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Proposed

RF4180

DUAL-BAND GSM900/DCS1800 TRANSMIT MODULE

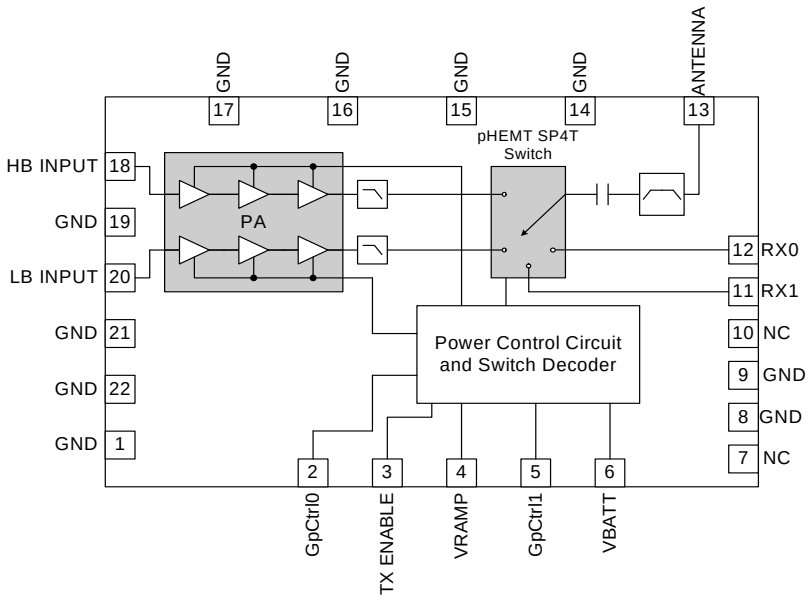
RoHS Compliant and Pb-Free Product
Package Style: Module 6mmx8mm

Features

- Enhanced Performance Transmit Module
- Small Form Factor 6mmx8mmx1.2mm
- No External Routing
- High Efficiency @ rated P_{OUT} V_{BATT}=3.5V GSM900 43% DCS1800 38%
- Low RX Insertion Loss
- Symmetrical RX Ports
- 0dBm to 6dBm Drive Level, >50dB of Dynamic Range
- Excellent ESD Protection at Antenna Port: 8kV
- Integrated Power Flattening Circuit

Applications

- 3V Dual-Band GSM/GPRS Handsets
- GSM900/DCS1800 Products
- GPRS Class 12 Compatible
- Portable Battery-Powered Equipment



Functional Block Diagram

Product Description

The RF4180 is a dual band (GSM900/DCS1800) transmit module with two symmetrical receive ports and GSM/GPRS Class 12 compliant. 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 harmonics. This results in high performance, a reduced solution size, and the ease of implementation simplifies transmitter design. The device is designed for use as the final portion of the transmit in GSM900/DCS1800 and eliminates the need for PA to antenna switch module matching. The device provides 50Ω matched input and output ports with no matching required.

The RF4180 features RFMD's latest integrated power flattening circuit, which significantly reduces current and power variation into load mismatch. The RF4180 also integrates an ESD filter to provide excellent ESD protection at the antenna port. The RF4180 is designed to provide maximum efficiency at rated P_{OUT}.

RF4180	Dual-Band GSM900/DCS1800 Transmit Module
RF4180SB	Transmit Module 5-Piece Sample Pack
RF4180PCBA-41X	Fully Assembled Evaluation Board

Optimum Technology Matching® Applied

☑ GaAs HBT	☐ SiGe BiCMOS	☑ GaAs pHEMT	☐ GaN HEMT
☐ GaAs MESFET	☐ Si BiCMOS	☑ Si CMOS	☐ RF MEMS
☐ InGaP HBT	☐ SiGe HBT	☐ Si BJT	

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