

RichWave

立 積 電 子



2020 V.1

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Innovation, Dedication, to Brilliance

The Trusted RF Provider

We bridge the wireless world

RichWave at a glance

Founded in 2004, RichWave is devoted to RF IC development and design. Our product lines include RF front-end components in a number of areas: WiFi 802.11n/ac/ax in networking, IoT(Internet of Things), and automotive; 4G/LTE in mobile phones; AM and FM receivers in broadcasting, and proprietary wireless transceivers in surveillance and automotive rearview applications. RichWave provides complete RF front-end solutions covering the spectrum of wireless communication applications and is recognized by customers for excellent product performance and world-class customer service.

RichWave -Your best partner in RF solutions

- Diverse process technologies, including SiGe, GaAs, CMOS/SOI, provide customers with high cost-performance products
- Innovative circuit design and system integration, provide customers with simple process and best performance products
- Simplify module design to provide customers with the most design flexibility
- Broad WiFi product portfolio including PA, LNA, SW and FEM, and innovate solutions for mobile and wireless video and audio transceiver
- Recognized by the top-tier OEM/ODM, and brand customers
- Great capacity support from coalition partners
- Strong customer service and technical support

Founded Jan. 2004



Worldwide Customers 350+



TSE Listed Nov. 2015



Launched Products 270+



WiFi FEM

5GHz FEM for WiFi 802.11ax

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (VHT80/160)(%)	Vcc (V)	Rx Gain (dB)	Package (mm, typ)	Pin Compatible
RTC7658	PA	LNA	SPDT	LPF	27	16.5 18	1 1.8	3.45	14	10L QFN 2.0x1.7x0.305	SKY85724
						17 18	1 1.8	3.6			
RTC7676	PA	LNA	SPDT	LPF	30	20 21.5	1 1.8	5	14	16L QFN 3.0x3.0x0.90	QPF4506B, SKY85755
						17 18.5	1 1.8	3.3			
RTC7676HM	PA	LNA	SPDT	LPF	30	20 22	1 1.8	5	16	16L QFN 3.0x3.0x0.90	QPF4506B
RTC7678	PA	LNA	SPDT	LPF	30	20.5 23	1 1.8	5	16	24L QFN 3.0x5.0x0.90	SKY85743
RTC7699	PA	LNA	SPDT	LPF	30.5	17 18.5	1 1.8	3.3	12.5	16L QFN 2.5x2.5x0.75	SKY85748
RTC66504	PA	LNA	SPDT	LPF	32	21.5 23	1 1.8	5	19.5	24L QFN 3.0x5.0x0.90	QPF4588, SKY85747
RTC66508H	PA	LNA	SPDT	LPF	27	17.5 18.5	1 1.8	3.5	14	16L QFN 2.5x2.5x0.55	SKY85748
					29	18 19.5	1 1.8	4.2	14.5		
RTC66518	PA	LNA	SPDT	LPF	31	17 18.5	1 1.8	3.3	14	16L QFN 3.0x3.0x0.90	QPF4506B, SKY85755
RTC66532	PA	LNA	SPDT	LPF	30	19 21	1 1.8	5	16	16L QFN 3.0x3.0x0.90	SKY85772
RTC66534	PA	LNA	SPDT	LPF	28.5	20 22	1 1.8	5	12.5	16L QFN 2.5x2.5x0.90	QPF4550, SKY85746
RTC66539	PA	LNA	SPDT	LPF	29	18 21	1 1.8	5	12	16L QFN 2.5x2.5x0.90	QPF4550

5GHz FEM for WiFi 802.11ac

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (VHT80)(%)	Vcc (V)	Rx Gain (dB)	Package (mm, typ)	Pin Compatible
RTC5633C	PA	LNA	SPDT	LPF	30	16	1.8	3.3	12	16L QFN 3.0x3.0x0.75	RFFM4501, SKY85703 RFFM4591, RFFM4591F
RTC5633N	PA	LNA	SPDT	LPF	30	16	1.8	3.3	10	16L QFN 3.0x3.0x0.75	RFFM4501, SKY85703 RFFM4591, RFFM4591F
RTC5637	PA	LNA	SPDT	LPF	29	19 17.5	1.8	5 3.3	14	16L QFN 3.0x3.0x0.90	SKY85712
RTC5638	PA	LNA	SPDT	LPF	30	16	1.8	3.3	12	16L QFN 2.5x2.5x0.90	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717
RTC5638H	PA	LNA	SPDT	LPF	30	20 18	1.8	5 3.3	13 12	16L QFN 2.5x2.5x0.75	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717, RFFM4558
RTC5638HE	PA	LNA	SPDF	LPF	28.5 29.5	21 18.5	1.8	5 3.3	13.5 12	16L QFN 2.5x2.5x0.75	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717, RFFM4558
RTC5638HM	PA	LNA	SPDT	LPF	28.5	20.5 20	1.8	5 4.3	13	16L QFN 2.5x2.5x0.90	SKY85717
RTC5638HS	PA	LNA	SPDT	LPF	28	19	1.8	5	14	16L QFN 2.5x2.5x0.75	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717, RFFM4558
RTC5638HS-1	PA	LNA	SPDT	LPF	28	19	1.8	5	14	16L QFN 2.5x2.5x0.75	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717, RFFM4558
RTC5639	PA	LNA	SPDT	LPF	31	20 16	1.8	5 3.3	14 13	16L QFN 3.0x3.0x0.90	SKY85712, RFFM4552
RTC5639E	PA	LNA	SPDT	LPF	30 29.5	21 18.5	1.8	5 3.3	13	16L QFN 3.0x3.0x0.90	SKY85712, RFFM4552
RTC5639HM	PA	LNA	SPDT	LPF	28.5	20.5	1.8	5	14	16L QFN 3.0x3.0x0.90	SKY85712, RFFM4552
RTC7635	PA	LNA	SPDT	LPF	29	20	1.8	5	10	12L QFN 2.0x2.0x0.55	SKY85735
RTC7637	PA	LNA	SPDT	LPF	30 29	18 16.5	1.8	3.7 3.3	13 12	16L QFN 2.3x2.3x0.36	RFFM8516, SKY85720, SKY85742
RTC7637S	PA	LNA	SPDT	LPF	32	18	1.8	3.7	12	16L QFN 2.3x2.3x0.36	RFFM8516, SKY85720, SKY85742
RTC7639	PA	LNA	SPDT	LPF	29.5	19	1.8	3.7	12	10L QFN 2.0x1.7x0.55	QM45858, SKY85732
RTC7672	PA	LNA	SPDT	LPF	30	23	1.8	5	16	24L QFN 3.0x5.0x0.90	SKY85728, QPF4519
RTC7692	PA	LNA	SPDT	LPF	31	22	1.8	5	14	16L QFN 3.0x3.0x0.90	SKY85729
RTC7694	PA	LNA	SPDT	LPF	29.5	18	1.8	3.7	12	10L QFN 2.0x1.7x0.55	QM45858, SKY85732
RTC66511	PA	LNA	SPDT	LPF	30	19.5	1.8	5	13	16L QFN 2.5x2.5x0.75	RFFM8502, RFFM8505, RFFM8511, LX5586, SKY85706, SKY85717, RFFM4558
RTC66529	PA	LNA	SPDT	LPF	28 27.5	20 18.5	1.8	5 3.3	13 12	16L QFN 2.5x2.5x0.36	SKY85717

5GHz RX-FEM for WiFi 802.11n

Part No.	PA	LNA	SW	LPF	Vcc (V)	Rx Gain (dB)	Rx NF (dB)	Tx/BT IL (dB)	Package (mm, typ)	Pin Compatible
RTC7630	---	LNA	SPDT	---	3.3	13	2.6	0.65	16L QFN 2.3x2.3x0.55	SKY85605
RTC7630H	---	LNA	SPDT	---	3.3	11	2.1	0.74	16L QFN 2.3x2.3x0.55	SKY85605
RTC7650	---	LNA	SPDT	---	3.3	13.5	2.2	0.75	8L QFN 1.5x1.5x0.45	SKY85608
RTC7653C	---	LNA	SPDT	---	3.3	13	2	0.9	WLCSP 0.736x0.946x0.322	AN29222K, SKY85611
RTC7657	---	LNA	SPDT	---	3.3 5	14	2.5 2.4	0.75	16L QFN 2.5x2.5x0.75	SKY85610
RTC7670	---	LNA	SPDT	---	3.3	13	2.6	0.9	6L QFN 1.2x1.4x0.31	SKY85613
RTC66526	---	LNA	SPDT	---	3.85	13	2.3	0.6	8L QFN 1.5x1.5x0.30	
RTC66538	---	LNA	SPDT	---	3.6	13	2.2	0.9	8L QFN 1.5x1.5x0.35	RFFM8550

2.4GHz FEM for WiFi 802.11ax

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (VHT40)(%)	Vcc (V)	Rx Gain (dB)	Package (mm, typ)	Pin Compatible
RTC7628	PA	LNA	SPDT	LPF	24	16 18.5	1 3	3.45	16	16L QFN 2.0x2.0x0.29	SKY85316
RTC7628-1	PA	LNA	SPDT	LPF	24	18 20.5	1 3	3.45	13.5	16L QFN 2.0x2.0x0.30	SKY85316
RTC7644	PA	LNA	SPDT	LPF	28.5	18 23	1 3	5	13	16L QFN 3.0x3.0x0.90	QPF4200, SKY85326
RTC7646	PA	LNA	SPDT	LPF	30	20.5 22.5	1 3	5	13	16L QFN 3.0x3.0x0.90	QPF4206B, SKY85337
RTC7647	PA	LNA	SPDT	LPF	34	21 23	1 3	5	13	24L QFN 3.0x5.0x0.90	SKY85331
RTC7664	PA	LNA	SPDT	LPF	29.5	17.5 20	1 3	3.3	13.5	16L QFN 2.5x2.5x0.75	SKY85330
					30	20 22	1 3	4.2	13.5		
RTC7665	PA	LNA	SPDT	LPF	28	19.5 22	1 3	5	13	16L QFN 2.5x2.5x0.75	SKY85330
RTC7665A	PA	LNA	SPDT	LPF	22	18.5	3	3.3	14	16L QFN 2.5x2.5x0.75	SKY85314
RTC66204	PA	LNA	SPDT	LPF	36	21.5 22.5	1 3	5	14.5	24L QFN 3.0x5.0x0.90	SKY85333, QPF4288
RTC66208	PA	LNA	SPDT	LPF	27	18 20	1 3	4.2	15	16L QFN 2.5x2.5x0.55	SKY85330
RTC66218	PA	LNA	SPDT	LPF	27.5	17.5 19.5	1 3	3.3	11	16L QFN 3.0x3.0x0.90	QPF4206B
RTC66226	PA	LNA	SPDT	LPF	24.5	16 18.5	1 3	3.3	13.5	16L QFN 3.0x3.0x0.90	SKY85340
					27	20 22	1 3	5	15		
RTC66232	PA	LNA	SPDT	LPF	26	19 22.5	1 3	5	15	16L QFN 2.5x2.5x0.75	SKY85303

2.4GHz FEM for WiFi 802.11n

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (%)	Vcc (V)	Rx Gain (dB)	Package (mm, typ)	Pin Compatible
RTC7625H	PA	LNA	SP3T	LPF	28 26.5	21 19	3	5 3.3	15	16L QFN 3.0x3.0x0.90	RFFM4203, RFFM4293 SKY85300, SKY85310
RTC7625HE	PA	LNA	SPDT	LPF	26 24.5	21 17	1.8	5 3.3	13.5 13	16L QFN 3.0x3.0x0.90	SKY85319
RTC7625HE-1	PA	LNA	SPDT	LPF	30	21 21 19	1.8	5 4.2 3.3	13 13 12	16L QFN 3.0x3.0x0.90	RTC7625HE, SKY85319
RTC7626H	PA	LNA	SP3T	LPF	27 26	21 18.5	3	5 3.3	15	16L QFN 2.5x2.5x0.75	SKY85302, SKY85303 RFFM8205, RFFM8211
RTC7626HE	PA	LNA	SP3T	LPF	25	21.5 23	1.8 3	5	13	16L QFN 2.5x2.5x0.75	SKY85302, SKY85303 RFFM8205, RFFM8211
					24	18.5 19.5	1.8 3	3.3	12		
RTC7626HS	PA	LNA	SP3T	LPF	27 26	21 18.5	3	5 3.3	15	16L QFN 2.5x2.5x0.75	---
RTC7662	PA	LNA	SPDT	LPF	33.5	22.5 24	1.8 3	5	13.5	24L QFN 3.0x5.0x0.90	SKY85309, SKY85331
RTC7667	PA	LNA	SP3T	LPF	29.5	19.5	3	3.7	12	16L QFN 2.3x2.3x0.36	SKY85312, RFFM8216
RTC7682-1	PA	LNA	SP3T	LPF	24	18.5 20	1.8 3	3.7	15	16L QFN 2.0x2.0x0.55	SKY85321
RTC7689	PA	LNA	SPDT	LPF	29	18.5 20	1.8 3	3.3	13.5	16L QFN 2.5x2.5x0.75	SKY85325, SKY85314
RTC66202	PA	LNA	SPDT	LPF	28	20 21.5	3	3.3 4.2	15	16L QFN 2.3x2.3x0.55	SKY85320

2.4GHz RX-FEM for WiFi 802.11n

Part No.	PA	LNA	SW	LPF	Vcc (V)	Rx Gain (dB)	Rx NF (dB)	Tx/BT IL (dB)	Package (mm, typ)	Pin Compatible
RTC7620	---	LNA	SP3T	---	3.3	15	1.6	0.7	12L QFN 2.0x2.0x0.45	SKY85203
RTC7620T	---	LNA	SP3T	---	3.3	16	1.8	0.5	12L QFN 2.0x2.0x0.45	SKY85203
RTC7623C	---	LNA	SP3T	---	3.3	13	1.7	0.7	WLCSP 0.736x0.946x0.322	AN29223K, SKY85204
RTC7627	---	LNA	SP3T	---	3.3	16	1.5	0.6	16L QFN 2.5x2.5x0.75	RFFM8255
RTC7663	---	LNA	SPDT	---	3.3	16	1.7	0.39	16L QFN 2.3x2.3x0.55	SKY85201
RTC7680	---	LNA	SP3T	---	3.3	16	1.6	0.55	8L QFN 1.5x1.5x0.31	SKY85207

2.4/5GHz Dual Band Passive FEM for WiFi 802.11a/b/g/n/ac

Part No.	PA	LNA	SW	DPX	Vcc (V)	Tx/Rx IL 2.4/5GHz (dB)	Package (mm, typ)	Pin Compatible
RTC6655F	---	---	SPDT	DPX	3.3	1.6/1.5 1.9/1.8	16L QFN 3.0x3.0x0.90	ASM-5104, SE2577L



WiFi PA

5GHz PA for WiFi 802.11n/ac

Part No.	Pout(dBm)	EVM (VHT80) (%)	Gain (dB)	Vcc (V)	Package (mm, typ)	Pin Compatible
RTC5636H	23 20	1.8	33 32	5 3.3	20L QFN 4.0x4.0x0.75	SE5003L1, RFPA5542, LX5531, SKY85402, SKY85405
RTC6659E	22	3	32	5	16L QFN 3.0x3.0x0.90	RTC6670
RTC6670E	19	3	28	3.3	16L QFN 3.0x3.0x0.90	RTC6671
RTC6670P	19	3	29	3.3	16L QFN 3.0x3.0x0.90	SE5005

2.4GHz PA for WiFi 802.11n

Part No.	Pout(dBm)	EVM (%)	Gain (dB)	Vcc (V)	Package (mm, typ)	Pin Compatible
RTC5641EX	26 23	3 1.8	31	5	16L QFN 3.0x3.0x0.90	SE2576, SE2605, SE2565, SE2604, SE2623L
	22 21	3 1.8	30	3.3		
RTC6649E	24.5 21.5	3	34.5 34	5 3.3	16L QFN 3.0x3.0x0.90	RTC6691H
RTC6649EH	26	3	34	5	16L QFN 3.0x3.0x0.90	RTC6649E
RTC6649EX	26.5 23	3 1.8	31	5	16L QFN 3.0x3.0x0.90	RTC6691, RTC6649E, RTC6691H
RTC6661E	20	3	29	3.3	12L QFN 2.0x2.0x0.45	LX5514, SST12LP07A
RTC6665	18	3	26	3.3	8L QFN 2.0x2.0x0.45	SST12LP14E
RTC6691	21.5	3	33.5	3.3	16L QFN 3.0x3.0x0.90	SST12LP15A
RTC6691H	21.5	3	34.5	3.3	16L QFN 3.0x3.0x0.90	SST12LP15A
RTC7641	26 24	3 1.8	32	5	16L QFN 3.0x3.0x0.90	SE2576, SE2605, SE2565, SE2604, SE2623L

WiFi LNA

5GHz LNA for WiFi 802.11n/ac

Part No.	Rx Gain (dB)	Rx NF (dB)	Vcc (V)	Package (mm, typ)	Pin Compatible
RTC5615	12	1.4	3.3	6L QFN 1.5x1.5x0.45	SKY65981, BGU7258
RTC6618	11	1.2	3.3	6L QFN 1.5x1.5x0.45	SKY65404, SKY90006

2.4GHz LNA for WiFi 802.11n

Part No.	Rx Gain (dB)	Rx NF (dB)	Vcc (V)	Package (mm, typ)	Pin Compatible
RTC5608	13	1.1	3.3	6L QFN 1.5x1.5x0.45	SKY65405, SKY90007
RTC5613	15.5	1.1	3.3	6L QFN 1.5x1.5x0.45	SKY65971, BGU7224
RTC6602N	14	1.2	3.3	SC82	RTC6602
RTC6610	14	1.4	3.3	6L QFN 1.5x1.5x0.55	---

WiFi Switch

Normal Power Switch

Feature	Part No.	Freq (GHz)	Insertion Loss (dB)	Isolation (dB)	Input P0.1dB (dBm)	Vctrl (V)	VDD (V)	Package (mm, typ)	Pin Compatible
SPDT	RTC6603	0.5~3.0	0.40 @ 2.50 GHz	27 @ 2.50 GHz	30	2.1~5.0	--	SC70	AS179, AS214, uPG2179, uPG2214 SKY13343, HWS408
	RTC6603SP	0.05~3.0	0.37 @ 2.45 GHz	29 @ 2.45 GHz	32	1.8~3.6	--	SC70	RTC6603, AS179, AS214, uPG2179, uPG2214, SKY13343, HWS408
	RTC6603U	0.05~3.0	0.38 @ 2.45 GHz	23 @ 2.45 GHz	30	1.6~3.6	--	SC70	RTC6603, AS179, AS214, uPG2179, uPG2214, SKY13343, HWS408
	RTC6607	0.1~3.0	0.51 @ 2.50 GHz	30 @ 2.50 GHz	31	1.8~5.0	--	6L QFN 1.0x1.0x0.45	SKY13323, uPG2406, uPG2158, uPG2159, GW2158, GW2159
	RTC6607SP	0.1~6.0	0.37 @ 2.45 GHz 0.65 @ 5.80 GHz	27 @ 2.45 GHz 23 @ 5.80 GHz	32 30	1.8~3.6	--	6L QFN 1.0x1.0x0.35	RTC6607, SKY13323, uPG2158, GW2158/2159
	RTC6607U	0.1~6.0	0.37 @ 2.45 GHz	33 @ 2.45 GHz	31.5	1.6~3.6	--	6L QFN 1.0x1.0x0.35	RTC6607, SKY13323 uPG2158, GW2158/2159
	RTC6608	0.1~6.0	0.45 @ 2.50 GHz 0.50 @ 5.80 GHz	30 @ 2.50 GHz 30 @ 5.80 GHz	32.5 30.5	2.7~5.0	--	6L QFN 1.0x1.0x0.45	SKY13323, uPG2406, uPG2158, uPG2159, GW2158, GW2159
	RTC6608O	0.03~6.0	0.45 @ 2.50 GHz 0.60 @ 5.80 GHz	26 @ 2.50 GHz 26 @ 5.80 GHz	30 32	2.8~3.6	--	6L QFN 1.0x1.0x0.45	SKY13351, uPG2185
	RTC6608OSP	0.03~6.0	0.40 @ 2.45 GHz 0.75 @ 5.80 GHz	25 @ 2.45 GHz 27 @ 5.80 GHz	33 32	1.6~3.6	--	6L QFN 1.0x1.0x0.35	RTC6608O, SKY13351, uPG2185
	RTC6608OU	0.03~6.0	0.24 @ 2.45 GHz 0.35 @ 5.80 GHz	35 @ 2.45 GHz 26 @ 5.80 GHz	32	1.6~3.6	--	6L QFN 1.0x1.0x0.35	RTC6608O, SKY13351, uPG2185
	RTC6609	0.1~6.0	0.40 @ 2.50 GHz 0.50 @ 5.80 GHz	33 @ 2.50 GHz 30 @ 5.80 GHz	31	2.7~5.0	--	6L QFN 1.5x1.5x0.55	SKY13314, uPG2163, HWS504
	RTC6609H	0.1~6.0	0.85 @ 2.50 GHz 1.05 @ 5.90 GHz	32 @ 2.50 GHz 29 @ 5.90 GHz	34 32	2.5~5.0	--	6L QFN 1.5x1.5x0.55	SKY13314, uPG2163, HWS504
	RTC6609SP	0.1~6.0	0.40 @ 2.45 GHz 0.80 @ 5.90 GHz	23 @ 2.45 GHz 26 @ 5.90 GHz	32 31	1.8~3.6	--	6L QFN 1.5x1.5x0.35	RTC6609, SKY13314, uPG2163, HWS504, SKY13446
	RTC6609U	0.1~6.0	0.24 @ 2.45 GHz 0.31 @ 5.80 GHz	32 @ 2.45 GHz 25 @ 5.90 GHz	31	1.6~3.6	--	6L QFN 1.5x1.5x0.35	RTC6609, SKY13314, uPG2163, HWS504, SKY13446
	RTC7603F	0.5~6.0	0.48 @ 2.45 GHz 1.00 @ 5.80 GHz	29 @ 2.45 GHz 22 @ 5.80 GHz	32 --	1.6~3.6	2.4~3.6	WLCSP 0.504x0.609x0.302	---
	RTC7608	0.1~6.0	0.50 @ 2.45 GHz 0.75 @ 5.80 GHz	25 @ 2.45 GHz 27 @ 5.80 GHz	32 31	1.2~3.6	2.5~3.6	6L QFN 1.0x1.0x0.35	NJG1806, SKY13585
	RTC7608U	0.1~7.125	0.21 @ 2.45 GHz 0.35 @ 5.80 GHz 0.53 @ 7.125 GHz	35 @ 2.45 GHz 25 @ 5.80 GHz 23 @ 7.125 GHz	32	1.08~3.6	2.5~3.6	6L QFN 1.0x1.0x0.35	NJG1806, SKY13585
	RTC7611	0.1~6.0	0.45 @ 2.45 GHz 0.82 @ 5.80 GHz	25 @ 2.45 GHz 24 @ 5.80 GHz	32 31	1.6~3.6	--	6L QFN 1.0x1.0x0.35	SKY13350
	RTC7614	0.01~6.0	0.45 @ 2.45 GHz 0.80 @ 5.80 GHz	23 @ 2.45 GHz 23 @ 5.80 GHz	31	1.2~3.6	2.5~3.6	6L QFN 1.0x1.0x0.55	SKY13453
SP3T	RTC8612G	0.1~6.0	0.40 @ 1.00 GHz 0.70 @ 3.80 GHz 0.75 @ 6.00 GHz	38 @ 1.00 GHz 25 @ 3.80 GHz 20 @ 6.00 GHz	37 35 34	1.6~3.0	2.5~4.8	12L QFN 2.0x2.0x0.55	SKY13374
	RTC8612K	0.1~6.0	0.40 @ 1.00 GHz 0.75 @ 6.00 GHz	38 @ 1.00 GHz 20 @ 6.00 GHz	37 34	1.6~3.0	2.5~4.8	12L QFN 2.0x2.0x0.55	SKY13330
	RTC6601	0.1~3.0	0.50 @ 2.50 GHz	25 @ 2.50 GHz	31.5	2.1~5.0	--	8L QFN 2.0x2.0x0.90	SKY13309
	RTC6617S	0.1~6.0	0.50 @ 2.45 GHz 0.95 @ 5.90 GHz	25 @ 2.45 GHz 24 @ 5.90 GHz	29 26	1.6~3.6	--	8L QFN 1.5x1.5x0.45	RTC6617, SKY13317 GW2151, uPG2413
	RTC6617SP	0.1~6.0	0.55 @ 2.45 GHz 0.95 @ 5.90 GHz	25 @ 2.45 GHz 24 @ 5.90 GHz	29 27	1.6~3.6	--	8L QFN 1.5x1.5x0.45	RTC6617, SKY13317 GW2151, uPG2413
	RTC6617U	0.1~6.0	0.31 @ 2.45 GHz 0.53 @ 5.90 GHz	22 @ 2.45 GHz 19 @ 5.90 GHz	30	1.0~3.6	--	8L QFN 1.5x1.5x0.45	RTC6617, SKY13317 GW2151, uPG2413
DPDT	RTC7605F	0.5~3.0	0.43 @ 2.45 GHz	26 @ 2.45 GHz	32	2.5~3.6	--	WLCSP 0.605x0.605x0.28	---
	RTC7610	0.1~6.0	0.50 @ 2.40 GHz 0.80 @ 5.00 GHz	37 @ 2.40 GHz 28 @ 5.00 GHz	33 32	1.6~3.6	3.0~5.0	8L QFN 1.1x1.1x0.29	SKY13586
	RTC6611	0.1~6.0	0.90 @ 2.40 GHz 1.35 @ 5.80 GHz	27 @ 2.40 GHz 27 @ 5.80 GHz	30	2.8~5.0	--	12L QFN 3.0x3.0x0.85	AS236, SKY13318
SPDT	RTC6615H	2.4~2.5 4.9~6.0	0.70 @ 2.40 GHz 1.00 @ 6.00 GHz	30 @ 2.45 GHz 29 @ 6.00 GHz	31	1.6~3.6	--	6L QFN 1.5x1.5x0.55	SKY13355, SKY13411, uPG2164, uPG2162, GW2164

High Power Switch

Feature	Part No.	Freq (GHz)	Insertion Loss (dB)	Isolation (dB)	Input P0.1dB (dBm)	Vctrl (V)	VDD (V)	Package (mm, typ)	Pin Compatible
SPDT	RTC5601H	0.1~6.0	0.60 @ 2.50 GHz 1.00 @ 5.90 GHz	28 @ 2.50 GHz 28 @ 5.90 GHz	37 36	2.5~5.0	--	6L QFN 1.5x1.5x0.55	SKY13370, SKY13348, UPG2176, GW2176
	RTC5605	0.1~6.0	0.85 @ 2.50 GHz 1.05 @ 5.90 GHz	29 @ 2.50 GHz 28 @ 5.90 GHz	34 32	2.5~5.0	--	6L QFN 1.5x1.5x0.55	SKY13319 uPG2409T6X
	RTC5606H	0.1~6.0	0.80 @ 2.50 GHz 1.00 @ 5.90 GHz	33 @ 2.50 GHz 29 @ 5.90 GHz	36 34	2.5~5.0	--	6L QFN 2.0x3.0x0.75	HWS466, GW1466, SKY13377, SKY13306, SKY13278
	RTC6619	0.5~3.0	0.55 @ 2.45 GHz	24 @ 2.45 GHz	35	2.7~3.6	--	6L QFN 1.5x1.5x0.55	SKY13370, SKY13348, UPG2176, GW2176
	RTC6619SP	0.5~6.0	0.65 @ 2.40 GHz 0.95 @ 5.00 GHz	38 @ 2.40 GHz 27 @ 5.00 GHz	37 34	1.6~3.6	--	6L QFN 1.5x1.5x0.55	SKY13370, SKY13348, UPG2176, GW2176
	RTC6619U	0.5~6.0	0.33 @ 2.40 GHz 0.43 @ 5.00 GHz	32 @ 2.40 GHz 24 @ 5.00 GHz	34	1.6~3.6	--	6L QFN 1.5x1.5x0.55	SKY13370, SKY13348, UPG2176, GW2176



LTE Switch

LTE Tx/Rx Switch for 2G/3G or 4G LTE(TDD/FDD) Antenna Diversity

Feature	Part No.	Freq (GHz)	Interface	Insertion Loss (dB)	RF to RF Isolation (dB)	Input P0.1 dB (dBm)	Vdd (V)	Vctrl (V)	Package (mm, typ)	Pin Compatible
SPDT	RTC8612H	0.4~6.0	GPIO	0.50 @ 1.0 GHz 0.99 @ 6.0 GHz	49 @ 1.0 GHz 28 @ 6.0 GHz	28	2.5~4.5	1.2~3.6	6L QFN 1.0x1.0x0.55	SKY13453, NJG1697EM1, XM0830SJ,XMSS1R6G0PA
	RTC8612HE	0.4~2.7	GPIO	0.20 @ 1.0 GHz 0.40 @ 2.7 GHz	24 @ 1.0 GHz 23 @ 2.7 GHz	-- 18	1.4~4.5	1.2~3.4	6L QFN 1.0x1.0x0.35	SKY13453, NJG1697EM1, XM0830SJ,XMSS1R6G0PA
	RTC8612RX	0.1~2.7	GPIO	0.28 @ 0.9 GHz 0.44 @ 2.7 GHz	35 @ 0.9 GHz 24 @ 2.7 GHz	31	2.4~3.6	1.2~3.3	6L QFN 1.1x0.7x0.35	RTC8612FR, RF1630, SKY13476, BGS12PL6, BGS12SL6, BGS12SN6, CXA4403GC, XMSSJJ3G0PA
	RTC8612RH	0.5~6.0	GPIO	0.23 @ 1.0 GHz 0.28 @ 2.7 GHz 0.56 @ 6.0 GHz	39 @ 1.0 GHz 28 @ 2.7 GHz 19 @ 6.0 GHz	34 32.5 30	2.4~3.3	1.2~3.3	6L QFN 1.1x0.7x0.35	RTC8612FR, RF1630, SKY13476, BGS12PL6, BGS12SL6, BGS12SN6, CXA4403GC, XMSSJJ3G0PA
	RTC8612S	0.5~3.8	GPIO	0.33 @ 1.0 GHz 0.45 @ 2.7 GHz	37 @ 1.0 GHz 23 @ 2.7 GHz	32	2.4~3.6	1.2~3.3	6L QFN 1.1x0.7x0.35	SKY13489
	RTC8612FR	0.08~2.7	GPIO	0.36 @ 0.8 GHz 0.53 @ 2.7 GHz	32 @ 0.8 GHz 27 @ 2.7 GHz	35.5	2.45~3.3	1.35~3.3	WLCSP 1.135x0.735x0.396	RF1630, SKY13476, BGS12PL6, BGS12SL6, BGS12SN6, CXA4403GC, XMSSJJ3G0PA
	RTC8612	0.1~3.0	GPIO	0.37 @ 1.0 GHz 0.45 @ 2.7 GHz	40 @ 1.0 GHz 30 @ 2.7 GHz	37.5	2.5~4.8	1.35~2.7	12L QFN 2.0x2.0x0.55	SKY13330, RFFM1602, RFSW1012
SP3T	RTC56373R	0.1~6.0	GPIO	0.28 @ 1.0 GHz 0.83 @ 6.0 GHz	35 @ 1.0 GHz 20 @ 6.0 GHz	35 32	2.45~4.8	1.35~3.3	12L QFN 2.0x2.0x0.75	SKY13373
	RTC8613	0.1~3.0	GPIO	0.37 @ 1.0 GHz 0.55 @ 2.7 GHz	39 @ 1.0 GHz 29 @ 2.7 GHz	36 --	2.5~4.8	1.2~3.6	14L QFN 2.0x2.0x0.55	SKY13584 XMSS2Q3G0PA
	RTC8613M	0.1~4.2	GPIO	0.30 @ 1.0 GHz 0.37 @ 2.7 GHz 0.42 @ 4.2 GHz	38 @ 1.0 GHz 28 @ 2.7 GHz 23 @ 4.2 GHz	34	2.45~3.6	1.35~2.7	9L QFN 1.1x1.1x0.55	BGS13SL9, RF1628 AW9103, SKY13582
	RTC56373	0.1~6.0	GPIO	0.38 @ 1.0 GHz 1.00 @ 6.0 GHz	40 @ 1.0 GHz 20 @ 6.0 GHz	38.5 --	2.5~4.8	1.35~3.3	12L QFN 2.0x2.0x0.75	SKY13373
SP4T	RTC26801	0.5~3.8	GPIO	0.23 @ 1.0 GHz 0.40 @ 2.0 GHz	45 @ 1.0 GHz 37 @ 2.0 GHz	33	2.4~4.8	1.2~3.6	9L QFN 1.1x1.1x0.40	RF1648B, SKY13626
	RTC8614U	0.1~3.8	GPIO	0.21 @ 1.0 GHz 0.30 @ 2.7 GHz	40 @ 1.0 GHz 34 @ 2.7 GHz	33	2.4~4.8	1.2~3.6	14L QFN 2.0x2.0x0.55	SKY13414, RF1734, XMSS2Q3G0PA-064, BGS14GA14, AW9104
	RTC8614	0.5~3.0	GPIO	0.43 @ 1.0 GHz 0.48 @ 2.7 GHz 0.84 @ 3.8 GHz	39 @ 1.0 GHz 29 @ 2.7 GHz 26 @ 3.8 GHz	-- 35 --	2.5~4.8	1.35~2.7	14L QFN 2.0x2.0x0.55	SKY13414, RF1734, XMSS2Q3G0PA-064, BGS14GA14, AW9104
SP6T	RTC8616LR	0.1~3.8	MIPI	0.60 @ 1.0 GHz 0.70 @ 2.7 GHz 0.75 @ 3.8 GHz	31 @ 1.0 GHz 21 @ 2.7 GHz 17 @ 3.8 GHz	21.5	2.4~4.5	1.65~1.95	14L QFN 2.0x2.0x0.55	RF1656
	RTC8616DX	0.1~3.8	GPIO	0.60 @ 1.0 GHz 0.70 @ 2.7 GHz 0.75 @ 3.8 GHz	31 @ 1.0 GHz 21 @ 2.7 GHz 17 @ 3.8 GHz	21.5	2.5~4.0	1.35~2.0	14L QFN 2.0x2.0x0.55	SKY13416, RF1736, RF1636(RX Only), XMSS2Q3G0PA-066, BGS16GA14, AW9106
	RTC8616	0.1~2.7	GPIO	0.55 @ 1.0 GHz 0.80 @ 2.7 GHz	39 @ 1.0 GHz 28 @ 2.7 GHz	36 27	2.5~4.8	1.35~3.6	14L QFN 2.0x2.0x0.55	SKY13416, RF1736, RF1636(RX Only), XMSS2Q3G0PA-066, BGS16GA14, AW9106
SP8T	RTC8618LR	0.1~3.8	MIPI	0.58 @ 1.0 GHz 0.78 @ 2.7 GHz 0.83 @ 3.8 GHz	34 @ 1.0 GHz 22 @ 2.7 GHz 18 @ 3.8 GHz	21.8	2.5~4.5	1.65~1.95	14L QFN 2.0x2.0x0.55	RF1658
	RTC8618DX	0.1~3.8	GPIO	0.56 @ 1.0 GHz 0.73 @ 2.7 GHz 0.81 @ 3.8 GHz	34 @ 1.0 GHz 22 @ 2.7 GHz 18 @ 3.8 GHz	21.8	2.5~4.0	1.35~2.0	14L QFN 2.0x2.0x0.55	SKY13418, RF1738, RF1638(RX Only) XMSS2Q3G0PA-068, BGS18GA14, AW9108
	RTC8618	0.1~3.0	GPIO	0.45 @ 1.0 GHz 0.75 @ 2.7 GHz	33 @ 1.0 GHz 23 @ 2.7 GHz	36 29	2.5~4.8	1.35~3.6	14L QFN 2.0x2.0x0.55	SKY13418, RF1738, RF1638(RX Only) XMSS2Q3G0PA-068, BGS18GA14, AW9108
DP4T	RTC8624	0.7~2.7	GPIO	0.16 @ 1.0 GHz 0.32 @ 2.7 GHz	27 @ 1.0 GHz 26 @ 2.7 GHz	-- 30	1.5~3.6	1.2~3.6	10L QFN 1.2x1.6x0.55	XM0831SZ, RF1624 NJG1692, BGS22WL10

Antenna Switch

Antenna Swap-DPDT

Feature	Part No.	Freq (GHz)	Interface	Insertion Loss (dB)	RF to RF Isolation (dB)	Input P0.1dB (dBm)	Vdd (V)	Vctrl (V)	Package (mm, typ)	Pin Compatible
X-DPDT	RTC8622	0.5~3.8	GPIO	0.31 @ 1.0 GHz 0.41 @ 2.7 GHz	28 @ 1.0 GHz 20 @ 2.7 GHz	38	2.4~4.8	1.2~3.3	12L QFN 2.0x2.0x0.55	SKY13396, RF1643C

Antenna Tuner

Feature	Part No.	Freq (GHz)	Interface	Insertion Loss (dB)	RF to RF Isolation (dB)	Input P0.1dB (dBm)	Vdd (V)	Vctrl (V)	Package (mm, typ)	Pin Compatible
SP4T	RTC8634	0.1~2.7	GPIO	0.33 @ 1.0 GHz 0.83 @ 2.7 GHz	25 @ 1.0 GHz 18 @ 2.7 GHz	39	2.4~5.9	1.3~3.1	10L QFN 1.1x1.5x0.35	BGSA14GN10, RF1694, SKY19245

CATV Switch

Switch for DOCSIS 3.0/3.1 Cable Network

Feature	Part No.	Freq (MHz)	Insertion Loss (dB)	Isolation (dB)	Input P0.1 dB (dBmV)	Vctrl (V)	Vdd (V)	Package (mm, typ)	Pin Compatible
SPDT	RTC3601	5~1794	0.10 @ 204 MHz 0.40 @ 1218 MHz	32 @ 204 MHz 16 @ 1218 MHz	87	0.6~3.6	2.3~5.5	12L QFN 3.0x3.0x0.75	PE42723
	RTC3602	5~6000	0.10 @ 100 MHz 0.30 @ 3000 MHz 1.15 @ 6000 MHz	59 @ 100 MHz 25 @ 3000 MHz 13 @ 6000 MHz	34	0.6~3.6	2.3~5.5	12L QFN 2.0x2.0x0.55	PE42422
	RTC66006	100~2700	0.36 @ 500 MHz 0.39 @ 1000 MHz 0.55 @ 2000 MHz	36 @ 500 MHz 31 @ 1000 MHz 22 @ 2000 MHz	32	1.35~3.3	1.8~3.6	SC 70	PE4259

LTE LNA

LTE LNA

Part No.	Bypass Mode	Freq (MHz)	Vdd (V)	Idd (mA)	NF (dB)	Gain (dB)	IP1dB (dBm)	IIP3 (dBm)	Package (mm, typ)	Pin Compatible
RTC8606L		728~960	1.5~3.3	4.8	0.95	15	-4.5	-1	6L QFN 1.1x0.70x0.55	BGA7L1N6, BGU8L1, RF2823
RTC8606M		1805~2200 2300~2690	1.5~3.3	5.0 5.6	1.0 1.1	13 12.5	-8.5 -8	0 -0.5	6L QFN 1.1x0.70x0.55	BGA7M1N6, BGU8M1, RF2824 BGA7H1N6, BGU8H1, RF2825
RTC8641M	v	1805~2200	1.8~3.3	4.5	0.85	12	-7.5	0	6L QFN 1.1x0.70x0.55	BGA7H1BN6, BGS8M2
RTC8641H	v	2300~2690	1.8~3.3	4.5	0.95	11.5	-5.5	0.5	6L QFN 1.1x0.70x0.55	BGA7H1BN6, BGS8H2
RTC86001L		617~960	1.5~3.3	5	1.1	13.5	-3.9	-2	6L QFN 1.1x0.70x0.50	RTC8606L, BGA7L1N6, BGU8L1, RF2823
RTC86001MH		1805~2200 2300~2690	1.5~3.3	7	0.95 1.05	15 13.5	-7 -6.5	-3.5	6L QFN 1.1x0.70x0.50	RTC8606M, BGA7M1N6, BGU8M1, RF2824 BGA7H1N6, BGU8H1, RF2825
RTC86003L	v	617~960	1.5~3.3	6.5	1	15.5	-5	-5	6L QFN 1.1x0.70x0.50	RTC8641L, BGA7L1BN6, BGS8L2
RTC86003M	v	1805~2200	1.5~3.3	7	1.1	16	-12	-5.5	6L QFN 1.1x0.70x0.50	RTC8641M, BGA7H1BN6, BGS8M2
RTC86003H	v	2300~2690	1.5~3.3	7	1.2	13.5	-9	-2.5	6L QFN 1.1x0.70x0.50	RTC8641H, BGA7H1BN6, BGS8H2
RTC86004MH		1805~2200 2300~2690	1.5~3.3	7	0.95 1.05	16 14	-9 -8.5	-4 0.5	6L QFN 1.1x0.70x0.50	RTC8606M, BGA7M1N6, BGU8M1, RF2824 BGA7H1N6, BGU8H1, RF2825

LTE LNA-Switch Combo

Part No.	Bypass Mode	Freq (MHz)	Vdd (V)	Idd (mA)	NF (dB)	Gain (dB)	IP1dB (dBm)	IIP3 (dBm)	Package (mm, typ)	Pin Compatible
RTC8645L		600~1000	2.2~3.3	4.6	1	15	-7	-3	12L QFN 1.9x1.1x0.55	BGM15LA12
RTC8645M		1805~2200	2.2~3.3	5.5	1.1	14	-	-	12L QFN 1.9x1.1x0.55	BGM15MA12
RTC8645H		2300~2690	2.2~3.3	5	1.3	13	-	-	12L QFN 1.9x1.1x0.55	BGM15HA12

GPS LNA

GPS LNA

Part No.	Freq (MHz)	Vdd (V)	Idd (mA)	NF (dB)	Gain (dB)	IP1dB (dBm)	IIP3 (dBm)	Package (mm, typ)	Pin Compatible
RTC8601	1559~1610	1.5~3.6	5	0.75	18.5	-11	3	6L QFN 1.0x1.45x0.55	BGU7005, BGU7007, MAX2659, AR8159
RTC8604	1550~1615	1.6~4.5	2.85	0.65	19.6	-16	-6.5	6L QFN 1.1x0.70x0.55	BGA725L6, BGA524N6
RTC9601N	1164~1300	1.4~3.3	2.8	0.7	18.5	-12	0	6L QFN 1.1x0.70x0.55	BGA855N6

SAW Filter

SAW Filter

Part No.	Freq (MHz)	Insertion Loss (dB)	Absolute Attenuation (dB)	Input Power (dBm)	Package (mm, typ)	Pin Compatible
RTC46S2RUHA	1559~1605	1.8 @ 1563.15 1.3 @ 1577.42 1.6 @ 1605.89	58 @ 777~798 MHz 57 @ 824~915 MHz 57 @ 10~925 MHz 57 @ 925~960 MHz 41 @ 1427~1463 MHz 47 @ 1710~1785 MHz 43 @ 1850~1980 MHz 37 @ 2400~2570 MHz 35 @ 2570~3000 MHz	15	5L QFN 1.1x0.9x0.436	SAFFB1G56AC0F0A, F6QA1G581M2QZ, SFHG89GA002, HDF1575E-B5

Tx SAW Filter

Part No.	Freq (MHz)	Insertion Loss (dB)	Absolute Attenuation (dB)	Input Power (dBm)	Package (mm, typ)	Pin Compatible
RTC46SQTUHA	2300~2400	2.35	23 @ 1574~1577MHz 23 @ 1577~1680MHz 24 @ 1845~1880MHz 33 @ 2110~2170MHz 15 @ 2421~2443MHz 36 @ 4600~4800MHz 27 @ 6900~7200MHz	27	5L QFN 1.1x0.9x0.436	SAFFB2G35MA0F0A, SF6HF2G350AF41, HDFB40TRSS-B5

IoT SAW Filter

Part No.	Freq (MHz)	Insertion Loss (dB)	Absolute Attenuation (dB)	Input Power (dBm)	Package (mm, typ)	Pin Compatible
RTC46SUTUHA	1626.5 ~ 1660.5	2.1	39 @ 10~1525MHz 45 @ 1559~1606MHz 3.5 @ 1680.5~1850MHz	15	5L QFN 1.1x0.9x0.436	---
RTC46SURUHA	1518 ~ 1559	1.9	59 @ 10 ~ 1450 MHz 53 @ 1450 ~ 1468 MHz 50 @ 1468 ~ 1486 MHz 49 @ 1486 ~ 1490 MHz 12 @ 1582 ~ 1592 MHz 48 @ 1592 ~ 1640 MHz 49 @ 1640 ~ 1700 MHz 53 @ 2400 ~ 2570 MHz	10	5L QFN 1.1x0.9x0.436	---

LTE Femtocell PA

LTE Femtocell Power Amplifiers (DL)

Part No.	Feature	Pout(dBm)	ACLR (dBc)	Gain (dB)	Vcc(V)	Package (mm, typ)
RTC5651	Band 1/2/3/4	24	-50	26	5	16L QFN 4.0x4.0x0.90
RTC5685	Band 13	22	-50	29	4.2	16L QFN 3.0x3.0x0.90
		23.5	-50	30	5	16L QFN 3.0x3.0x0.90
RTC56841	Band 40/66	22	-50	30	4.2	16L QFN 3.0x3.0x0.90
		24	-50	31	5	16L QFN 3.0x3.0x0.90
RTC5682	Band 3	21	-48	24	3.3	16L QFN 3.0x3.0x0.90



Motion Detection Sensor

Part No.	Operation Freq (GHz)	Operation Mode	Vdd (V)	Package (mm, typ)	Operation temperature	Qualification	Reference module design
RTC6011	5.8GHz ISM band	CW or Pulse	2.2 ~ 3.6	3mm x 3mm QFN	-20 ~ +85	FCC/CE	20mmx20mm @~8M, 23mmx32mm @~15M, 23mmx56mm @~20M

IoT

2.4GHz BT LE/Zigbee FEM

Part No.	PA	LNA	SW	LPF	Saturated Tx Gain (dB)	Pout (dBm)	Vcc (V)	Rx Gain (dB)	Rx NF (dB)	Icq_off (μA)	Package (mm,typ)	Pin Compatible
RTC2624	PA	LNA	SP3T	---	20	22	1.7~3.6	11	2.1	1	16L QFN 2.4x2.4x0.75	SKY66114
RTC26202E	---	LNA	SPDT	---	---	---	1.7~3.6	12	2.1	1	6L QFN 1.0x1.0x0.75	---

LNA for NB-IoT, LoRa and Other Sub-1G

Part No.	Bypass Mode	Freq (MHz)	Vdd (V)	Idd (mA)	NF (dB)	Gain (dB)	IP1dB (dBm)	IIP3 (dBm)	Package (mm, typ)	Pin Compatible
RTC86003L	v	617~960	1.5~3.3	6.5	1	15.5	-5	-5	6L QFN 1.1x0.70x0.50	RTC8641L, BGA7L1BN6, BGS8L2
RTC86003M	v	1805~2200	1.5~3.3	7	1.1	16	-12	-5.5	6L QFN 1.1x0.70x0.50	RTC8641M, BGA7H1BN6, BGS8M2
RTC86003H	v	2300~2690	1.5~3.3	7	1.2	13.5	-9	-2.5	6L QFN 1.1x0.70x0.50	RTC8641H, BGA7H1BN6, BGS8H2

GPIO Switch for NB-IoT, LoRa and Other Sub-1G

Feature	Part No.	Freq (GHz)	Insertion Loss (dB)	RF toRF Isolation (dB)	Input P0.1 dB (dBm)	Vdd (V)	Vctrl (V)	Package (mm, typ)	Pin Compatible
SPDT	RTC8612H	0.4~6.0	0.50 @ 1.0 GHz 0.99 @ 6.0 GHz	49 @ 1.0 GHz 28 @ 6.0 GHz	28	2.5~4.5	1.2~3.6	6L QFN 1.0x1.0x0.55	NJG1697EM1, SKY13453, XM0830SJ, XMSS1R6G0PA
	RTC8612HE	0.4~2.7	0.20 @ 1.0 GHz 0.40 @ 2.7 GHz	24 @ 1.0 GHz 23 @ 2.7 GHz	-- 18	1.4~4.5	1.2~3.4	6L QFN 1.0x1.0x0.35	NJG1697EM1, SKY13453, XM0830SJ, XMSS1R6G0PA
	RTC8612RH	0.5~6.0	0.23 @ 1.0 GHz 0.28 @ 2.7 GHz 0.56 @ 6.0 GHz	39 @ 1.0 GHz 28 @ 2.7 GHz 19 @ 6.0 GHz	34 32.5 30	2.4~3.3	1.2~3.3	6L QFN 1.1x0.7x0.35	RTC8612FR, RF1630, SKY13476, BGS12PL6, BGS12SL6, BGS12SN6, CXA4403GC, XMSSJJ3G0PA
	RTC6608OU	0.03~6.0	0.24 @ 2.45 GHz 0.35 @ 5.80 GHz	35 @ 2.45 GHz 26 @ 5.80 GHz	32	1.6~3.6	--	6L QFN 1.0x1.0x0.35	RTC6608O, SKY13351 uPG2185
	RTC6609U	0.1~6.0	0.24 @ 2.45 GHz 0.31 @ 5.90 GHz	32 @ 2.45 GHz 25 @ 5.90 GHz	31	1.6~3.6	--	6L QFN 1.5x1.5x0.35	RTC6609, SKY13314, uPG2163, HWSS04, SKY13446
	RTC6619U	0.5~6.0	0.33 @ 2.40 GHz 0.43 @ 5.00 GHz	32 @ 2.40 GHz 24 @ 5.00 GHz	34	1.6~3.6	--	6L QFN 1.5x1.5x0.55	SKY13370, SKY13348, UPG2176, GW2176
	RTC7608U	0.1~7.125	0.21 @ 2.45 GHz 0.35 @ 5.80 GHz 0.53 @ 7.125 GHz	35 @ 2.45 GHz 25 @ 5.80 GHz 23 @ 7.125 GHz	32	1.08~3.6	2.5~3.6	6L QFN 1.0x1.0x0.35	NJG1806, SKY13585
SP3T	RTC8613M	0.1~4.2	0.30 @ 1.0 GHz 0.37 @ 2.7 GHz 0.42 @ 4.2 GHz	38 @ 1.0 GHz 28 @ 2.7 GHz 23 @ 4.2 GHz	34	2.45~3.6	1.35~2.7	9L QFN 1.1x1.1x0.55	SKY13582, RF1621, RF1628, AW9103, BGS13GN9
	RTC56373	0.1~6.0	0.38 @ 1.0 GHz 1.00 @ 6.0 GHz	40 @ 1.0 GHz 20 @ 6.0 GHz	38.5 --	2.5~4.8	1.35~3.3	12L QFN 2.0x2.0x0.75	SKY13373
	RTC56373R	0.1~6.0	0.28 @ 1.0 GHz 0.83 @ 6.0 GHz	35 @ 1.0 GHz 20 @ 6.0 GHz	35 32	2.45~4.8	1.35~3.3	12L QFN 2.0x2.0x0.75	SKY13373
	RTC6617U	0.1~6.0	0.31 @ 2.45 GHz 0.53 @ 5.90 GHz	22 @ 2.45 GHz 19 @ 5.90 GHz	30	1.0~3.6	--	8L QFN 1.5x1.5x0.45	RTC6617, SKY13317, GW2151, uPG2413
SP4T	RTC8614U	0.1~3.8	0.21 @1.0 GHz 0.30 @2.7 GHz	40 @1.0 GHz 34 @2.7 GHz	33	2.4~4.8	1.2~3.6	14L QFN 2.0x2.0x0.55	SKY13414, RF1734, XMSS2Q3G0PA-064, BGS14GA14, AW9104
	RTC8614	0.5~3.0	0.43 @ 1.0 GHz 0.48 @ 2.7 GHz 0.84 @ 3.8 GHz	39 @ 1.0 GHz 29 @ 2.7 GHz 26 @ 3.8 GHz	-- 35 --	2.5~4.8	1.35~2.7	14L QFN 2.0x2.0x0.55	SKY13414, RF1734, XMSS2Q3G0PA-064, BGS14GA14, AW9104
	RTC26801	0.5~3.8	0.23 @ 1.0 GHz 0.40 @ 2.0 GHz	45 @ 1.0 GHz 37 @ 2.0 GHz	33	2.4~4.8	1.2~3.6	9L QFN 1.1x1.1x0.40	RF1648B, SKY13626
SP6T	RTC8616	0.1~2.7	0.55 @ 1.0 GHz 0.80 @ 2.7 GHz	39 @ 1.0 GHz 28 @ 2.7 GHz	36 27	2.5~4.8	1.35~3.6	14L QFN 2.0x2.0x0.55	SKY13416, RF1736, RF1636(RX Only), XMSS2Q3G0PA-066, BGS16GA14, AW9106
SP8T	RTC8618	0.1~3.0	0.45 @ 1.0 GHz 0.75 @ 2.7 GHz	33 @ 1.0 GHz 23 @ 2.7 GHz	36 29	2.5~4.8	1.35~3.6	14L QFN 2.0x2.0x0.55	SKY13418, RF1738, RF1638(RX Only), XMSS2Q3G0PA-068, BGS18GA14, AW9108

Automotive

Switch for Automotive

Feature	Part No.	Freq (GHz)	Insertion Loss (dB)	Isolation (dB)	Input P0.1dB (dBm)	Vctrl (V)	Vdd (V)	Package (mm, typ)	Qualification
SPDT	RTC1602	0.1~6.0	0.50 @ 2.45 GHz 0.75 @ 6.00 GHz	25 @ 2.45 GHz 27 @ 6.00 GHz	32 31	1.2~3.6	2.5~3.6	6L QFN 1.0x1.0x0.35	AEC-Q100 Grade 2
	RTC1603	0.7~6.0	0.50 @ 1.00 GHz 0.99 @ 6.00 GHz	50 @ 1.00 GHz 28 @ 6.00 GHz	28	1.2~3.6	2.5~4.5	6L QFN 1.0x1.0x0.55	AEC-Q100 Grade 2
	RTC1604	0.03~6.0	0.40 @ 2.45 GHz 0.75 @ 6.00 GHz	25 @ 2.45 GHz 27 @ 6.00 GHz	33 32	1.6~3.6	---	6L QFN 1.0x1.0x0.35	AEC-Q100 Grade 2
	RTC16003	0.5~2.7	0.28 @ 0.90GHz 0.44 @ 2.70GHz	35 @ 0.90 GHz 24 @ 2.70 GHz	31	1.2~3.3	2.4~3.6	6L QFN 1.1x0.7x0.35	AEC-Q100 Grade 2
SP3T	RTC1601	0.1~6.0	0.50 @ 2.45 GHz 0.80 @ 5.00 GHz	37 @ 2.45 GHz 30 @ 5.00 GHz	33 32	1.6~3.6	3.0~5.0	8L QFN 1.1x1.1x0.29	AEC-Q100 Grade 2

2.4GHz FEM for Automotive

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (%)	Vcc (V)	Rx Gain (dB)	Rx/Tx ISO (dB)	Package (mm, typ)	Qualification
RTC1620	PA	LNA	SP3T	LPF	28 26.5	21 19	3	5 3.3	15	40	16L QFN 3.0x3.0x0.90	AEC-Q100 Grade 2
RTC1621	---	LNA	SP3T	---	---	---	---	3.3	15	---	12L QFN 2.0x2.0x0.45	AEC-Q100 Grade 2
RTC16204	PA	LNA	SP3T	LPF	23.5	16 19	1 3	3.45	16	---	16L QFN 2.0x2.0x0.29	AEC-Q100 Grade 2
RTC16206	---	LNA	SP3T	---	---	---	---	3.3	16	---	8L QFN 1.5x1.5x0.305	AEC-Q100 Grade 2

5GHz FEM for Automotive

Part No.	PA	LNA	SW	LPF	Tx Gain (dB)	Pout (dBm)	EVM (%)	Vcc (V)	Rx Gain (dB)	Rx/Tx ISO (dB)	Package (mm, typ)	Qualification
RTC1630	PA	LNA	SPDT	LPF	31	20 16	1.8	5 3.3	14 13	---	16L QFN 3.0x3.0x0.90	AEC-Q100 Grade 2
RTC1631	---	LNA	SPDT	---	---	---	---	3.3	13.5	---	8L QFN 1.5x1.5x0.45	AEC-Q100 Grade 2
RTC16504	PA	LNA	SPDT	LPF	27	16.5 18	1 1.8	3.45	14	---	10L QFN 2.0x1.7x0.305	AEC-Q100 Grade 2

FM Tuner

Part No.	RTC6211N	RTC6213N	RS6208N	RTC6226	RTC6226E
FM Band Range	64~108MHz	64~108MHz	64~108MHz	62~110MHz	62~110MHz
Audio Output Format	Analog	Analog	Analog	Digital	Digital
Stereo/ MONO	Stereo	Stereo	Stereo	Stereo	Stereo
Supply Voltage	2.7~5.5V	2.7~5.5V	2.7~5.5V	2.0~3.6V	2.0~3.6V
VIO	1.5~3.6V	1.5~3.6V	1.5~3.6V	1.2~3.6V	1.2~3.6V
Current Consumption (Typical)	17mA	17mA	17mA	17mA	17mA
Package Type	2.5mm*2.5mm 16-pin QFN	2.5mm*2.5mm 16-pin QFN	3mm*3mm 20-pin QFN	2mm*2mm 16-pin QFN	2mm*2mm 16-pin QFN
Control Interface	I2C	I2C	I2C	I2C	I2C
Sensitivity (Typical)	1.6 uV emf	1.6 uV emf	1.6 uV emf	1.2 uV emf	1.2 uV emf
Adjacent Channel Selectivity ±200KHz (Typical)	50dB	50dB	50dB	60dB	60dB
Alternative Channel Selectivity ±400KHz (Typical)	60dB	60dB	60dB	63dB	63dB
Audio Mono SNR	60dB	60dB	60dB	61dB	61dB
Audio Stereo SNR	50dB	50dB	50dB	56dB	56dB
THD (%)	0.10%	0.10%	0.10%	0.10%	0.10%
RDS	--	Support	Support	Support	Support
RDS sensitivity	--	15 uV emf	15 uV emf	15 uV emf	15 uV emf
Crystal Type	--	--	--	--	X-tal

FMAMSW Tuner

Market	I2C Radio	Traditional (Mech.) Radio
Part No.	RTC6235	RTC6255
FM Band Range	64 ~ 108 MHz	64 ~ 108 MHz
AM Band Range	504 ~ 1750 kHz	504 ~ 1750 kHz
SW Band Range	--	2.3 ~ 28.0 MHz
RDS Support	--	--
Package Type	SOP-16	SOP-16
Supply Voltage	2~3.6V	2~3.6V
Current Consumption (Typical)	19mA	19mA
Freq. Tune Control Interface	I2C	PVR
Display by I2C	Yes	Yes
FM Sensitivity (Typical)	1.6 uV emf	1.6 uV emf
AM/SW Sensitivity (Typical)	18 uV emf	18 uV emf
Stereo/MONO Output	Stereo	MONO

Wireless Audio/ Video

Application	Function	Decoder Ability*	Transmitter P/N		Receiver P/N	
Security	1T1R 4T1R	D1 30fps CIF 120fps	RTC6758	RTC6763S	RTC6758 SATA/USB/SDHC Storage/4 Channels Recording/P2P/Remote control/ LCD touch panel/HDMI&CVBS Output	RTC6763S
Security	4T1R	720p 120fps 1080p 60fps	**	RTC6763S	** SATA/USB/SDHC Storage/ 4 Channels Recording/P2P/ Remote control/ LCD touch panel/ HDMI&CVBS Output	RTC6763S
Car RearView	1T1R 4T1R	D1 30fps CIF 120fps	RTC6758	RTC6763S	RTC6758	RTC6763S
Car RearView	1T1R 4T1R	720p 30fps 720p 20fps*1 VGA 20 fps*3	**	RTC6763S	**	RTC6763S
Car RearView (Low Cost)	1T1R	480*272 30fps	**	RTC6763S	**	RTC6763S
Door Phone	1T1R	480*272 30fps	**	RTC6763S	**	RTC6763S

*Transmission frame rate depends on environment condition

** Third-party Codec

Application	Freq.	Vcc	Transmitter P/N	Receiver P/N
AV sender	2.4GHz	3.3V	RTC6701	RTC6711/RTC6721 (Stereo Audio Demodulator)
AV sender	5.8GHz	3.3V	RTC6705	RTC6715



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