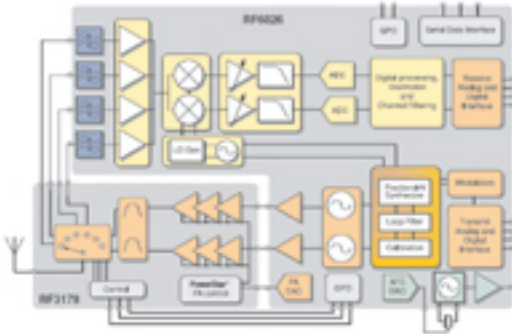
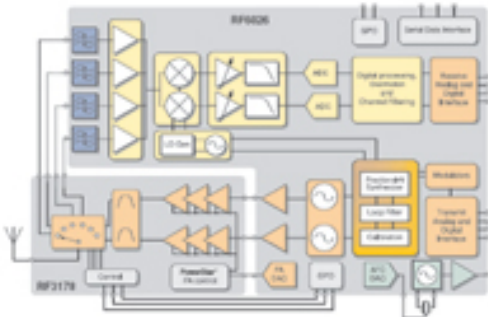


Radio Module Solution



RF Micro Devices introduces a complete POLARIS 2 TOTAL RADIO Module solution, comprised of a cellular transceiver module and a cellular transmit module for handsets operating on the GSM/GPRS and GSM/GPRS/EDGE networks. The performance, size and cost advantages of the POLARIS 2 TOTAL RADIO Module solution enable handset manufacturers to introduce smaller, more feature-rich handsets capable of delivering advanced levels of functionality and services.



[1]

The solution is a complete, two-placement radio consisting of transceiver and transmit modules, and is designed to support up to four frequency bands while operating under the GSM, GPRS and EDGE air interface standards. Features of the solution include:

- Small form factor
- Streamlined supply chain through a two-module (RF6026 and RF3178) complete radio implementation
- Rx SAW filters and passive components integrated into the transceiver module (RF6026)
- High performance in the transmit module (RF3178) achieved through Optimum Technology Matching[®]
- GaAs HBT power amplifier, GaAs pHEMT switch and CMOS controller
- Ability to interface with a range of basebands through support of very low-IF (VLIF) and zero-IF (ZIF) receive architectures, and the availability of both analog and digital baseband interfaces

Radio Module Solution

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The receive section uses digital channel filtering to provide high performance over temperature, voltage and processing variations while offering flexibility through eight selectable channel bandwidths. The receiver outputs a fully filtered DC signal in either analog I/Q or digital formats.

The transmit section includes fractional-N-based digital modulators, providing desirable spectral performance while using a fraction of the power consumption required in translational-loop or direct-launch transmitters. 8-PSK signals are modulated via the polar modulator, providing minimum power consumption by enabling the use of a saturated power amplifier for both constant and non-constant envelope signals. The radio also includes integrated power amplifier control circuitry, eliminating the need for external power detectors, feedback circuits and auxiliary DACs.

By offering both programmable analog I/Q and digital baseband interfaces in transmit and receive paths, the POLARIS 2 TOTAL RADIO Module solution is capable of seamlessly interfacing with all major baseband devices.

RFMD's POLARIS transceiver product portfolio is comprised of the POLARIS 1 transceiver chipset for GSM/GPRS handsets, the POLARIS 2 TOTAL RADIO transceiver chipset for GSM/GPRS/EDGE handsets and the POLARIS 2 TOTAL RADIO Module solution for both GSM/GPRS and GSM/GPRS/EDGE handsets.

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[1] http://www.wirelessdesignmag.com/sites/wirelessdesignmag.com/files/legacyimages/0604/wd64ta_lrg.jpg