



RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

## SAW DEVICE SELECTION TABLE

for

Industrial Electronics

**(including Infrastructure Systems and Multimedia)**

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<b>Basestation IF Filters</b>
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Center Frequency MHz	Type		Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rejection dB	Package	Size mm <sup>2</sup>	Application
133.20	B4926	i	0.20	0.80	4.5	32	QCC12C	7.0x5.0	GSM
122.88	B5245	i	0.10	2.50	6.2	40	QCC12C	7.0x5.0	Clean-up
153.60	B5206	i	20.00	29.00	7.8	57	QCC12E	7.0x5.0	TD-SCDMA
153.60	B5239	i	40.00	55.00	12.2	60	QCC12E	7.0x5.0	TD-SCDMA
138.20	B5233	i	35.00	47.00	10.4	45	QCC12E	7.0x5.0	CDMA/LTE
172.80	B5220	i	21.00	30.00	9.4	60	QCC12E	7.0x5.0	W-CDMA/LTE
182.50	B5255	i	12.00	17.50	9.4	55	QCC12E	7.0x5.0	LTE
184.30	B5258	i	47.00	60.00	9.0	35	QCC12E	7.0x5.0	LTE
184.32	B5268	i	65.00	75.00	17.8	45	QCC12E	7.0x5.0	LTE
191.60	<b>B5270</b>	<b>i</b>	16.00	22.00	11.1	50	QCC12E	7.0x5.0	LTE
192.00	B5219	i	21.00	30.00	7.9	50	QCC12E	7.0x5.0	W-CDMA/LTE
192.00	B5224	i	30.00	40.00	8.9	50	QCC12E	7.0x5.0	W-CDMA/LTE
192.00	B5087	i	60.00	70.00	15.2	50	QCC12E	7.0x5.0	W-CDMA/LTE
192.00	B5260	i	60.00	75.00	9.8	45	QCC12E	7.0x5.0	W-CDMA/LTE
230.40	B5269	i	60.00	75.00	10.2	35	QCC12E	7.0x5.0	LTE
230.40	B5272	i	65.00	80.00	10.3	35	QCC12E	7.0x5.0	LTE
307.20	B5251	i	41.00	55.00	11.0	45	QCC12E	7.0x5.0	LTE
307.20	B5254	i	60.00	75.00	10.4	50	QCC12E	7.0x5.0	LTE

- s: samples available (not yet in production)
- o: obsolete (not for new designs)
- i: data sheet is available in Internet

**Basestation RF Filters**

Center Frequency MHz	Type	Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rej. dB	Package	Size mm <sup>2</sup>	Application
453.74	B5061	i 7.48	21.00	2.2	48	DCC6C	3.0x3.0	Band 31 UL
455.00	B5336	i 5.00	10.00	1.6	44	DCC6C	3.0x3.0	Band 31 UL
465.00	B5052	i 10.00	23.00	2.0	17	QCC8B	3.8x3.8	Band 31 DL
634.50	B5384	i 35.00	60.00	3.0	35	DCC6C	3.0x3.0	Band 71 DL
680.50	B5378	i 35.00	50.00	2.2	30	DCC6C	3.0x3.0	Band 71 UL
707.00	B5107	i 18.00	34.00	1.6	40	DCC6C	3.0x3.0	Band 12 UL
722.50	B5347	i 11.00	25.00	1.8	45	DCC6C	3.0x3.0	Band 29 DL
736.50	B5329	i 39.00	80.00	3.0	20	DCC6C	3.0x3.0	Band 12+13 DL
737.00	B5124	i 20.00	35.00	1.9	40	DCC6C	3.0x3.0	Band 12 DL
737.50	B5346	i 17.00	35.00	1.8	40	DCC6C	3.0x3.0	Band 12 DL
751.00	B5344	i 10.00	24.00	1.7	30	DCC6C	3.0x3.0	Band 13 DL
751.50	B5116	i 11.00	38.00	1.5	30	DCC6C	3.0x3.0	Band 13 DL
763.00	B5341	i 10.00	26.00	2.2	50	DCC6C	3.0x3.0	Band 14 DL
766.50	B5117	i 17.00	37.00	2.0	30	DCC6C	3.0x3.0	Band 14 DL
781.50	B5114	i 11.00	39.00	1.6	28	DCC6C	3.0x3.0	Band 13 UL
787.50	B5120	i 21.00	35.00	1.5	30	DCC6C	3.0x3.0	Band 13+14 UL
793.00	B5380	i 10.00	25.00	1.8	38	DCC6C	3.0x3.0	Band 14 UL
796.50	B5118	i 17.00	37.00	1.8	32	DCC6C	3.0x3.0	Band 14 UL
723.00	B5309	i 10.00	32.00	1.7	38	DCC6C	3.0x3.0	Band 28 Japan
725.50	B5194	i 45.00	100.00	2.4	15	DCC6C	3.0x3.0	Band 28 UL
725.50	B5326	i 45.00	80.00	3.3	20	DCC6C	3.0x3.0	Band 28 UL
725.50	B5328	i 45.00	60.00	2.5	35	DCC6C	3.0x3.0	Band 28 UL
733.00	B5178	i 10.00	35.00	1.6	40	DCC6C	3.0x3.0	Band 28 Japan
780.50	B5199	i 45.00	60.00	3.0	33	DCC6C	3.0x3.0	Band 28 DL
780.50	B5325	i 45.00	n/a	3.5	18	DCC6C	3.0x3.0	Band 28 DL
806.00	B5131	i 30.00	n/a	1.8	15	DCC6C	3.0x3.0	Band 20 DL
806.00	B5307	i 30.00	46.00	2.0	34	DCC6C	3.0x3.0	Band 20 DL
847.00	B5130	i 30.00	50.00	2.4	31	DCC6C	3.0x3.0	Band 20 UL
815.50	B5370	i 17.00	40.00	1.7	36	DCC6C	3.0x3.0	Band 27 UL
822.50	B5321	i 15.00	30.00	2.1	40	DCC6C	3.0x3.0	Band 18 UL
831.50	B5348	i 35.00	52.00	2.1	30	DCC6C	3.0x3.0	Band 26 UL
836.50	B5176	i 25.00	46.00	1.7	49	DCC6C	3.0x3.0	Band 5 UL
860.50	B5371	i 17.00	40.00	2.2	45	DCC6C	3.0x3.0	Band 27 DL
867.50	B5059	i 25.00	50.00	2.5	47	DCC6C	3.0x3.0	Band 18 DL
876.50	B5351	i 35.00	52.00	2.0	34	DCC6C	3.0x3.0	Band 26 DL
895.50	B5056	i 39.00	62.00	2.1	25	DCC6C	3.0x3.0	R-GSM UL
897.50	B5340	i 35.00	50.00	2.2	60	DCC6C	3.0x3.0	Band 8 UL
897.50	<b>B5398</b>	i 35.00	65.00	1.7	30	DCC6C	3.0x3.0	Band 8 UL
902.50	<b>B5606</b>	i 25.00	40.00	1.6	30	DCC6C	3.0x3.0	Band 8 Japan
907.50	B5322	i 15.00	30.00	2.0	44	DCC6C	3.0x3.0	Band 8 Japan
939.00	B5161	i 42.00	120.00	2.5	30	DCC6C	3.0x3.0	R-GSM DL
940.50	B5057	i 39.00	60.00	2.7	35	DCC6C	3.0x3.0	R-GSM DL
942.50	B5182	i 35.00	50.00	2.5	33	DCC6C	3.0x3.0	Band 8 DL
952.50	B5352	s,i 15.00	30.00	2.2	35	DCC6C	3.0x3.0	Band 8 Japan
1446.45	B5128	i 37.10	80.00	2.5	50	DCC6C	3.0x3.0	Band 11+21 UL
1457.00	B5385	i 20.00	60.00	1.6	44	DCC6C	3.0x3.0	Band 45 UL

s: samples available (not yet in production)

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**Basestation RF Filters (cont.)**

Center Frequency MHz	Type	Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rej. dB	Package	Size mm <sup>2</sup>	Application	
1732.50	B5109	i	45.00	90.00	1.7	28	DCC6C	3.0x3.0	Band 4 UL
1732.50	B5353	s,i	45.00	75.00	1.5	35	DCC6C	3.0x3.0	Band 4 UL
1747.50	B5085	i	75.00	200.00	2.5	25	DCC6C	3.0x3.0	Band 3 UL
1747.50	B5149	i	75.00	105.00	2.0	35	DCC6C	3.0x3.0	Band 3 UL
1747.50	B5159	i	75.00	140.00	2.2	20	DCC6C	3.0x3.0	Band 3 UL
1747.50	B5323	i	75.00	96.00	2.7	45	DCC6C	3.0x3.0	Band 3 UL
1747.50	B5364	i	75.00	90.00	2.6	58	DCC6C	3.0x3.0	Band 3 UL
1762.50	B5110	i	45.00	90.00	1.7	28	DCC6C	3.0x3.0	Band 9 UL
1774.90	B5349	s,i	20.00	85.00	1.7	40	DCC6C	3.0x3.0	Band 9 UL
1842.50	B4166	o	75.00	140.00	2.9	25	DCC6C	3.0x3.0	Band 3 DL
1842.50	B5330	i	75.00	n/a	3.0	30	DCC6C	3.0x3.0	Band 3 DL
1842.50	B5386	i	75.00	120.00	2.1	30	DCC6C	3.0x3.0	Band 3 DL
1845.00	<b>B5376</b>	i	90.00	135.00	2.1	35	DCC6C	3.0x3.0	Band 3 extend
1880.00	B5180	i	60.00	110.00	2.1	25	DCC6C	3.0x3.0	Band 2 UL
1880.00	B5375	i	60.00	80.00	2.5	59	DCC6C	3.0x3.0	Band 2 UL
1882.50	B4182	i	65.00	100.00	2.5	30	DCC6C	3.0x3.0	Band 25 UL
1882.50	B5171	i	65.00	n/a	2.6	20	DCC6C	3.0x3.0	Band 25 UL
1882.50	B5177	i	65.00	100.00	2.0	26	DCC6C	3.0x3.0	Band 25 UL
1950.00	B5127	i	20.00	n/a	2.5	35	DCC6C	3.0x3.0	Band 1 Japan
1950.00	B5166	i	60.00	105.00	2.0	42	DCC6C	3.0x3.0	Band 1 UL
1960.00	B5155	i	60.00	120.00	2.3	32	DCC6C	3.0x3.0	Band 2 DL
1962.50	B5142	i	65.00	n/a	2.9	20	DCC6C	3.0x3.0	Band 25 DL
2140.00	B5377	i	60.00	130.00	2.8	35	DCC6C	3.0x3.0	Band 1 DL
2140.00	<b>B5610</b>	s	160.00	300.00	2.3	25	DCC6C	3.0x3.0	Band 1 extend
2155.00	B5359	i	90.00	230.00	2.9	36	DCC6C	3.0x3.0	Band 66 DL
2310.00	B5342	i	10.00	60.00	2.2	45	DCC6C	3.0x3.0	Band 30 UL
2352.50	B5345	s,i	15.00	70.00	1.7	35	DCC6C	3.0x3.0	Band 30 DL
2535.00	B5115	i	70.00	130.00	2.5	32	DCC6C	3.0x3.0	Band 7 UL
2655.00	B5122	i	70.00	140.00	2.3	36	DCC6C	3.0x3.0	Band 7 DL
1900.00	B5305	i	40.00	80.00	1.9	40	DCC6C	3.0x3.0	Band 39
2017.50	B5306	i	15.00	50.00	2.2	45	DCC6C	3.0x3.0	Band 34
2345.00	B5312	i	50.00	90.00	2.1	40	DCC6C	3.0x3.0	Band 40 partial
2345.00	B5361	i	50.00	80.00	2.2	30	DCC6C	3.0x3.0	Bd 40 Post-PA
2350.00	B5133	i	100.00	n/a	2.0	30	DCC6C	3.0x3.0	Band 40
2350.00	B5302	i	100.00	150.00	2.0	25	DCC6C	3.0x3.0	Band 40
2560.00	B5164	i	30.00	120.00	2.4	33	DCC6C	3.0x3.0	Band 41 XGP
2593.00	B5303	i	194.00	300.00	2.0	20	DCC6C	3.0x3.0	Band 41
2593.00	B5337	i	194.00	360.00	2.7	34	DCC6C	3.0x3.0	Band 41
2595.00	B5154	i	50.00	130.00	2.6	30	DCC6C	3.0x3.0	Band 38
2595.00	B5308	i	50.00	130.00	1.9	35	DCC6C	3.0x3.0	Band 38
2595.00	B5175	i	100.00	160.00	2.5	25	DCC6C	3.0x3.0	Band 41 partial
2595.00	B5304	i	80.00	145.00	2.0	28	DCC6C	3.0x3.0	Band 41 partial
3450.00	B5327	i	80.00	200.00	1.9	38	DCC6C	3.0x3.0	Band 22 UL
3500.00	B5360	i	200.00	400.00	4.5	35	DCC6C	3.0x3.0	Band 42
3540.00	B5350	i	120.00	250.00	2.7	30	DCC6C	3.0x3.0	Band 42 partial
3700.00	B5366	i	200.00	400.00	4.0	35	DCC6C	3.0x3.0	Band 43

s: samples available (not yet in production)

o: obsolete (not for new designs)

i: data sheet is available in Internet

<b>Dualband Filters and Diplexers</b>
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Center Frequency MHz	Type		Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rejection dB	Package	Size mm <sup>2</sup>	Application
707 / 793	<b>B5399</b>	i	16 / 10	30 / 30	1.9 / 2.1	31	DCC6D	3.0x3.0	Bd 12+14 Diplx.
718 / 847	<b>B5394</b>	i	30 / 30	50 / 50	2.6 / 2.6	30	DCC6C	3.0x3.0	Dualband 20+28a
725 / 847	BK23B	s	45 / 30	60 / 60	2.4 / 1.8	30	DCC6C	3.0x3.0	Dualband 20+28
781.5/836.5	<b>B5602</b>	i	11 / 25	30 / 50	1.2 / 1.6	40	DCC6D	3.0x3.0	Bd 5+13 Diplex.
1747 / 1950	BK48	s	75 / 60	96 / 105	t.b.d.	30	DCC6C	3.0x3.0	Dualband B1+3
1747 / 1950	B5343	i	75 / 60	96 / 105	2.7 / 2.6	43	DCC6D	3.0x3.0	Bd 1+3 Diplexer
1747 / 1950	<b>B5389</b>	i	75 / 60	100 / 105	2.2 / 2.3	37	DCC6D	3.0x3.0	Bd 1+3 Diplexer
1732 / 1880	B5381	i	45 / 60	85 / 90	2.2 / 2.8	30	DCC6C	3.0x3.0	Dualband B2+4
1732 / 1880	B5362	i	45 / 60	85 / 90	2.5 / 3.0	37	DCC6D	3.0x3.0	Bd 2+4 Diplexer
1745 / 1882	<b>B5392</b>	i	70 / 65	100 / 90	2.0 / 2.4	35	DCC6D	3.0x3.0	Bd 25+66 Diplx.
1897 / 2017	B5186	i	35 / 15	80 / 60	3.0	35	DCC6C	3.0x3.0	Dualband 34+39
1897 / 2017	B5190	i	35 / 15	80 / 60	2.8 / 2.7	35	DCC6C	3.0x3.0	Dualband 34+39
1897 / 2017	B5187	i	35 / 15	80 / 50	3.0 / 3.5	25	DCC6D	3.0x3.0	Bd 34+39 Diplx.

- s: samples available (not yet in production)  
o: obsolete (not for new designs)  
i: data sheet is available in Internet

<b>Broadband Wireless Access and WiMAX Filters</b>
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Center Frequency MHz	Type		Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rejection dB	Package	Size mm <sup>2</sup>
110.59	B5232	i	1.15	3.00	4.0	40	QCC12C	7.0x5.0
140.00	B5250	i	2.00	4.40	11.6	45	QCC12E	7.0x5.0
140.00	B5247	s,i	3.80	7.20	8.6	40	QCC12E	7.0x5.0
140.00	B5249	i	7.40	13.50	12.4	45	QCC12E	7.0x5.0
140.00	B5246	i	15.00	21.00	11.4	45	QCC12E	7.0x5.0
810.00	B5094	i	20.00	43.00	2.1	40	DCC6C	3.0x3.0
1080.00	B5168	i	1.00	3.50	3.6	25	QCC8F	3.0x3.0
1080.00	B5169	i	7.00	22.00	2.5	40	QCC8F	3.0x3.0
1080.00	B5157	i	30.00	n/a	1.6	40	DCC6C	3.0x3.0
1900.00	B5148	i	35.00	90.00	2.6	45	DCC6C	3.0x3.0

- \*: 30dB-bandwidth
- s: samples available (not yet in production)
- o: obsolete (not for new designs)
- i: data sheet is available in Internet

<b>Trunked Radio Filters</b>
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Center Frequency MHz	Type		Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rejection dB	Package	Size mm <sup>2</sup>	Application
342.50	B5189	i	25.00	42.00	3.5	20	QCC8B	3.8x3.8	TETRA
350.00	B5192	i	20.00	n/a	2.2	15	QCC8C	5.0x5.0	TETRA
355.00	B5073	i	10.00	17.00	1.8	30	QCC8B	3.8x3.8	TETRA
365.00	B5074	i	10.00	17.00	1.7	50	QCC8B	3.8x3.8	TETRA
367.50	B5188	i	25.00	46.00	3.0	27	QCC8B	3.8x3.8	TETRA
390.00	B5047	i	20.00	32.00	3.1	20	QCC8B	3.8x3.8	TETRA
390 / 420	B4233	i	20 / 20	38 / 40	1.9 / 1.9	40	QCC8C	5.0x5.0	TETRA 2in1
390 / 415	B5151	i	20 / 30	50 / 60	1.8 / 2.2	25	QCC8C	5.0x5.0	TETRA 2in1
392.50	B5334	i	25.00	50.00	2.8	40	QCC8B	3.8x3.8	TETRA
392.5/417.5	B5338	i	25 / 25	55 / 55	2.2 / 2.2	30	QCC8C	5.0x5.0	TETRA 2in1
415.00	B5053	i	10.00	21.00	2.3	40	QCC8B	3.8x3.8	TETRA
415.00	B5324	i	30.00	50.00	3.3	40	QCC8B	3.8x3.8	TETRA
417.50	B5335	i	25.00	50.00	3.0	40	QCC8B	3.8x3.8	TETRA
420.00	B5048	i	20.00	34.00	3.2	20	QCC8B	3.8x3.8	TETRA
425.00	B5055	i	10.00	21.00	2.7	40	QCC8B	3.8x3.8	TETRA
440.50	B5173	i	15.00	25.00	1.9	40	QCC8B	3.8x3.8	DMR/PMR
452.50	B5150	i	15.00	n/a	1.6	15	QCC8B	3.8x3.8	TETRA
454.00	B5369	i	32.00	55.00	3.5	34	DCC6	3.8x3.8	DMR/PMR
460.00	B5058	i	20.00	42.00	2.0	30	QCC8B	3.8x3.8	TETRA
465.00	B5052	i	10.00	23.00	2.7	40	QCC8B	3.8x3.8	TETRA/Bd31
769 / 809.5	B4236	i	14 / 31	42 / 50	1.7 / 2.3	55-60	QCC8E	3.0x2.5	iDEN/APCO
769 / 860.5	B4232	i	14 / 19	42 / 46	1.7 / 2.4	55-60	QCC8E	3.0x2.5	iDEN/APCO
769 / 860.5	B4240	i	14 / 19	42 / 46	1.6 / 1.8	55-60	QCC8E	3.0x2.5	iDEN/APCO
815.50	B5370	i	17.00	40.00	1.7	36	DCC6C	3.0x3.0	TETRA/iDEN
815.50	B5046	i	19.00	46.00	2.6	40	DCC6D	3.0x3.0	TETRA/iDEN
860.50	B5371	i	17.00	40.00	2.2	45	DCC6C	3.0x3.0	TETRA/iDEN
860.50	B5013	i	19.00	50.00	3.0	45	DCC6D	3.0x3.0	TETRA/iDEN

- s: samples available (not yet in production)
- o: obsolete (not for new designs)
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<b>Filters for Satellite Navigation and Cable Networks</b>
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Center Frequency MHz	Type		Usable Passband MHz	Bandwidth 20dB MHz	Insertion Attenuation dB	Out of Band Rejection	Package	Size mm <sup>2</sup>
173.80	B5068	i	24.00	27.50	9.3	45	QCC12E	7.0x5.0
610.00	B3690	i	2.70	5.50	9.5	45	QCC12C	7.0x5.0
1474.00	B8844	i	44.00	86.00	1.7	45	QCT5F	1.1x0.9
1475.00	<b>B5608</b>	<b>i</b>	110.00	200.00	2.5	35	DCC6C	3.0x3.0
1575.42	B9457	i	2.40	80.00	0.5	30	QCS5U	1.4x1.1
1582.47	B9621	i	46.84	90.00	1.4	35	QCS5P	1.4x1.1
1538.50	B5163	i	41.00	80.00	2.3	45	DCC6C	3.0x3.0
1643.50	B5153	i	34.00	80.00	1.8	40	DCC6C	3.0x3.0
1650.75	B5143	i	48.50	85.00	2.9	45	DCC6C	3.0x3.0

- s: samples available (not yet in production)  
o: obsolete (not for new designs)  
i: data sheet is available in Internet



**Filters for Smallcells and Convergence Application (Femtocells, Internet Access Points, ...)**

Center Frequency MHz	Type		Usable Passband MHz	Insertion Attenuation dB	Package	Size mm <sup>2</sup>	Application
942.5/1842.5	B9940	i	35 / 75	2.0 / 2.5	QCT10K	1.1x1.5	2in1 diplexed output - GSM Eur. Sniffers
942.5/1842.5	B9943	i	35 / 75	1.5 / 1.9	QCT10K	1.1x1.5	2in1 - GSM Eur. Sniffers
1890.00	B9479	i	20.00	1.9	QCS5I	1.1x1.4	<b>DECT</b> Europe Rx/Tx filter - Consumer
1582.47	B9621	i	8.34	1.4	QCS5P	1.1x1.4	<b>GPS/GNSS/Galileo/Beidu</b> filter - Industrial
2442.00	B9634	i	84.00	2.5	QCU5S	1.1x1.4	<b>WiFi</b> Coexistence filter - Industrial
1950.00	B9414	i	60.00	2.5	QCS5I	1.1x1.4	Band <b>1</b> Uplink filter - Consumer
1950.00	B9610	i	60.00	2.0	QCS5P	1.1x1.4	Band <b>1</b> Uplink filter - Industrial
2140.00	B9451	i	60.00	2.1	QCS5U	1.1x1.4	Band <b>1/4</b> Downlink filter - Consumer
2140.00	B9622	i	60.00	2.0	QCS5P	1.1x1.4	Band <b>1</b> Downlink filter - Industrial
1880.00	B9459	i	60.00	2.5	QCS5U	1.1x1.4	Band <b>2</b> Uplink filter - Consumer
1880.00	B9611	i	60.00	2.5	QCS5M	1.1x1.4	Band <b>2</b> Uplink filter - Industrial
1960.00	B9477	i	60.00	2.6	QCS5I	1.1x1.4	Band <b>2</b> Downlink filter - Consumer
1960.00	B9619	i	60.00	2.5	QCS5P	1.1x1.4	Band <b>2</b> Downlink filter - Industrial
1747.50	B9489	i	75.00	2.2	QCS5I	1.1x1.4	Band <b>3</b> Uplink filter - Consumer
1747.50	B9624	i	75.00	2.4	QCS5P	1.1x1.4	Band <b>3</b> Uplink filter - Industrial
1842.50	B9639	i	75.00	2.3	QCS5P	1.1x1.4	Band <b>3</b> Downlink filter - Industrial
2132.50	B9615	i	45.00	1.9	QCS5P	1.1x1.4	Band <b>4</b> Downlink filter - Industrial
1732.50	B9617	i	45.00	1.2	QCS5P	1.1x1.4	Band <b>4</b> Uplink filter - Consumer
836.50	B9425	i	25.00	1.7	QCS5I	1.1x1.4	Band <b>5</b> Uplink filter - Consumer
836.50	B9613	i	25.00	1.6	QCS5P	1.1x1.4	Band <b>5</b> Uplink filter - Industrial
881.50	B9439	i	25.00	2.1	QCS5I	1.1x1.4	Band <b>5</b> Downlink filter - Consumer
881.50	B9612	i	25.00	1.8	QCS5P	1.1x1.4	Band <b>5</b> Downlink filter - Industrial
2535.00	B9495	i	70.00	2.0	QCS5U	1.1x1.4	Band <b>7</b> Uplink filter - Consumer
2535.00	B9629	i	70.00	2.7	QCU5C	1.1x1.4	Band <b>7</b> Uplink filter - Industrial - WiFi Coex.
2535.00	B9636	i	70.00	1.5	QCS5P	1.1x1.4	Band <b>7</b> Uplink filter - Industrial - WiFi Coex.
2655.00	B9623	i	70.00	2.0	QCS5P	1.1x1.4	Band <b>7</b> Downlink filter - Industrial
897.50	B9633	i	35.00	2.5	QCS5P	1.1x1.4	Band <b>8</b> Uplink filter - Industrial
897.50	B9442	i	35.00	2.3	QCS5I	1.1x1.4	Band <b>8</b> Uplink filter - Consumer
942.50	B9630	i	35.00	2.1	QCS5P	1.1x1.4	Band <b>8</b> Downlink filter - Industrial
942.50	B9449	i	35.00	2.5	QCS5I	1.1x1.4	Band <b>8</b> Downlink filter - Consumer
737.50	B9620	i	17.00	2.0	QCS5P	1.1x1.4	Band <b>12/17</b> Downlink filter - Industrial
707.50	B9616	i	17.00	2.2	QCS5P	1.1x1.4	Band <b>12/17</b> Uplink filter - Industrial
782.00	B8311	o	10.00	1.9	QCS5I	1.1x1.4	Band <b>13</b> Uplink filter SE/Bal - Consumer
782.00	B9475	i	10.00	2.3	QCS5I	1.1x1.4	Band <b>13</b> Uplink filter - Consumer
782.00	B9627	i	10.00	1.5	QCS5P	1.1x1.4	Band <b>13</b> Uplink filter - Industrial
751.00	B8317	i	10.00	2.0	QCS5I	1.1x1.4	Band <b>13</b> Downlink filter - Consumer
751.00	B9638	i	10.00	2.1	QCS5P	1.1x1.4	Band <b>13</b> Downlink filter - Industrial
847.00	B9632	i	30.00	2.8	QCS5M	1.1x1.4	Band <b>20</b> Uplink filter - Industrial
847.00	B9485	i	30.00	1.5	QCS5F	1.1x1.4	Band <b>20</b> Uplink filter - Consumer
806.00	B9631	i	30.00	2.1	QCS5P	1.1x1.4	Band <b>20</b> Downlink filter - Industrial
1962.50	B8310	i	65.00	2.7	QCS5I	1.1x1.4	Band <b>25</b> Downlink filter - Consumer
725.50	<b>AR99</b>	s	45.00	2.7	QCS5P	1.1x1.4	Band <b>28</b> Uplink filter - Industrial
3625.00	B9641	i	150.00	2.2	QCS5P	1.1x1.4	Band <b>48</b> - Interstage filter - Industrial
2155.00	<b>B9642</b>	i	90.00	2.4	QCS5P	1.1x1.4	Band <b>66</b> Downlink filter - Industrial
833.00	B8304	i	32.00	2.3	QCS5I	1.1x1.4	CDMA <b>BC10</b> Uplink filter - Consumer
878.00	B8303	i	32.00	2.6	QCS5I	1.1x1.4	CDMA <b>BC10</b> Downlink filter - Consumer

s: samples available (not yet in production)

o: obsolete (not for new designs)

i: data sheet is available in Internet

**Duplexers and Post PA filters for Smallcells and Convergence Application (Femtocells, ...)**

Center Frequency MHz	Type		Usable Passband MHz	Insertion Attenuation dB	Package	Size mm <sup>2</sup>	Application
1950 / 2140	B8637	i	60.00	2.0 / 2.0	QCA9V	2.0x2.5	Band 1 Dpx femtocell - Consumer
1950 / 2140	<b>AM67</b>	s	60.00	2.5 / 2.2	QCS9P	2.0x2.5	Band 1 Dpx Smallcells, high isolation - Industr.
1950 / 2140	B8092	i	60.00	2.0 / 2.3	QCW9F	2.0x2.5	Band 1 Dpx Smallcells, high power - Industrial
1950 / 2140	D7903	i	60.00	3.3 / 2.4	ML042B	8.1x8.1	Band 1 E-Dpx - very high isolation - Enterprise
1880 / 1960	B8047	i	60.00	2.0 / 2.0	QCS9P	2.0x2.5	Band 2 Dpx Smallcells, high power - Industrial
1747.5 / 1842.5	B8018	i	75.00	3.5 / 2.6	QCS9P	2.0x2.5	Band 3 Dpx Smallcells - Industrial
1747.5 / 1842.5	B8044	i	75.00	3.2 / 2.2	QCS9P	2.0x2.5	Band 3 Dpx Smallcells - Industrial
1732.5 / 2132.5	B8111	i	45.00	2.1 / 1.8	QCS8E	1.8x1.4	Band 4 Dpx femtocell - Consumer
1732.5 / 2132.5	B8026	i	45.00	2.3 / 2.0	QCS9P	2.0x2.5	Band 4 Dpx Smallcells, high power - Industrial
1732.5 / 2132.5	B8033	i	45.00	2.1 / 1.7	QCS9P	2.0x2.5	Band 4 Dpx Smallcells, high power - Industrial
1732.5 / 2132.5	D7902	i	45.00	2.8 / 2.7	ML042B	8.1x8.1	Band 4 E-Dpx - very high isolation - Enterprise
836.5 / 881.5	B8112	i	25.00	1.9 / 2.1	QCT8E	1.8x1.4	Band 5 Dpx femtocell - Consumer
836.5 / 881.5	B8013	i	25.00	2.4 / 2.0	QCS9P	2.0x2.5	Band 5 Dpx Smallcells, high power - Industrial
836.5 / 881.5	D7900	i	25.00	3.0 / 2.8	ML042B	8.1x8.1	Band 5 E-Dpx - very high isolation - Enterprise
2535 / 2655	B8113	i	70.00	2.4 / 2.0	QCR8J	1.8x1.4	Band 7 Dpx femtocell - Consumer
2535 / 2655	B8032	i	70.00	3.5 / 2.0	QCD9H	2.0x2.5	Band 7 Dpx Smallcells - Industrial
2535 / 2655	B8043	i	70.00	1.9 / 2.1	QCS9P	2.0x2.5	Band 7 Dpx Smallcells - Industrial
897.5 / 942.5	B8048	i	35.00	1.6 / 1.9	QCS9P	2.0x2.5	Band 8 Dpx Smallcells, high power - Industrial
902 / 947	<b>B8202</b>	i	26.00	1.6 / 1.5	QCS9P	2.0x2.5	Band 8 <sub>CMCC</sub> Dpx Smallcells - Industrial
707.5 / 737.5	B8012	i	17.00	2.3 / 1.8	QCS9P	2.0x2.5	Band 12 Dpx Smallcells, high power - Industrial
782 / 751	B8005	i	10.00	1.9 / 1.6	QCS9P	2.0x2.5	Band 13 Dpx Smallcells, high power - Industrial
782 / 751	<b>B8114</b>	i	10.00	2.1 / 1.8	QCS8C	1.8x1.4	Band 13 Dpx femtocell - Consumer
782 / 751	D7901	i	10.00	2.9 / 2.6	ML042B	8.1x8.1	Band 13 E-Dpx - very high isolation - Enterprise
763 / 793	B8039	i	10.00	2.1 / 2.1	QCS9P	2.0x2.5	Band 14 Dpx for Public Safety - Industrial
847 / 806	B8030	i	30.00	2.9 / 2.8	QCS9P	2.0x2.5	Band 20 Dpx for Smallcell, high power - Industr.
718 / 773	B8035	i	30.00	2.2 / 2.2	QCS9P	2.0x2.5	Band 28a Dpx Smallcells, high power - Industr.
733 / 788	B8036	i	30.00	2.5 / 2.0	QCS9P	2.0x2.5	Band 28b Dpx Smallcells, high power - Industr.
1745 / 2155	B8038	i	45.00	2.2 / 2.8	QCS9P	2.0x2.5	Band 66 Dpx Smallcells, high power - Industr.
2017.50	B9626	i	15.00	1.5	QCS5P	1.1x1.4	Band 34 - TDD Post PA filter - Industrial
2345.00	B9637	i	50.00	2.1	QCS5P	1.1x1.4	Band 40 part. 50MHz - Post PA filter - Industr.
2335.00	B9635	i	70.00	1.9	QCS5P	1.1x1.4	Band 40 part. 70MHz - Post PA filter - Industr.
2335.00	B8355	i	70.00	2.0	QCR5G	1.1x1.4	Band 40 part. 70MHz - Post PA filter - Cons.
2350.00	B9628	i	100.00	2.3	QCU5D	1.1x1.4	Band 40 - TDD Post PA filter - Industrial
2345.00	<b>AS47</b>	s	90.00	2.3	QCR8V	1.4x1.8	Band 40 - TDD Post PA filter - Industrial
2350.00	B8353	i	100.00	2.0	QCR5G	1.1x1.4	Band 40 - TDD Post PA filter - Consumer
2605.00	B8354	i	100.00	1.7	QCR5G	1.1x1.4	Band 38/41 part. - Post PA filter - Consumer
2593.00	<b>AS29</b>	s	194.00	3.5	QCR8V	1.4x1.8	Band 41 - TDD Post PA filter - Industrial
2593.00	B8352	i	194.00	2.9	QLA8H	1.4x1.8	Band 41 - BAW - Post PA filter - Consumer

- s: samples available (not yet in production)  
o: obsolete (not for new designs)  
i: data sheet is available in Internet

### Filters and Duplexers for M2M and IoT Applications

Center Frequency MHz	Type		Usable Passband MHz	Insertion Attenuation dB	Package	Size mm <sup>2</sup>	Application
452.40	B5365	i	4.80	2.0	DCC6C	3.0x3.0	LTE450 C-Band, TX filter
452.50	B8701	i	5.00	2.0	QCA9N	2.5x2.0	LTE450 C-Band, TX filter, small size
462.50	B5363	i	5.00	2.4	DCC6D	3.0x3.0	LTE450 C-Band, RX, 100 Ohms balanced
452.5 / 462.5	B8691	i	5.00	1.7 / 2.6	QCA9N	2.5x2.0	LTE450 C-Band, Dpx, 100 Ohms balanced RX
455.00	B8702	i	4.50	2.1	QCA9N	2.5x2.0	LTE Band <b>31</b> TX filter
465.00	B8359	i	5.00	1.9	QCV9I	2.0x1.6	LTE Band <b>31</b> RX, 100 Ohms balanced
455.0 / 465.0	B1220	i	5.00	1.8 / 2.7	QCA9N	2.5x2.0	LTE Band <b>31</b> Dpx, 100 Ohms balanced RX
707.5 / 737.5	B8040	i	17.00	2.0 / 2.2	QCU9L	2.0x1.6	LTE Band <b>12</b> Dpx, unbalanced RX
718.0 / 773.0	B8041	i	30.00	2.3 / 2.3	QCU9L	2.0x1.6	LTE Band <b>28a</b> Dpx, unbalanced RX
733.0 / 788.0	B8042	i	30.00	2.1 / 2.3	QCU9L	2.0x1.6	LTE Band <b>28b</b> Dpx, unbalanced RX
751.0 / 782.0	B8031	i	20.00	1.7 / 2.7	QCD9M	2.5x2.0	LTE Band <b>13</b> Dpx, <b>NS07</b> rejection
699 - 3600	<b>B8666</b>	i	46.84	1.5	QLA10B	1.7x1.3	GPS/GNSS/Beidou extractor - Consumer
1575.42	B9457	i	2.40	0.5	QCS5U	1.4x1.1	GPS filter - Consumer, low loss
1582.47	<b>B8813</b>	i	46.84	1.2	QCT5F	1.1x0.9	GPS/GLONASS/COMPASS filter - Consumer
1582.47	B9621	i	46.84	1.4	QCS5P	1.4x1.1	GPS/GLONASS/COMPASS filter - Industrial
2311 / 2353	AR06A	s	13.00	2.1 / 3.0	QCT8E	1.8x1.4	LTE Band <b>30+75</b> Dpx, unbalanced RX
699 - 2690	<b>B8688</b>	i	79.50	1.85	QLA10Q	1.7x1.3	<b>WiFi</b> extractor, opt. for Low Band - Consumer
1427 - 2690	<b>B1224</b>	i	79.50	1.5	QLA10Q	1.7x1.3	<b>WiFi</b> extractor, opt. for High Band - Consumer
2442.00	<b>B8328</b>	i	79.00	1.65	QCR5S	1.4x1.1	<b>WiFi</b> Coexistence filter - Consumer
2442.00	<b>B8857</b>	i	79.00	1.6	QLA5A	1.1x0.9	<b>WiFi</b> Coexistence filter - Consumer
2442.00	<b>B8873</b>	s	79.00	2.0	QCR5D	1.1x0.9	<b>WiFi</b> Coexistence filter - Consumer
2442.00	B9634	i	84.00	2.5	QCU5S	1.4x1.1	<b>WiFi</b> Coexistence filter - Industrial
2535 / 2655	B8699	i	70.00	1.9 / 2.8	QCS8C	1.8x1.4	LTE Band <b>7</b> Dpx, 100Ohms balanced RX
2535 / 2655	<b>AT42A</b>	s	70.00	2.1 / 1.9	QCU9L	2.0x1.6	LTE Band <b>7</b> Dpx, unbalanced RX

s: samples available (not yet in production)

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i: data sheet is available in Internet

**Band-stop Filters for Mobile TV, TV, Tuner and Set-Top-Box Applications**

Passband MHz	Rejection band MHz	Type		Standard	Size	Features
0 - 790	832 - 862, 880 - 915	B1670	i	DVB-T VHF and UHF band	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
0 - 790	832 - 862, 880 - 915	B8746	i	DVB-T VHF and UHF band	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
0 - 785	791- 821, 832 - 862	B8732	i	DVB-T VHF and UHF band	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 75Ω. Low loss and low ripple.
0 - 686	703 - 862	B8734	i	DVB-T VHF and UHF band	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
0 - 710	718 - 748, 815 - 845, 900 - 915	B8733	i	ISDB-T 1 seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 710	718 - 748, 755 - 765, 815 - 845	B8759	i	ISDB-T 1 seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 710	815-915	B8731	i	ISDB-T 1 seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 710	718 - 748, 755 - 765, 815 - 845	B1676	i	ISDB-T 1 seg	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 710	815 - 845	B1671	i	ISDB-T 1 seg	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 710	815 - 845	B8747	i	ISDB-T 1 seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple. Suppression at 1.4279 GHz
470 - 770	824 - 840, 898 - 925	B8740	i	ISDB-T 1-seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple. Suppression at 1.4279 GHz
470 - 770	830 - 845	B8742	o	ISDB-T 1-seg	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple. Suppression at 1.4279 GHz
470 - 752 / 806	824 - 849, 880 - 915	B8743	i	SBTV D UHF-band	1.4 x 1.1 x 0.4 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 686	699 - 862	<b>B1679</b>	i	DVB-T UHF band	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 786	791- 821, 832 - 862	B1678	i	DVB-T UHF band	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 75Ω. Low loss and low ripple.
470 - 798	824 - 849	B1673	i	CM MB	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 806	824 - 849, 880 - 915	B1674	o	SBTV B	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.
470 - 862	880 - 915	B1672	o	CM MB, CTTB and DVB-T/H	3.0 x 3.0 x 1.1 mm <sup>3</sup>	Single ended operation at 50Ω. Low loss and low ripple.

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Bandpass filters for Channel Stacking Switch and Satellite Channel Router applications						
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Center Frequency MHz	Type		Usable Passband MHz	Package	Application	Features
974.00	B1651	i	40	QCC8F	Channel Stacking Switch based on Entropic chipset for DirectTV Spectrum	Low loss and balanced operation at 150Ω.
1076.06	B1652	i				
1178.12	B1653	i				
1280.18	B1654	i				
1382.24	B1655	i				
1484.30	B1656	i				
1586.36	B1657	i				
1688.42	B1658	i				
1790.48	B1659	i				
1892.54	B1660	i				
1994.60	B1661	i				
2096.66	B1662	i				
1284.00	B1641	i	40.5	DCC6D	Satellite Channel Router based on STM chipset for EU Frequencies #1	Low loss and impedance transformation from balanced 200Ω to singled ended 75Ω
1516.00	B1635	i				
1632.00	B1636	i				
1748.00	B1637	i				
1864.00	B1638	i				
1980.00	B1639	i				
2096.00	B1640	i				

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