QOCVO

QPF4526 Wi-Fi 6 Front End Module

Product Overview

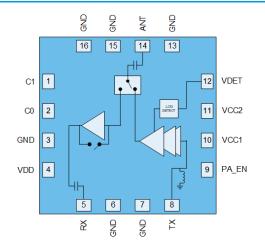
The Qorvo® QPF4526 is an integrated front end module (FEM) designed for Wi-Fi 6 (802.11ax) systems. The compact form factor and integrated matching minimizes layout area in the application.

Performance is focused on optimizing the PA for a 5V supply voltage that conserves power consumption while maintaining the highest linear output power and leading edge throughput.

Integrated die level filtering for 2nd and 3rd harmonics as well as 2.4 GHz rejection for DBDC operation are included. A broadrange, constant slope voltage logarithmic power detector is provided for application feedback.

The QPF4526 integrates a 5 GHz power amplifier (PA), single pole two throw switch (SP2T) and bypassable low noise amplifier (LNA) into a single device.

Functional Block Diagram



Top View



16 Pad 3 x 3 mm Laminate Package

Key Features

- 5150-5895 MHz
- Pout = +17 dBm MCS11 HE160 -43 dB Dynamic EVM
- POUT = +19 dBm MCS11 HE80 -43 dB Dynamic EVM
- Pout = +23.5 dBm MCS9 VHT80/160 -35 dB Dynamic EVM
- POUT = +27 dBm MCS0 HT20 Spectral Mask Compliance
- Optimized for +5 V Operation
- 33 dB Tx Gain
- 1.9 dB Noise Figure
- 14.5 dB Rx Gain & 8 dB Bypass Loss
- 25 dB 2.4 GHz Rejection on Rx Path
- Integrated DC Power Detector

Applications

- Access Points
- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Internet of Things

Ordering Information

Part Number	Description		
QPF4526SB	Sample bag with 5 pieces		
QPF4526SR	7" reel with 100 pieces		
QPF4526TR13	13" reel with 10,000 pieces		
QPF4526EVB	Assembled Evaluation Board		

QOULO

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Handling Precautions

Parameter	Rating	Standard	•	
ESD – Human Body Model (HBM)	Class 1C (1000V)	ANSI/ESD/JEDEC JS-001		Caution!
ESD – Charged Device Model (CDM)	Class C3 (1000V)	ANSI/ESD/JEDEC JS-002		ESD sensitive device
MSL – Moisture Sensitivity Level	MSL 3	IPC/JEDEC J-STD-020		

Solderability

Compatible with both lead-free (260 °C max. reflow temperature) and tin/lead (245 °C max. reflow temperature) soldering processes.

Package lead plating: Electroless Ni/Electroless Pd/Immersion Au (ENEPIG)

RoHS Compliance

This part is compliant with the 2011/65/EU RoHS directive (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment), as amended by Directive 2015/863/EU.

This product also has the following attributes:

- Lead Free
- Halogen Free (Chlorine, Bromine)
- Antimony Free
- TBBP-A (C15H12Br402) Free
- SVHC Free
- PFOS Free

Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:

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