Applied

- |                                     |                                   |   |
|-------------------------------------|-----------------------------------|---|
| <input type="checkbox"/> Si BJT     | <input type="checkbox"/> GaAs HBT | <input type="checkbox"/> GaAs MESFET        |
| <input type="checkbox"/> Si Bi-CMOS | <input type="checkbox"/> SiGe HBT | <input checked="" type="checkbox"/> Si CMOS |
| <input type="checkbox"/> InGaP/HBT  | <input type="checkbox"/> GaN HEMT | <input type="checkbox"/> SiGe Bi-CMOS       |

Package Style: QFN, 48-Pin, 7 x 7

Features

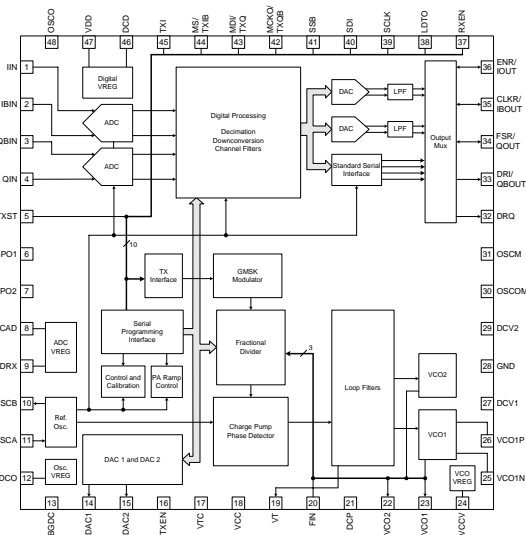
- Fractional-N Synthesizer with Digital GMSK Modulator
- Signal Processing Circuitry for use with RF2710/RF2716 VLIF Receiver
- Versatile Baseband Interface
- Integrated RF Transmit VCO's

Ordering Information

- |             |  |
|-------------|--|
| RF6001      | Fractional-N RF Synthesizer with Modulator and Digital IF Filter |
| RF6001 PCBA | Fully Assembled Evaluation Board                                 |

RF Micro Devices, Inc.  
 7628 Thorndike Road  
 Greensboro, NC 27409, USA

Tel (336) 664 1233  
 Fax (336) 664 0454  
<http://www.rfmd.com>



Functional Block Diagram

*Please contact  
RF Micro Devices  
Applications Engineering  
at (336) 678-5570  
for more information.*