

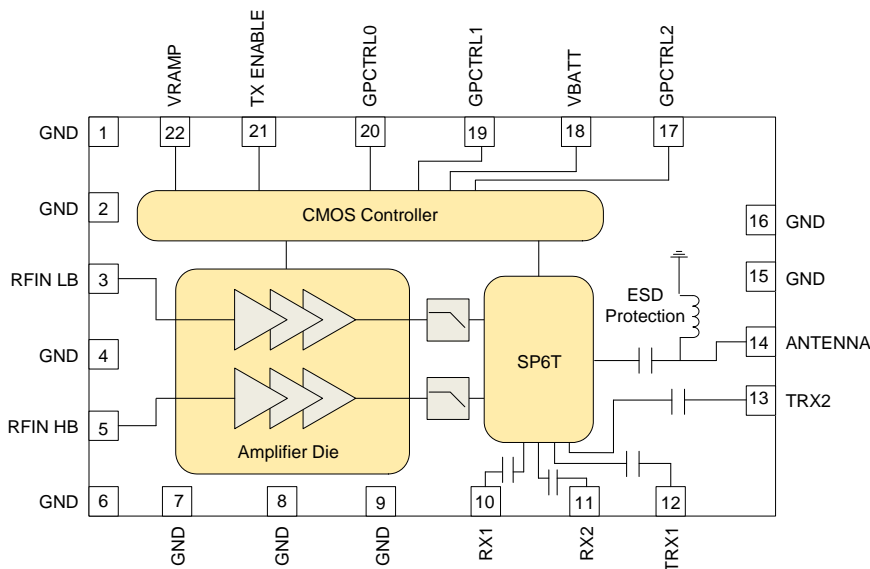


### Features

- High Efficiency at Rated  $P_{OUT}$   
 $V_{BATT} = 3.5V$   
Low Band = 40%  
High Band = 35%
- Integrated Power Flattening Circuit for Lower Power Variation under Mismatch Conditions
- Integrated  $V_{BATT}$  Tracking Circuit for Improved Switching Spectrum under Low  $V_{BATT}$  Conditions
- Dual Mode Operation
- Digital Bias Control
- EDGE Low Power Mode
- 8kV Robust ESD Protection at Antenna Port
- Symmetrical RX Ports
- Two High Linearity TX/RX UMTS Ports
- 0dBm to 6dBm Drive Level, >50dB of Dynamic Range

### Applications

- For Single- and Dual-Band 3G Applications
- GSM850/EGSM900/DCS1800/PCS1900 Products
- 3.2V Multimode Mobile Applications
- GPRS Class 12 Compliant
- Mobile GPRS/EDGE Data Products



Functional Block Diagram

### Product Description

The RF3233 is a quad band (GSM850/EGSM900/DCS1800/PCS1900) GPRS/Linear EDGE Class 12 compliant transmit module with two symmetrical receive ports and two high linearity UMTS ports for single- and dual-band multi-mode applications. This transmit module builds upon RFMD's leading power amplifier with PowerStar® integrated power control technology, pHEMT switch technology, and integrated transmit filtering for best-in-class harmonic performance. RF3233 is designed to operate in either saturated mode for GMSK or linear mode for EDGE 8PSK signalling and also features EDGE low power mode. The results are high performance, reduced solution size, and ease of implementation. The device is designed for use as the final portion of the transmitter section in a GSM850/EGSM900/DCS1800/PCS1900 and UMTS handset and eliminates the need for a PA-to-antenna switch module matching network. The device provides 50Ω matched input and output ports requiring no external matching components. The RF3233 features RFMD's latest integrated power-flattening circuit, which significantly reduces current and power variation into load mismatch. Additionally, a  $V_{BATT}$  tracking feature is incorporated to maintain switching performance as supply voltage decreases. The RF3233 also integrates an ESD filter to provide excellent ESD protection at the antenna port.

### Ordering Information

RF3233	Quad-Band GSM850/EGSM900/DCS1800/PCS1900 Transmit Module
RF3233SB	Transmit Module 5-Piece Sample Pack
RF3233PCBA-41X	Fully Assembled Evaluation Board

### Optimum Technology Matching® Applied

<input checked="" type="checkbox"/> GaAs HBT	<input type="checkbox"/> SiGe BiCMOS	<input checked="" type="checkbox"/> GaAs pHEMT	<input type="checkbox"/> GaN HEMT
<input type="checkbox"/> GaAs MESFET	<input type="checkbox"/> Si BiCMOS	<input checked="" type="checkbox"/> Si CMOS	<input type="checkbox"/> BiFET HBT
<input type="checkbox"/> InGaP HBT	<input type="checkbox"/> SiGe HBT	<input type="checkbox"/> Si BJT	<input type="checkbox"/> LDMOS

**Please contact  
RFMD Technical Support  
at (336) 678-5570  
for more information.**