

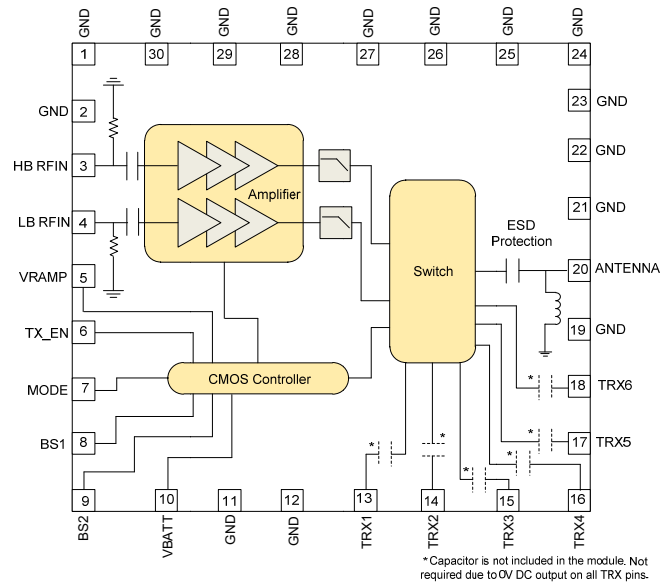


### Features

- High Efficiency at Rated  $P_{OUT}$   
 $V_{BATT} = 3.5$   
 GSM850/EGSM900 = 43%  
 DCS1800/PCS1900 = 36%
- Integrated Power Flattening Circuit
- Integrated  $V_{BATT}$  Tracking Circuit
- 8kV Robust ESD Protection at Antenna Port
- No External Routing
- No External DC blocking needed on TRx Ports
- Low TRx Insertion Loss for 3G efficiency and improved Rx sensitivity
- Six high linearity TRx Ports
- High TRx to TRx isolation
- 0dBm to 6dBm Drive Level, >50dB of Dynamic Range

### Applications

- Single thru Quad Band UMTS handsets and connected devices including TDSCDMA and CDMA
- GSM850/EGSM900/DCS1800/PCS1900 Products
- 3V Multimode Mobile Applications
- GPRS Class 12 Compliant



Functional Block Diagram

### Product Description

The RF3235 is a quad-band (GSM850/EGSM900/DCS1800/PCS1900) GSM/GPRS Class 12-compliant transmit module with six transmit/receive ports for UMTS use that also serve as GSM Rx ports. This transmit module builds upon RFMD's leading PowerStar® integrated power control technology, SOI (silicon-on-insulator) switch technology, and integrated transmit filtering for best-in-class harmonic performance. 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/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 RF3235 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 RF3235 also integrates an ESD filter to provide excellent ESD protection at the antenna port.

### Optimum Technology Matching® Applied

- |  |                                      |   |                                    |
|--|--------------------------------------|---|------------------------------------|
| <input checked="" type="checkbox"/> GaAs HBT | <input type="checkbox"/> SiGe BiCMOS | <input 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"/> LD MOS    |

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# RF3235



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