






MT6628 Peripheral Component QVL V1.1



MediaTek TCXO QVL for MT6628

0.5ppm

Component	Part Number	Manufacturer	Vendor
TCXO 2520 2.8V (26MHZ, 0.5ppm)	IT2205AE 26.0MHZ (TX6217)		Aurum Tech Inc.
	7L26002009		TXC
TCXO 2520 1.8V (26MHZ, 0.5ppm)	IT2205AE 26.0MHZ (TX6131)		Aurum Tech Inc.
	7L26002009		TXC
TCXO 2520 2.8V (26MHZ, 0.5ppm)	TTS27NSC-A7	TEW	Unifirst
TCXO 2520 2.8V (26MHZ, 0.5ppm)	ENG3216B	NDK	NDK

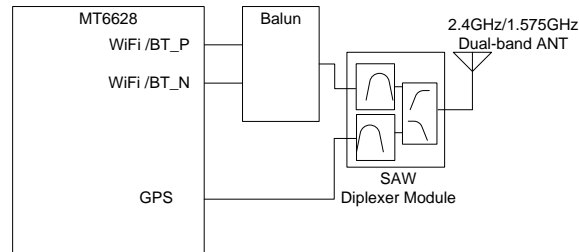
2ppm TCXO (Need to change SW setting)

Component	Part Number	Manufacturer	Vendor
TCXO 2520 2.8V (26MHZ, 2 ppm)	7L26002015	TXC	TXC
TCXO 3225 2.8V (26MHZ, 2 ppm)	KT3225P26000ZAW28TQ0	Kyocera	Kyocera
TCXO 3225 2.8V (26MHZ, 2 ppm)	DSB321SCL	KDS	Hele



- If customers decide to use 2.0ppm TCXO, We suggest customers to set **gps_tcxo_ppb = 2000 ppb**.
- So that GPS SW can improve the TTFF may be longer problem, and keep GPS has better performance while using 2.0ppm TCXO.

MT6628 Diplexer QVL for WIFI/BT/GPS

Single ANT application

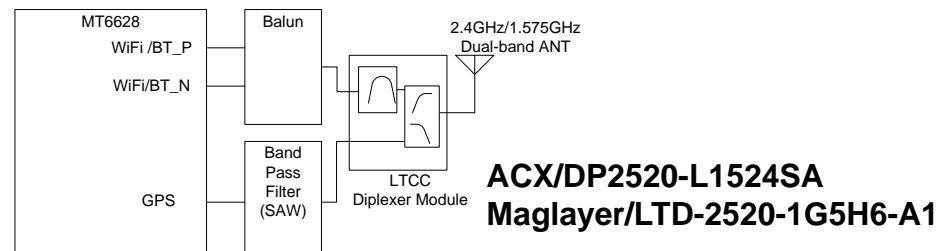
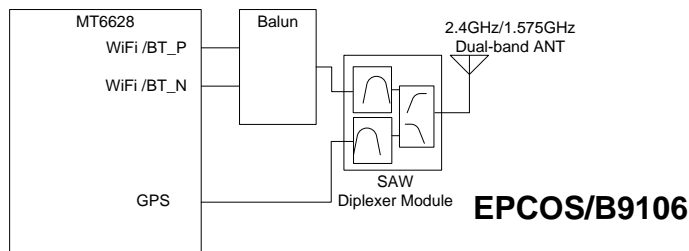


- The diplexer module integrates 2.4GHz BPF, 1.575GHz BPF, and 2.4GHz/1.575GHz diplexer





Component	Part Number	Manufacturer	Vendor
SAW Diplexer (2.5x2.0x0.87, unit: mm)	B39252-B9106-A710		TDK-EPCOS
	DGW2520GC6T0LF		Pilkorcnd

MT6628 Diplexer QVL for WIFI/BT/GPS






Single ANT application



- ❑ The SAW diplexer module, B9106, integrates 2.4GHz BPF, 1.575GHz BPF, and 2.4GHz/1.575GHz diplexer
- ❑ The LTCC diplexer module integrates 2.4GHz BPF and 2.4GHz/1.575GHz diplexer; need to add another GPS SAW filter between this part and MT6628
- ❑ The LTCC diplexer is pin-to-pin compatible with SAW diplexer EPCOS/B9106.

Component	Part Number	Manufacturer	Vendor
LTCC Diplexer	DP2520-L1524SA		ACX, 環德電子
	LTD-2520-1G5H6-A1		美磊科技
	DPX252500DT-5217A1		TDK
	RFDIP2520080TM0T62		華新科技

MT6628 GPS External LNA QVL

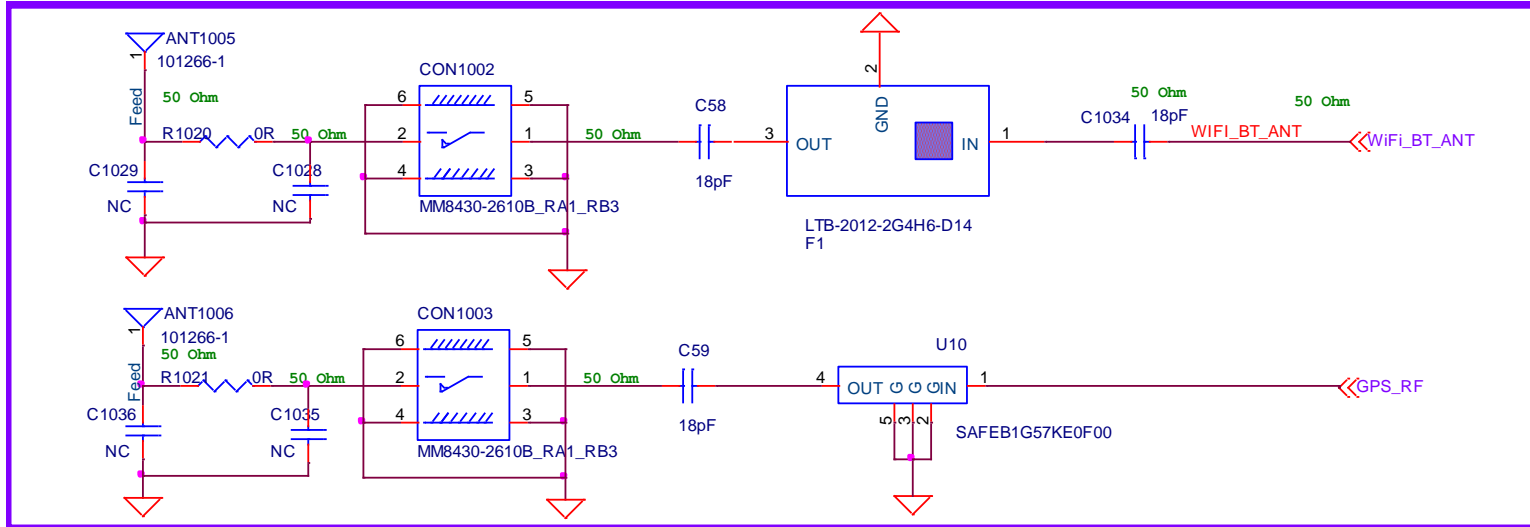
Component	Part Number	Manufacturer	Vendor
External GPS LNA	MAX2659*		MAXIM
	BGU7005*		NXP
	uPC8231TK		RENESAS
	SKY65601-477LF		Skyworks
	BGA725L6		Infineon

* MAX2659 and BGU7005 are pin-to-pin compatible.



MT6628 WiFi/BT/GPS Dual ANT Solution

Confidential B

客戶可根據phone機構本身設計選擇雙天線架構.










MT6628 SAW QVL for GPS only using


Component	Part Number	Manufacturer	Vendor
SAW	SAFEB1G57KE0F00		Murata
	B9444		TDK EPCOS
	856561		SAWTEK
	TA0757A		TAI_SAW
	FAR-F6KA-1G5754-L4AJS		TAIYO YUDEN

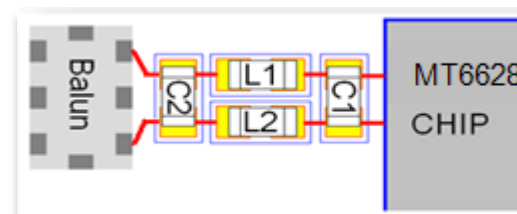
MT6628 WiFi/BT BPF QVL

MT6628 2.4GHz Filter Qualified Parts

MT6628 2.4GHz Filter Qualified Parts									
		Vendor							
		美磊科技	華新科技	璟德電子	TDK(日)	太陽誘電(日)	Murata(日)	麥捷科技	
									
	Frequency	SPEC	LTB-2012-2G4H6-M14	RFBPF2012080AM-0T62	BF2012-L2R4NDA	DEA202450BT-2175A1-H	FI 212B2450VB-T	LFB212G45CL1D419	MBPF2IM2450-N81
Insertion Loss	2400 - 2500MHz	-1.5db	-1.1~-0.9dB	-1.4~ -1.2 dB	-1.4~-1.0dB	-1.7~1.2dB	-2.2~-1.6dB	-2.0 ~ -1.8dB	-2 .0~ -1.6dB
Attenuation	860 - 960MHz	-35db	-37.1~-36.5dB	-38.4~-37.9dB	-38~-37.3dB	-43 - -40.3dB	-43.3~-43.9dB	-45 ~ -46dB	-40 ~ -39dB
	1545 - 1605MHz	-35db	-37.4~-36.5dB	-38.3~-37.4dB	-37.9 ~ -39dB	-35.4 ~ -36.7dB	-43.6~-44.8dB	-44 ~ -45dB	-50 ~ -60dB
	1710 - 1990MHz	-35db	-44.3~-39.7dB	-44.9~-40.5dB	-43.4 ~ -35.6dB	-36.9 ~ -43.9dB	-43.2~-48.2dB	-48 ~ -47.9dB	-45 ~-30dB
	2170MHz	-30db	-34dB	-32.5dB	-33.8dB	-35.6dB	-46dB	-43.4dB	-30dB
	4800 - 5000MHz	-45db	-65~-48.5dB	-59.8~-48.4dB	-65 ~-49.9dB	-53.5~-48.1dB	-50~-55dB	-45 ~- 42dB	-39 ~ -42dB

MT6628 Balun filter QVL

MT6628 Balun + 2.4GHz Filter Qualified Parts						
		Vendor				
		環德電子	華新科技	TDK(日)	美磊科技	
		ACX	PSA	TDK	 MAG.LAYERS Scientific Techniques Co., Ltd.	
	Frequency	SPEC	FB2012-05N2R4GT	RFBPB2012090AM1T59	DEA202450BT-7116E1	BBF-2012-2G4H6-B5
Insertion Loss	2400 - 2500MHz	-3db	-2.4 ~ -2.9dB	-2.5 ~ -2.6dB	-2.3 ~ -2.1dB	-2.3~-2.1dB
Attenuation	860 - 960MHz	-35db	-46 ~ -45dB	-45 ~ -46dB	-51 ~ -55dB	-45 ~ -44dB
	1545 - 1605MHz	-35db	-39.5 ~ -40.2dB	-39 ~ -40dB	-38 ~ -40dB	-42dB
	1710 - 1910MHz	-35db	-39.1 ~ -43.4dB	-40 ~ -54dB	-35 ~ -29.5dB	-47 ~ -48dB
	2170MHz	-20dB	-18dB	-14.6dB	-6.1dB	-14dB
	4800 - 5000MHz	-45db	-51 ~ -52dB	-44 ~ -48dB	-45 ~ -47dB	-58 ~ -59dB
Matching		C1	0402 / 2.2PF	0402 / 2.2PF	0402 / 1.8PF	0402 / 1.8PF
		C2	NC	NC	NC	NC
		L1	0402/ 0R	0402/ 0R	0402/ 0R	0402/ 0R
		L2	0402/ 0R	0402/ 0R	0402/ 0R	0402/ 0R
WiFi-to-WCDMA (2170MHz) Antenna Isolation			>20dB	>23dB	>32dB	>23dB
Lead time			6~8 weeks	4 weeks	6~8 weeks	6~8 weeks



MT6628 WiFi/BT Balun QVL

There are more baluns under qualification.

Component	Part Number	Manufacturer	Vendor
WiFi/BT Balun	BL1608-05T2450T/LF	ACX	環德電子



Thanks

