

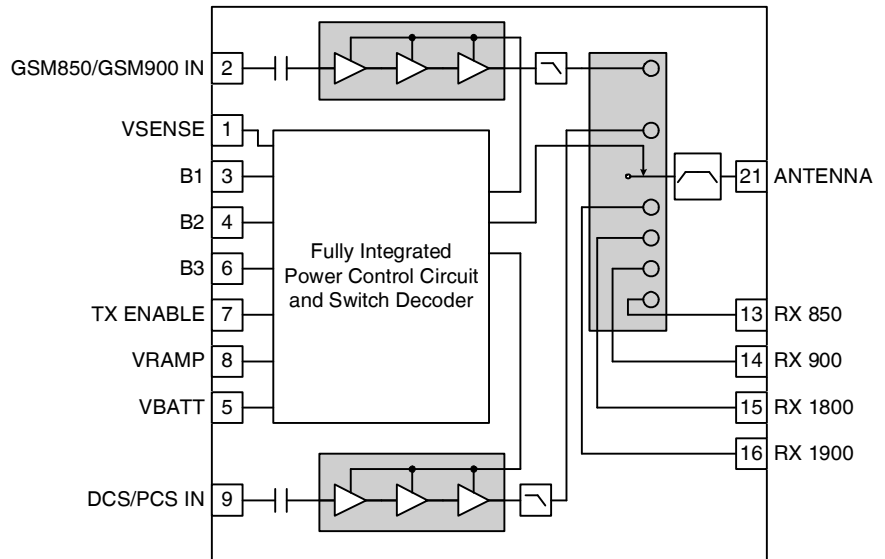


**Features**

- IEC 61000-4-2 Compliant, with-standing 8kV on Antenna Port
- +33dBm GSM Output Power at 3.4V
- +31dBm DCS/PCS Output Power at 3.4V
- 42% GSM and 38% DCS/PCS  $\eta_{EFF}$
- Integrated Antenna Switch and LP Filter

**Applications**

- GSM850/EGSM900/DCS/PCS Products
- GPRS Class 12 Compatible
- Commercial and Consumer Systems
- Power Star® Module
- 3V Quad-Band Handsets
- Portable Battery-Powered Equipment



Functional Block Diagram

**Product Description**

The RF3178GA is a high-power, high-efficiency transmit module containing RFMD's Power Star® integrated power control, integrated pHEMT front end antenna switch and harmonic filtering functionality. All of these combine to provide for best-in-class harmonic emission control and RX and TX insertion loss. The device is self-contained with 50Ω input and output terminals with no matching components required. The integrated power control function based on RFMD's patented Power Star® control is incorporated, eliminating the need for directional couplers, detector diodes, power control ASIC's, and other power control circuitry; this allows the module to be driven directly from the DAC output. The device is designed for use as the final portion of the transmit chain for GMSK handheld digital cellular equipment in the GSM850, EGSM900, DCS and PCS bands. On-board power control provides over 70dB control range. The integrated antenna switch allows true quad band TX and RX functionality and eliminates the need for PA to antenna switch module matching.

**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"/> InGaP HBT           | <input type="checkbox"/> SiGe HBT    | <input type="checkbox"/> Si BJT                |                                   |

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# RF3178GA

*Proposed*



**Please contact  
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for more information.**

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