

1	2	3	4	5	6	7	8	
A								A
B								B
C								C
D								D
1	2	3	4	5	6	7	8	

REVISION	DATE	COMMENTS
1.0	09/22/2021	initial version
1.1	12/03/2021	YT8531 symbol update notes update
1.2	02/14/2022	LED0 configuration update

YT8531(D)(P) Reference Design V1.2

Sheet Title: <i>Title</i>		Drawn By: <i>QWB</i>		
Project Title: <i>YT8531(D)(P) Reference Design</i>		Revision: <i>1.2</i>	Size: <i>A3</i>	
Designed for:		Sheet <i>1</i> of <i>2</i>		
Number:		Mod. Date: <i>2022/2/14</i>		

REVISION	DATE	COMMENTS
1.0	09/22/2021	initial version
1.1	12/03/2021	YT8531 symbol update notes update
1.2	02/14/2022	LEDO configuration update

YT8531(D)(P) Reference Design V1.2

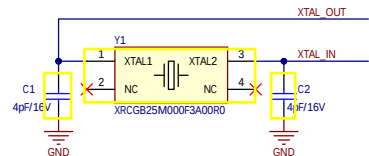
For Quactel

Sheet Title: <i>Title</i>	Drawn By: <i>QWB</i>	
Project Title: <i>YT8531(D)(P) Reference Design</i>	Revision: <i>1.2</i>	Size: <i>A3</i>
Designed for:	Sheet <i>1</i> of <i>2</i>	
Number:	Mod. Date: <i>2022/2/14</i>	



A

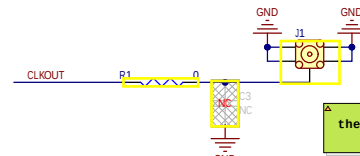
A



Calculate the value of external load capacitor according to the crystal load capacitance.

When connect an external 25MHz oscillator or clock from another device to XTAL_I pin, keep the XTAL_O floating.

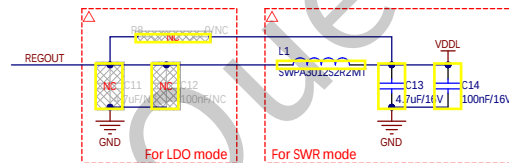
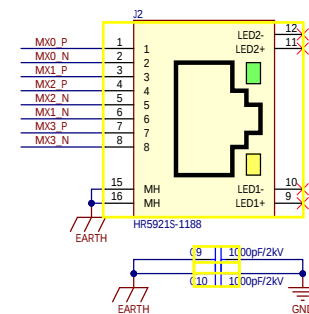
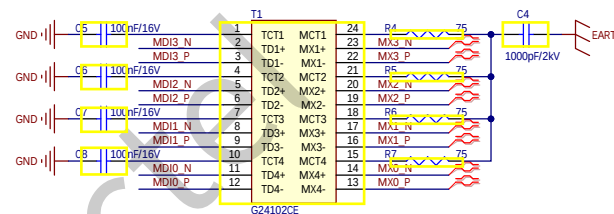
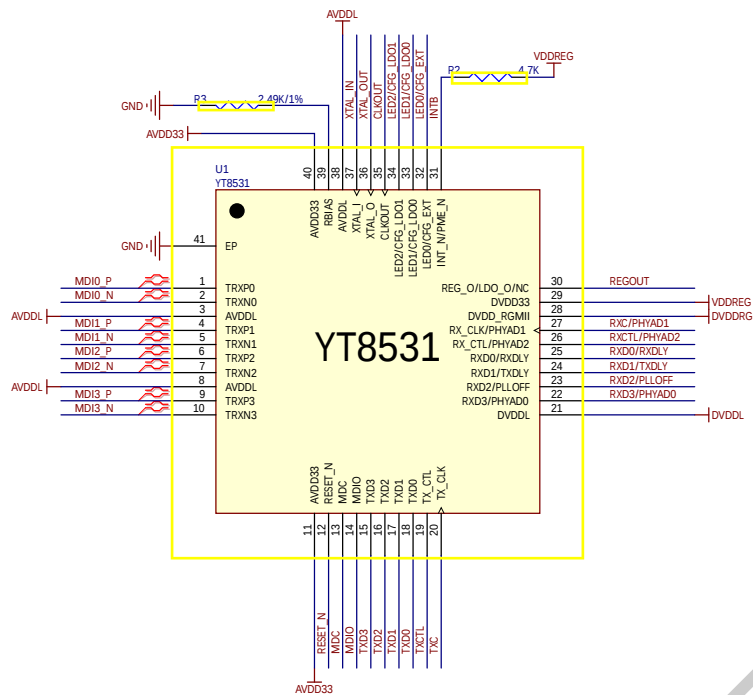
When connect an external 25MHz oscillator or clock from another device to XTAL_O pin, XTAL_I must be shorted to GND.



the SMA connector J1 is optional

B

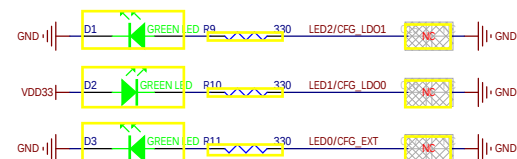
B



For YT8531H/YT8531C, R8 C11 and C12 must be removed. For YT8531DH/YT8531DC, L1 must be removed and short REGOUT and VDDL.

R8 can be reserved for compatible design (One PCB for both YT8531 and YT8531D).

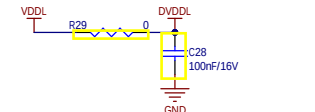
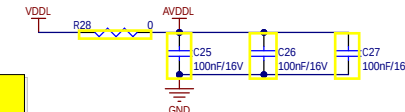
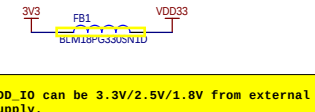
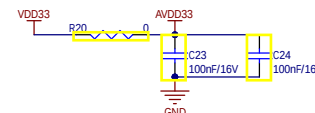
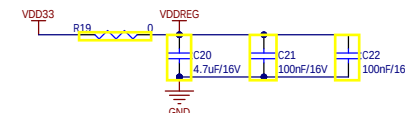
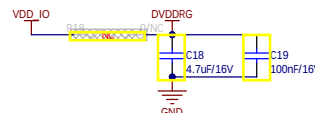
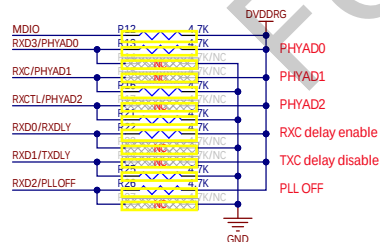
For YT8531P, pin30 is NC, R8 C11 C12 and L1 must be removed. And VDDL must be from external power supply.



if the LED pin is pulled high, it will be an active low output. And if the LED pin is pulled low, it will be an active high output

C

C



CFG_EXT	CFG_LDO[1:0]	RGMI Voltage Selection
1'b1	2'b00	External 3.3V
1'b1	2'b01	External 2.5V
1'b1	2'b10	External 1.8V
1'b1	2'b11	External 1.8V
1'b0	2'b01	Internal 2.5V
1'b0	2'b10	Internal 1.8V
1'b0	2'b11	Internal 1.8V

VDD_IO can be 3.3V/2.5V/1.8V from external power supply.

R18 is only for external RGMI voltage application.

R18 must be removed for internal RGMI voltage application.

C18 C19 must always be in existence.

D

D