

Wi-Fi Switch & LNA Front-End Solutions

High-Performance Solutions for Customer Premise Applications

qorvo
all around you

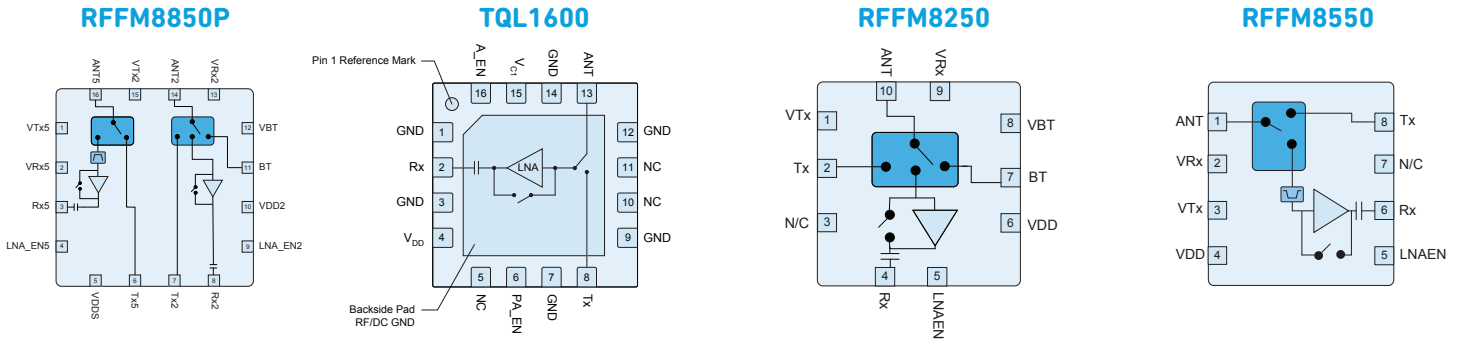


Wi-Fi Switch + LNA Front End Solutions

Qorvo® offers a wide range of switch + LNA front-end solutions designed specifically for high-performance 802.11a/b/g/n/ac Wi-Fi applications operating in the 2.4GHz and 5GHz bands. Some of these applications include computing, video streaming/media, AP/router, set-top-box/gateway, enterprise and carrier/small cell.

Features

- Single supply voltage 3.0V to 5V
- Integrated SPDT or SP3T switch and low noise amplifier
- Typical gain is 12dB and 1.7dB noise figure in receive mode pin-to-pin
- SPDT and SP3T switch control voltage 2.1 to 5V (3.0V typical)
- Low profile packages



Specifications

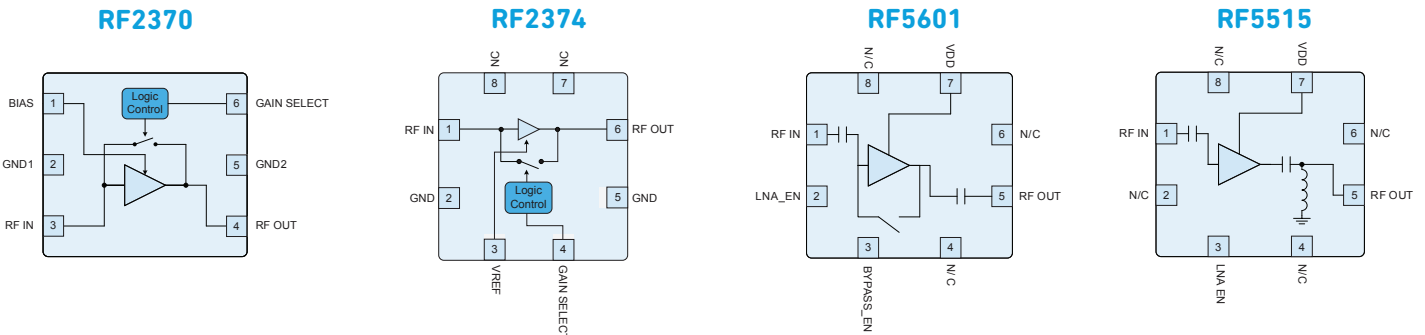
Freq Range (GHz)	Switch	Rx Gain (dB)	Rx NF (dB)	Tx Insertion Loss (dB)	Tx Switch P1dB (dBm)	Rx OP1d (dBm)	Rx OIP3 (dBm)	Rx IIP3 (dBm)	V _{CC} (V)	I _{CC} (mA)	RF Ports DC-Blocked	Package	Part Number
2400 to 2500	SP3T	12.0	2.2	1.7	28	7	17	5	3.0 to 4.5	8.5	Yes	2x2x0.5 QFN	RF5611
2400 to 2500	SP3T	13.0	2.3	0.5	30	8	18	5	3.6	7	No	1.75x1.75x0.33 QFN	RFFM8250
2400 to 2500	SP3T	13.0	2.3	0.5	30	8	18	5	3.6	7	No	2.3x2.3x0.33 QFN	RFFM8850
4900 to 5850	SP2T	12.0	2.5	0.5	30	7	17	5	3.6	10	No	1.5x1.5x0.4 QFN	RFFM8550
4900 to 5850	SP2T	12.0	2.5	0.5	30	7	17	5	3.6	10	No	1.5x1.5x0.4 QFN	RFFM8550
4900 to 5850	SP2T	16.0	2.4	1.0	31	7	19	3	2.7 to 4.2	17	No	2x2x0.5 QFN	RFFM5541
4900 to 5925	SPDT	13.0	2.6	0.6	30	43	16	3	5	13	No	1.5x1.5x0.45 DFN	RFFM4555
5150 to 5875	SPDT	13.0	2.5	0.6	>30	43	16	3	5	8	No	2.5x2.5x0.45 QFN	TQL1600

Low Noise Amplifier Portfolio

Qorvo delivers Low Noise Amplifiers (LNAs) focused upon 802.11a/b/g/n/ac Wi-Fi applications. Providing high dynamic range, superior performance and low current consumption, our portfolio of LNAs enable compact designs through various module-compatible type packages.

Features

- High dynamic range
- Low current consumption
- Broadband operation
- Internally matched at 50Ω (RF5515)
- Bias current may be set externally (RF2370, RF2373, RF2374)
- Low profile package



Specifications

Description	Freq (MHz)	Gain (dB)	NF (dB)	IP1dB (dBm)	V _D (V)	I _D (mA)	Package Style	Part Number
Broadband LNA	DC to 4000	14	1.2	-5.0	3.3	10	SOT-343	SGA-8343Z
Broadband LNA	DC to 6000	14	1.5	-8.0	2.7 to 4.8	6	SOT-5 Lead	RF2472
Broadband LNA w/Bypass Mode	900 to 4000	14	1.3	-5.0	3.3	10	2.2x2.2 QFN-8	RF2374
Broadband LNA w/Bypass Mode	900 to 4000	14	1.3	-5.0	3.3	10	SOT-6 Lead	RF2370
5GHz LNA w/Bypass	4900 to 5900	11	1.6	-2.0	2.3 to 4.8	12	2.2x2.2x0.45 QFN-8	RF5601
5GHz LNA	4900 to 5900	11	1.6	-2.0	2.3 to 4.8	12	2.2x2.2x0.45 QFN-8	RF5515

Wi-Fi Switch Front-End Solutions

Qorvo offers a wide selection of high-performance switches suitable for Wi-Fi customer premise equipment applications. Covering Single-Pole Double-Throw (SPDT) and Single-Pole Triple-Throw (SP3T) applications, these products are ideal for use in space-constrained layouts such as mobile point, repeaters, computing, router, set-top-box, PCIe form-factor-cards and MIMO applications. Typical applications include 2.4GHz and 5GHz switching, antenna tuning and other areas requiring high-performance signal routing.

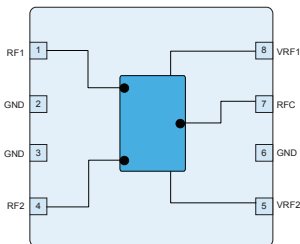
Features

- Excellent insertion loss
- High isolation
- Low voltage operation
- Very low current consumption
- Ideal for 2.5GHz and 5GHz, portable battery-powered, and Wi-Fi/Bluetooth® combination devices

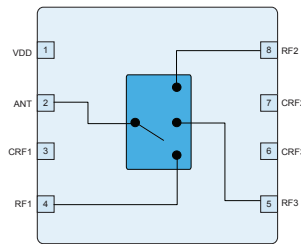
Specifications

Switch Type	Control Lines	Freq Range (MHz)	Rx P0.1dB (dBm)	Control Voltage (V)	Tx Insertion (dB)	Isolation (dB)	Rx IIP3 (dBm)	Switching Speed (nS)	Package	Sample Availability	Part Number
SPDT	1	DC to 3000	28	0/+2.7	0.25	27	60	40	2x1.25x0.8	NOW	RF3023
	1	DC to 3000	28	0/+2.7	0.25	27	60	40	2x1.25x0.8	NOW	RF3024
	2	DC to 6000	23	0/+3.0	0.26	27	62	160	2x1.3x0.38	NOW	RF1126
	1	DC to 6000	27	0/+3.0	0.5	>39	50	120	3x3x0.6	NOW	RF3025
	1	10 to 6000	27	0/+3.0	0.55	58	50	160	3x3x0.6	NOW	RF3021
	2	100 to 6500	40	0/+2.8	0.5	30	52	300	2x2x0.6	NOW	RFSW8000
	2	300 to 6000	29	0/+1.8	0.65	22	29	<250	1x1.075x0.5	NOW	RFSW8008
	2	500 to 6000	31	0/+3.0	0.65	26	55	<250	1.86x1.5x0.59	NOW	RFSW8009
SP3T	3	DC to 3000	25	0/+1.65	0.6	18	40	85	2x2x0.5	NOW	RF5840
	3	DC to 3000	28	0/+2.5	0.6	18	43	50	2x2x0.5	NOW	RF5500
	3	DC to 3000	29	0/+2.5	0.6	25	45	150	2x2x0.5	NOW	RF5570
	3	10 to 6000	31	0/+3.0	0.5	27	53	25	2x2x0.55	NOW	RFSW6132
	3	2400 to 2500	26	1.8 to 5.0	0.6	25	45	180	1.5x1.5x0.45	NOW	RFSW8001
DPDT	2	10 to 6000	34	0/+3.0	0.65	35	56	35	3x3x0.55	NOW	RFSW6223

RFSW8000



RFSW8001



RFSW8009

