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Proposed

RFFM5765Q

AEC-Q100 QUAL IN PROCESS 2.4GHz 802.11b/g/n WiFi FRONT END MODULE

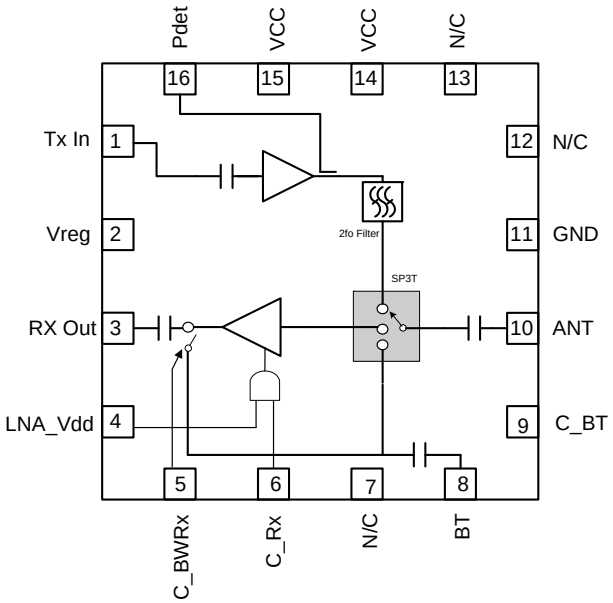
Package Style: QFN, 16-pin, 3mm x 3mm x 0.5mm

Features

- Integrated 2.4GHz b/g/n Amplifier, LNA, SP3T Switch, and Power Detector Coupler
- Single Supply Voltage 3.0V to 4.8V
- P_{OUT} = 19dBm, 11g, OFDM at <4% EVM; 22dBm 11b ACPR < -33dBc

Applications

- Automotive WiFi
- WiFi Direct
- Automotive Diagnostics
- WiFi Infotainment
- 2.5GHz ISM Band Solutions
- Portable Battery-Powered Equipment



Functional Block Diagram

Product Description

The RFFM5765Q provides a complete integrated solution in a single Front End Module (FEM) for Automotive WiFi Applications, 802.11b/g/n, and Bluetooth® systems. The ultra small form factor and integrated matching greatly reduces the number of external components and layout area in the customer application. This simplifies the total Front End solution by reducing the bill of materials, system footprint, and manufacturability cost. The RFFM5765Q integrates a 2.4GHz Power Amplifier (PA), Low Noise Amplifier (LNA), power detector coupler for improved accuracy, and some filtering for harmonic rejection. The RFFM5765Q is capable of receiving WiFi and Bluetooth simultaneously and is pending completion of AEC-Q100 qualification. The device is provided in a 3mm x 3mm x 0.5mm, 16-pin package. This module meets or exceeds the RF Front End needs of IEEE 802.11b/g/n WiFi RF systems.

Ordering Information

RFFM5765QSQ	Standard 25 piece bag
RFFM5765QSR	Standard 100 piece bag
RFFM5765QTR7	Standard 2500 piece reel (13”)
RFFM5765QPCBA-410	Fully Assembled Evaluation Board with 5-piece Sample

Optimum Technology Matching® Applied

☐ GaAs HBT	☐ SiGe BiCMOS	☑ GaAs pHEMT	☐ GaN HEMT
☐ GaAs MESFET	☐ Si BiCMOS	☐ Si CMOS	☐ BiFET HBT
☑ InGaP HBT	☐ SiGe HBT	☐ Si BJT	☐ LDMOS

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