

Guangzhou Tronlong Technology Co., Ltd

Code name:TL28335/2812-EVM

Version: A3

Designer:King& Li Haiming

2017.06.21

Tronlong®

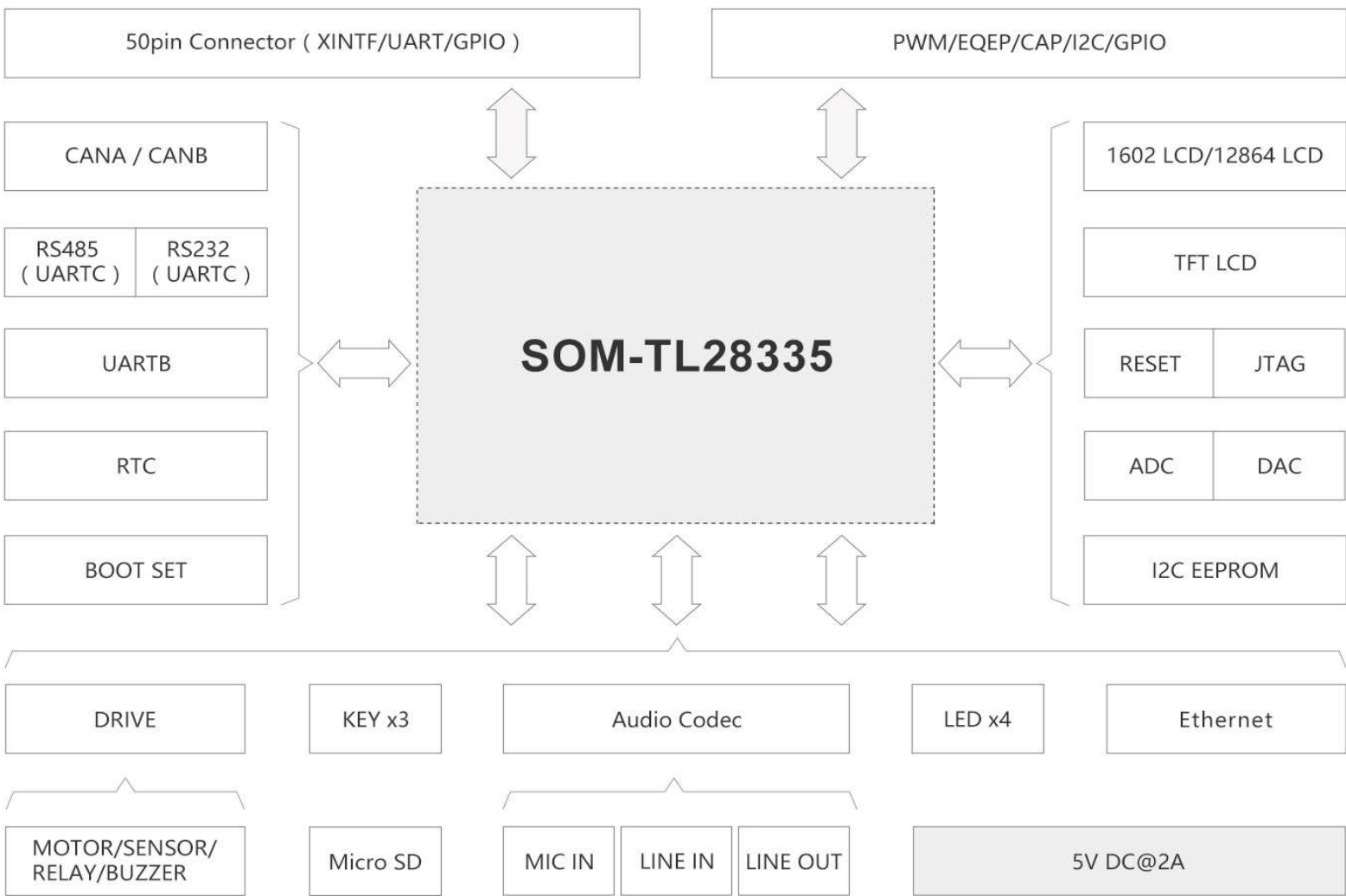
Revision History

Revision No	Description of Change	Author(s)	Data
A1	Designed the Basic Circuit Function Base on Requirement of EVM-A1	King	2015.06.06
A2	Amend the BUG of EVM-A1	King	2015.11.19
A3	Amend the BUG of RS232 and RS485	Li Haiming	2017.06.21

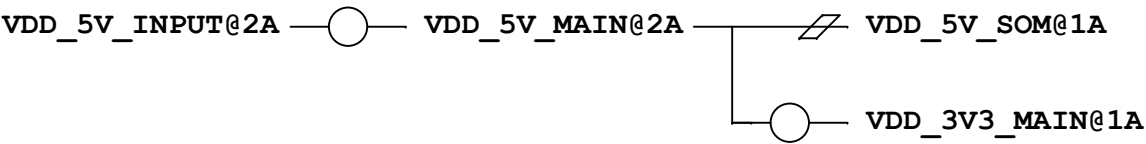
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Title COVER					
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SYSTEM DIAGRAM

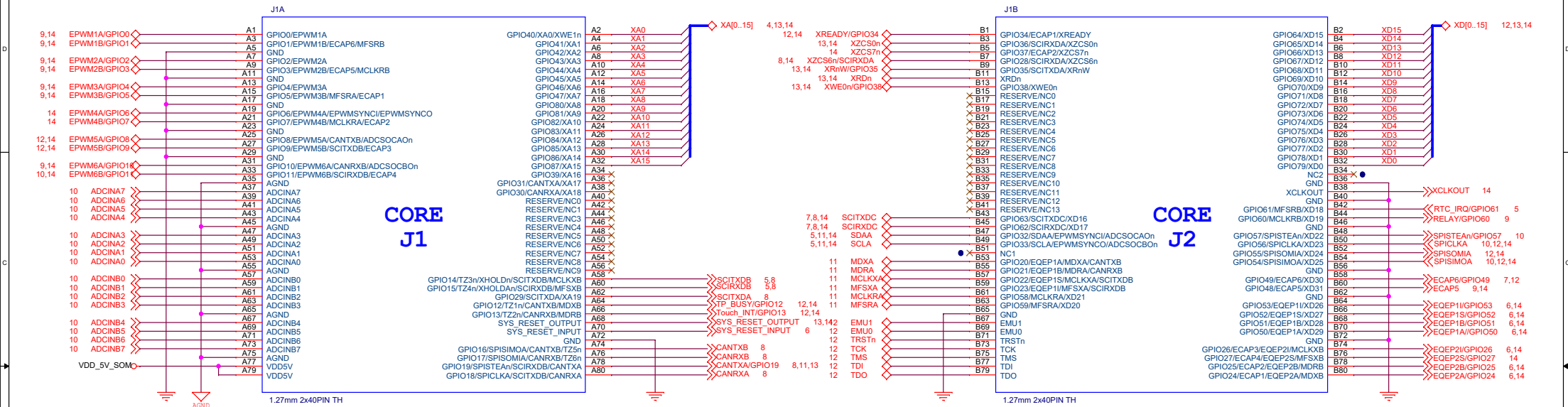


POWER TREE

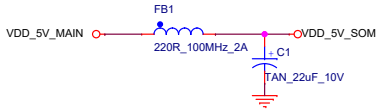


Tronlong®		Guangzhou Tronlong Technology Co., Ltd	
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CORE BOARD CONNECTOR



The 34P and 51P of J2 need to pull out the needle



Power Net Description:

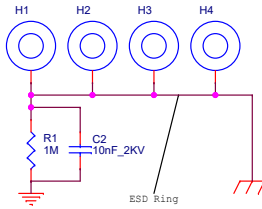
Net	Voltage	Direction
VDD_5V_SOM	5V	INPUT

NOTES

NOTE1: RESERVE/NCx is reserve signal, 2812/28335 core board in the signal function of the pin may be different, please see the specific models list of pin signal that core board NCx for impending pins, used infool proof of the core. Core board has been stuck in this pin hole, the corresponding EVM board need to pull out the needle handle

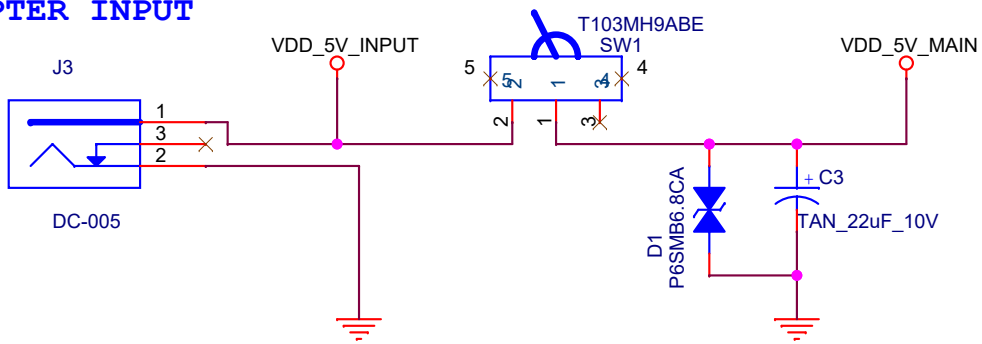
NOTE2: This EVM is applicable to SOM-TL2812 and SOM-TL28335; The signal name of J1 and J2 is named after according to the SOM-TL28335 core board signal, if you use the SOM-TL2812 or SOM-TL28377, please see the specific models list of pin signal that core board

ESD RING

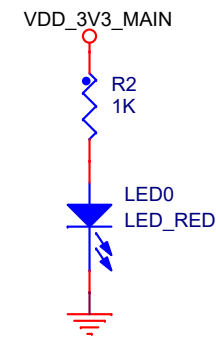


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TH_CONNECTOR			
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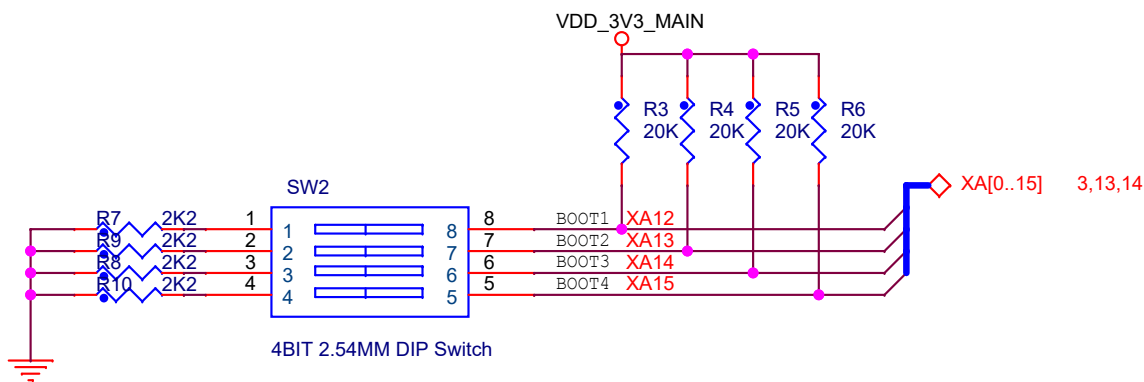
ADAPTER INPUT



POWER LED

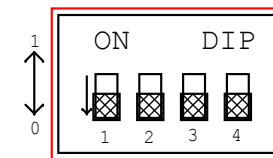


DSP BOOT SET

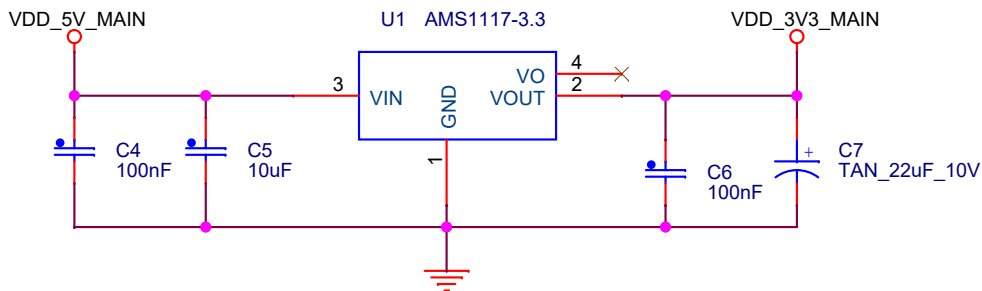


BOOT DEVICE FIRIST	BOOT BITS[1:4]	SW2 BITS[1:4]
Jump to Flash	1111	0000
SCI-A boot	0111	1000
I2C-A	0011	1100
Jump to XINTF x16	1001	0110
Jump to SARAM	0010	1101

Example: Jump to Flash

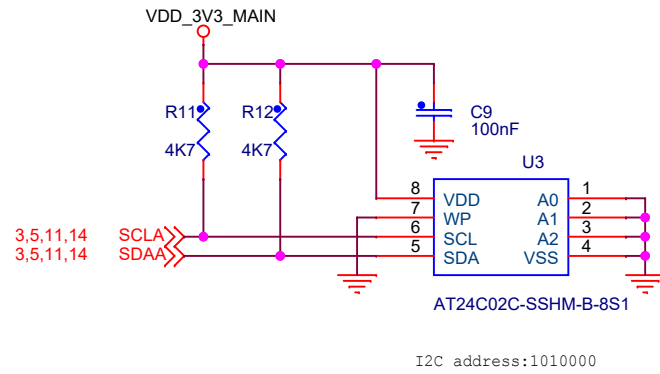


LDO 3V3



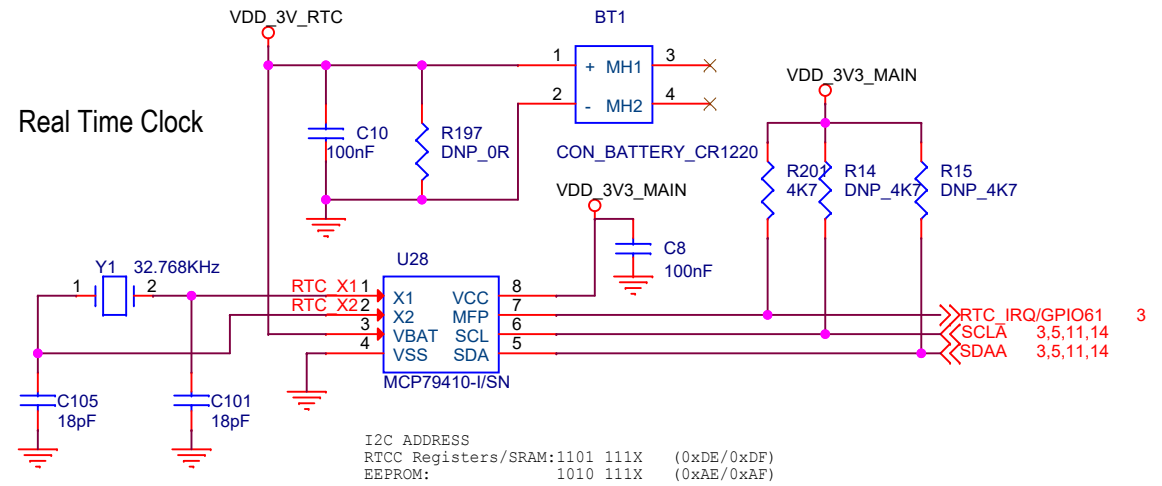
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POWER/BOOTSET	
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I2C EEPROM

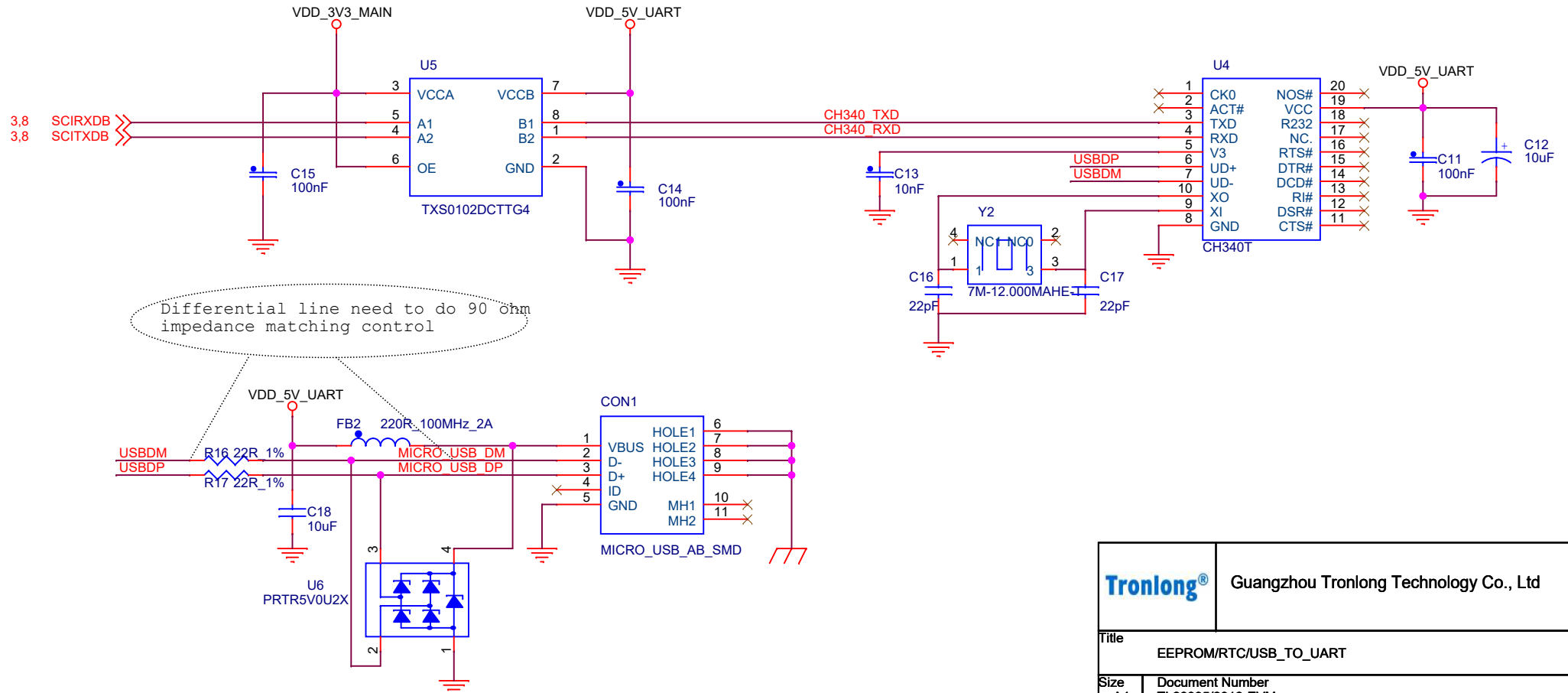


RTC

Real Time Clock



MicroUSB to UARTB



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Title
EEPROM/RTC/USB_TO_UART

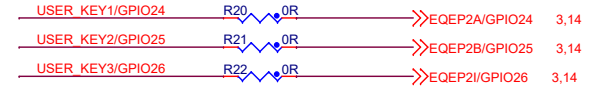
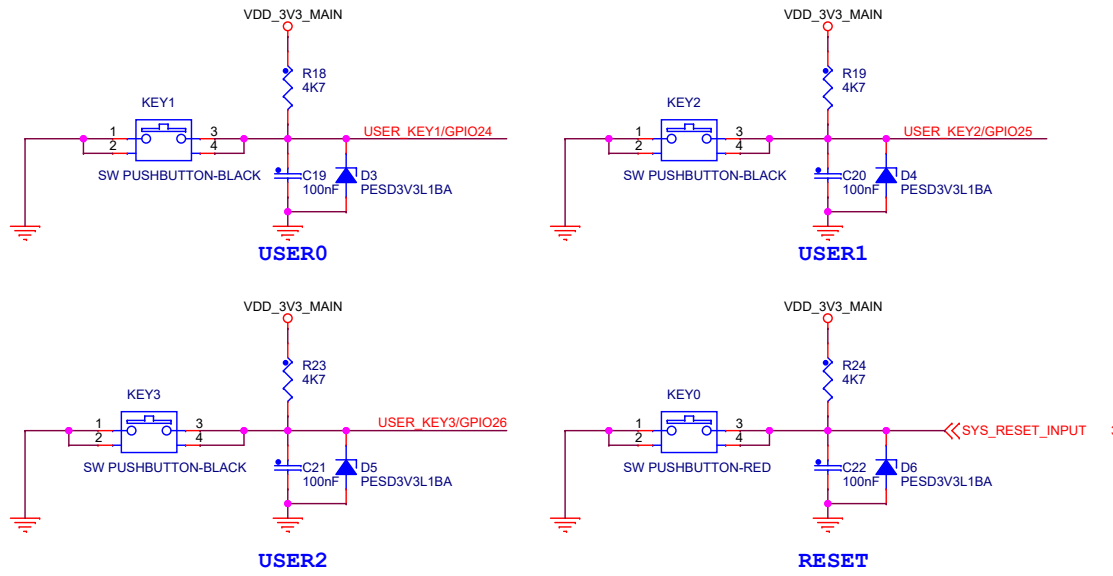
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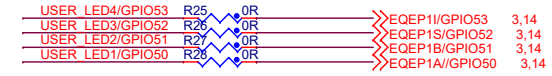
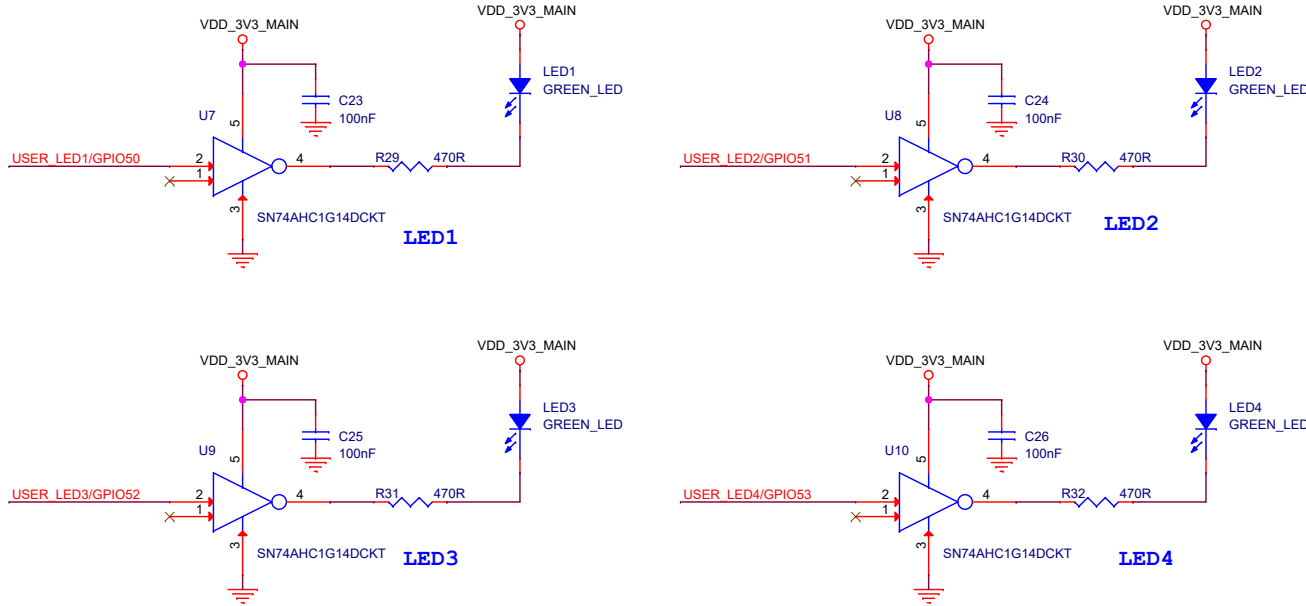
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USER KEY



USER LED



Tronlong®		Guangzhou Tronlong Technology Co., Ltd		A
Title USER_KEY/LED				
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MULTIPLEXER

VDD_3V3_MAIN

C100
100nF

U29

16 VCC 1B1 2B1 6 RS232 SCITXDC
10 RS232 SCIRXDC

7 1A 1B2 5 RS485 SCITXDC
9 2A 2B2 11 RS485 SCIRXDC

3,8,14 SCITXDC
3,8,14 SCIRXDC

3,12 ECAP6/GPIO49

2 1B3 2B3 4
12

14 S1 S0 1B4 2B4 3
13

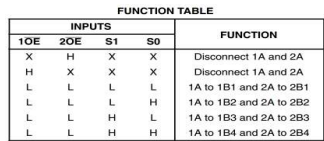
1 1OE
15 2OE
8 GND

R196
4K7

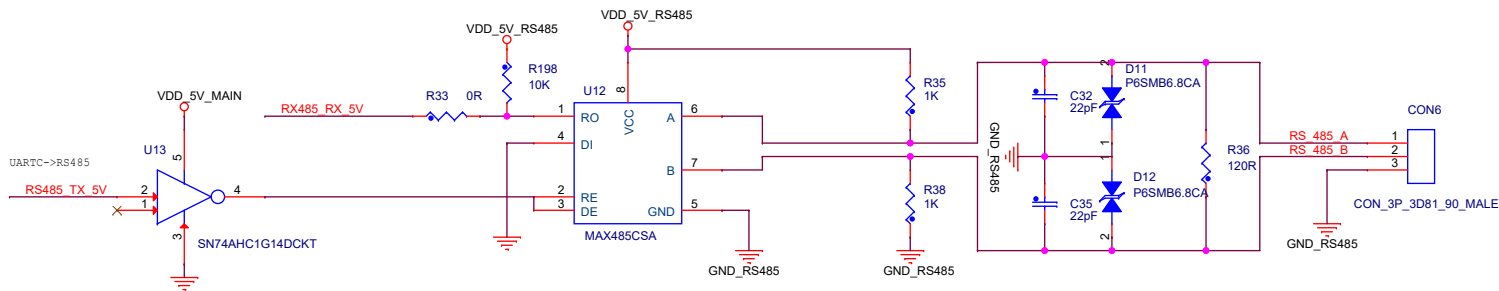
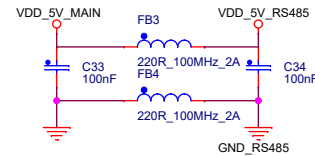
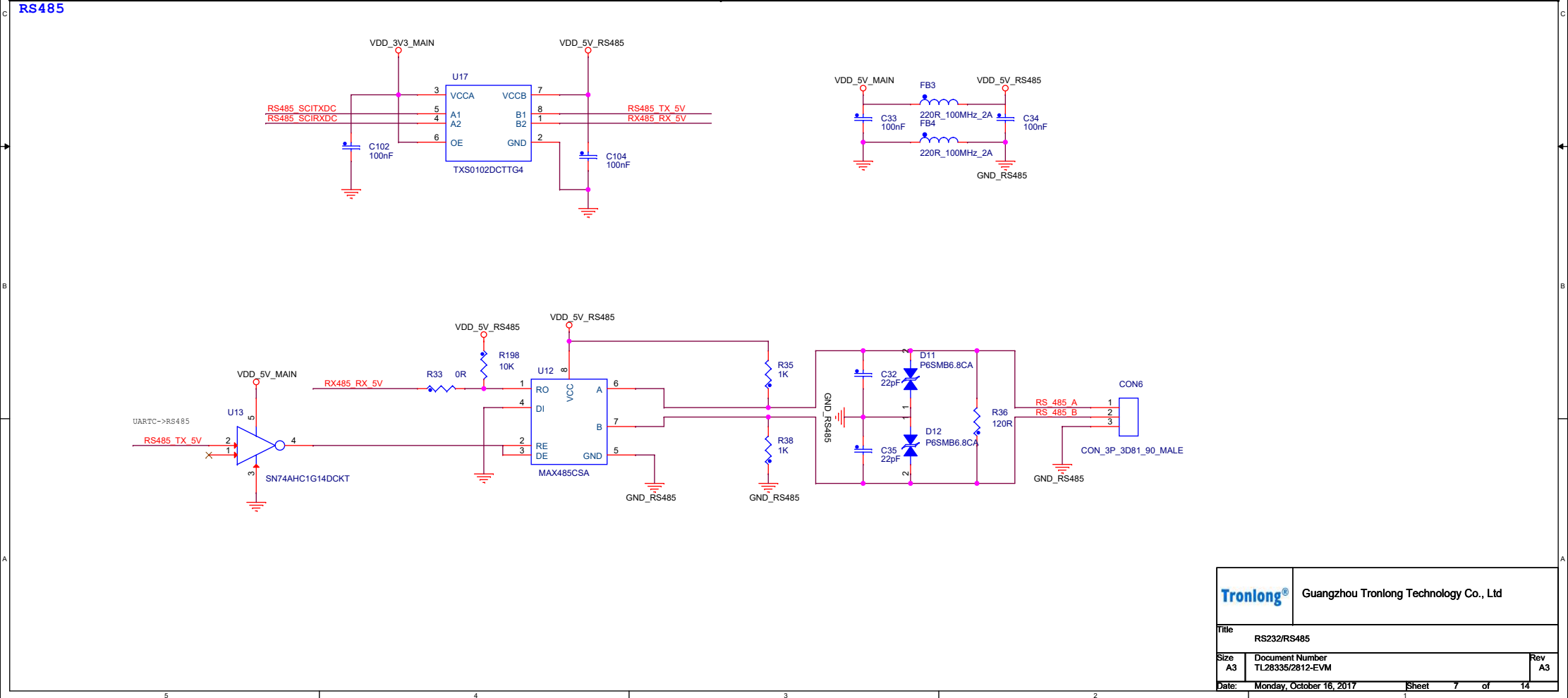
SN74CBT3253PW

FUNCTION TABLE				
INPUTS				FUNCTION
1OE	2OE	S1	S0	
X	H	X	X	Disconnect 1A and 2A
H	X	X	X	Disconnect 1A and 2A
L	L	L	L	1A to 1B1 and 2A to 2B1
L	L	L	H	1A to 1B2 and 2A to 2B2
L	L	H	L	1A to 1B3 and 2A to 2B3
L	L	H	H	1A to 1B4 and 2A to 2B4

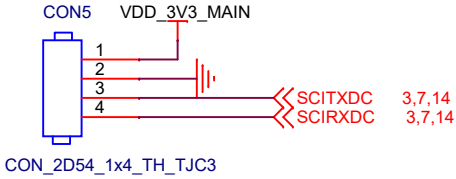
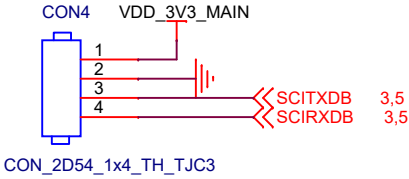
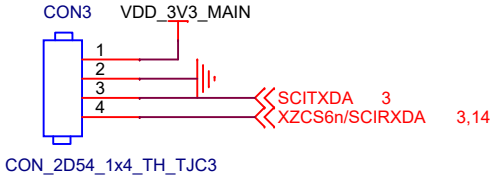
S0	ENABLE
0	RS232
1	RS485



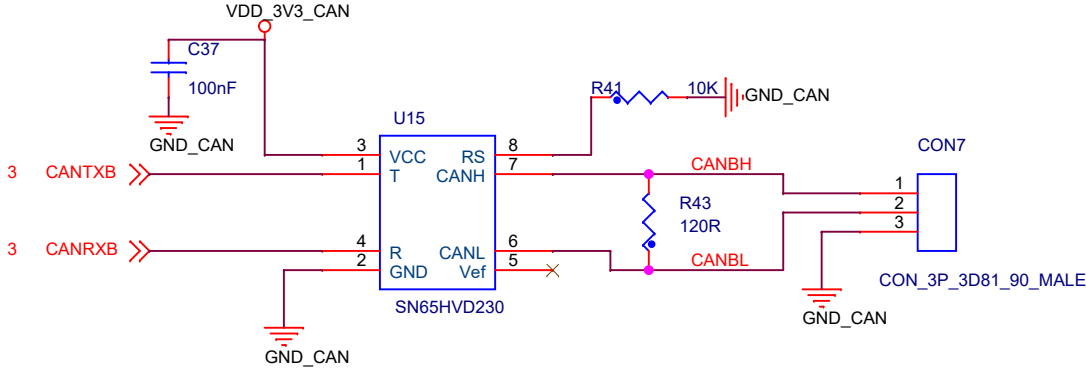
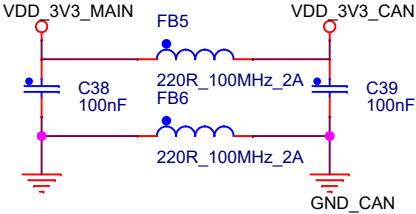
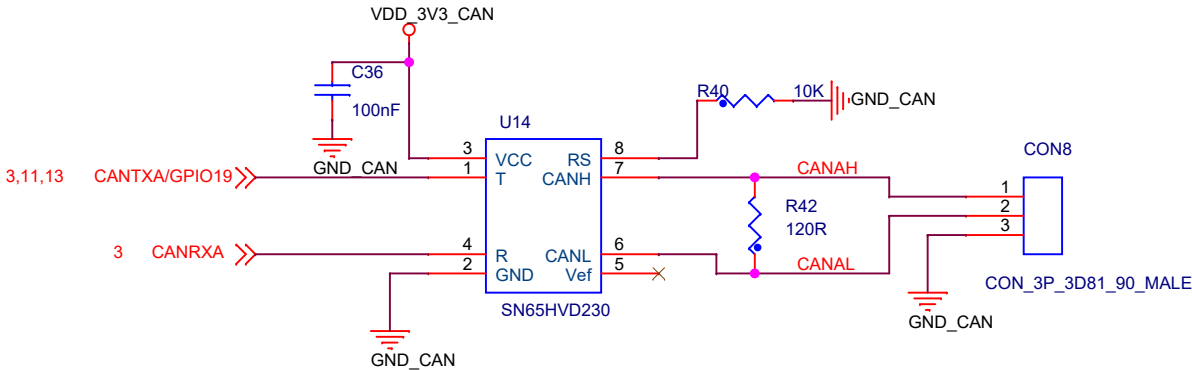
S0	ENABLE
L	RS232
H	RS485



TTL_UART

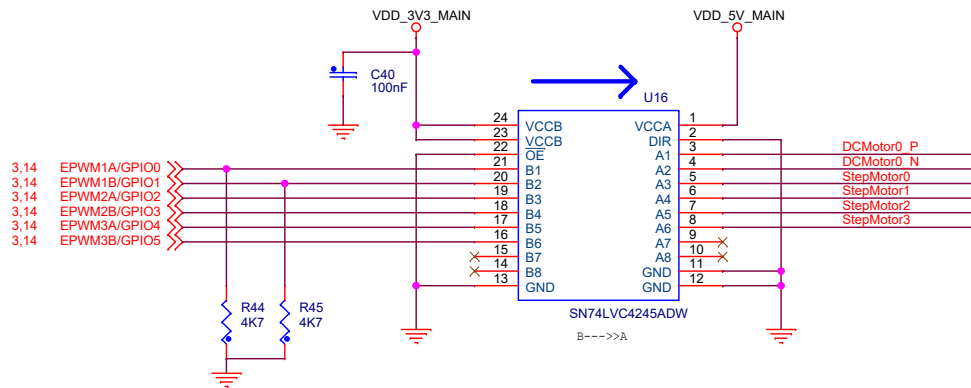


CAN

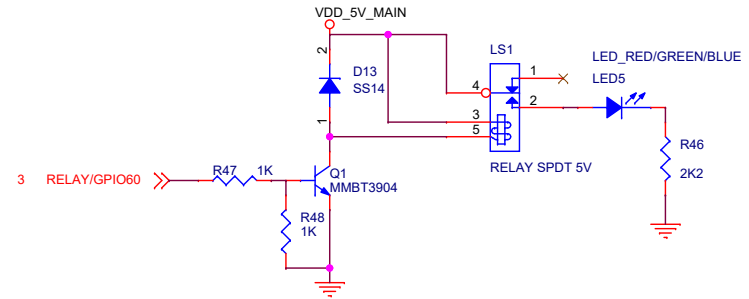


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TTL_UART/CAN			
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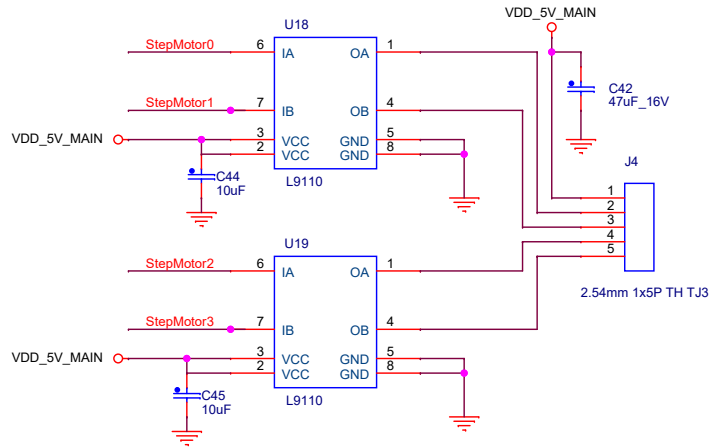
Level Translator 3V3 To 5V



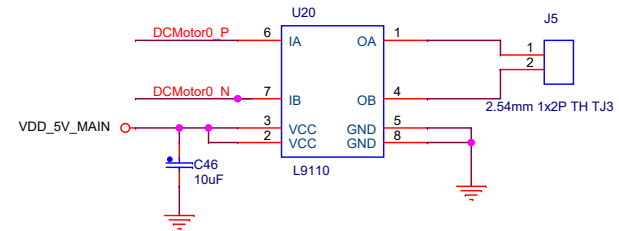
5V Relay



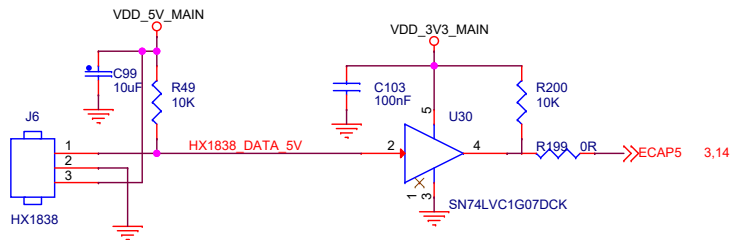
Stepper Motor Driver



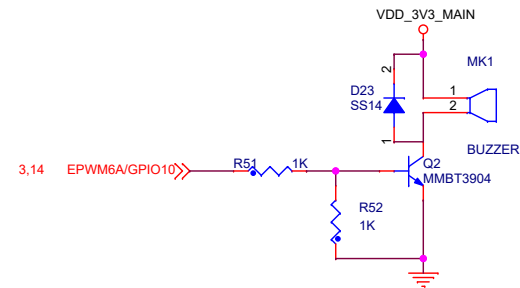
DC Motor Driver



HX1838 IrDA

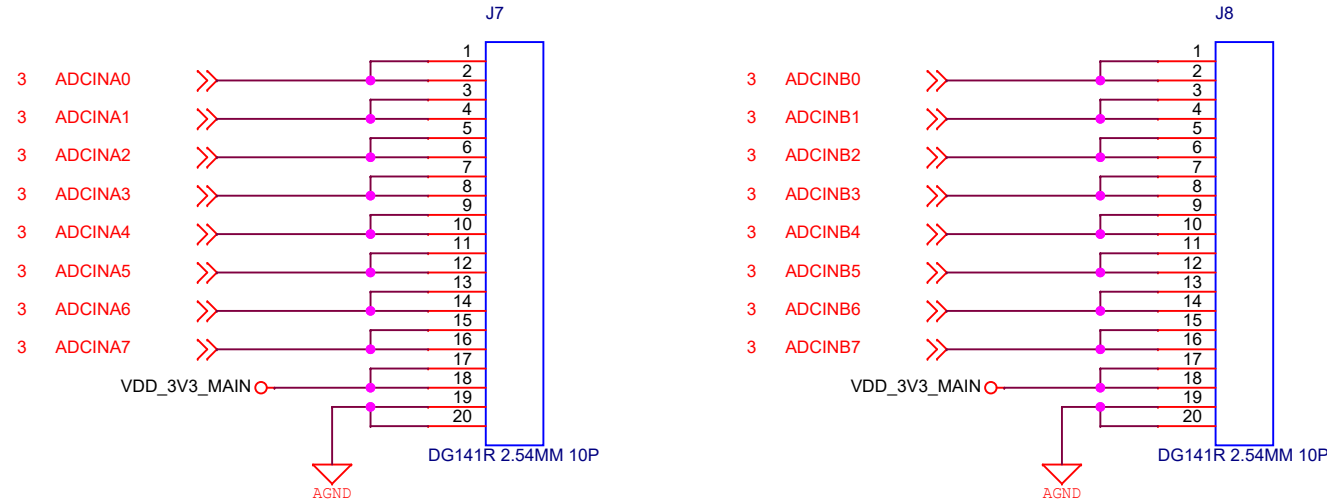


Passive Buzzer

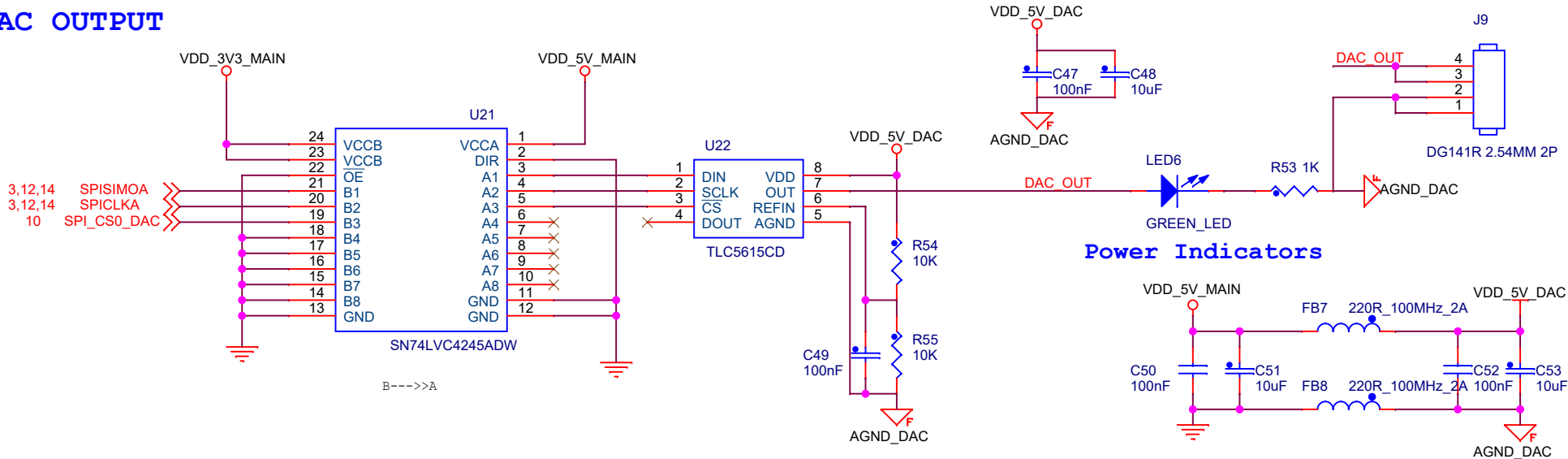


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Title MOTOR/SENSOR/RELAY/BUZZER			
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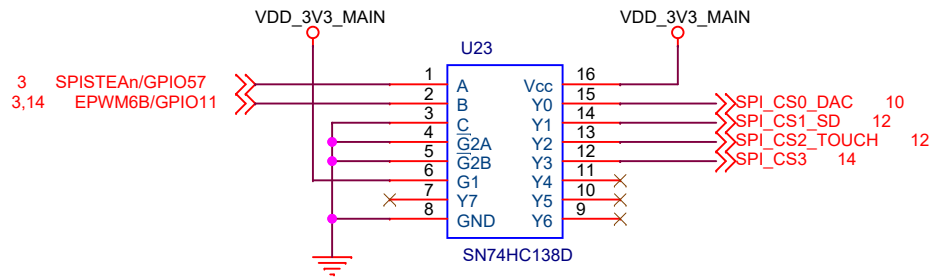
ADC INPUT



DAC OUTPUT

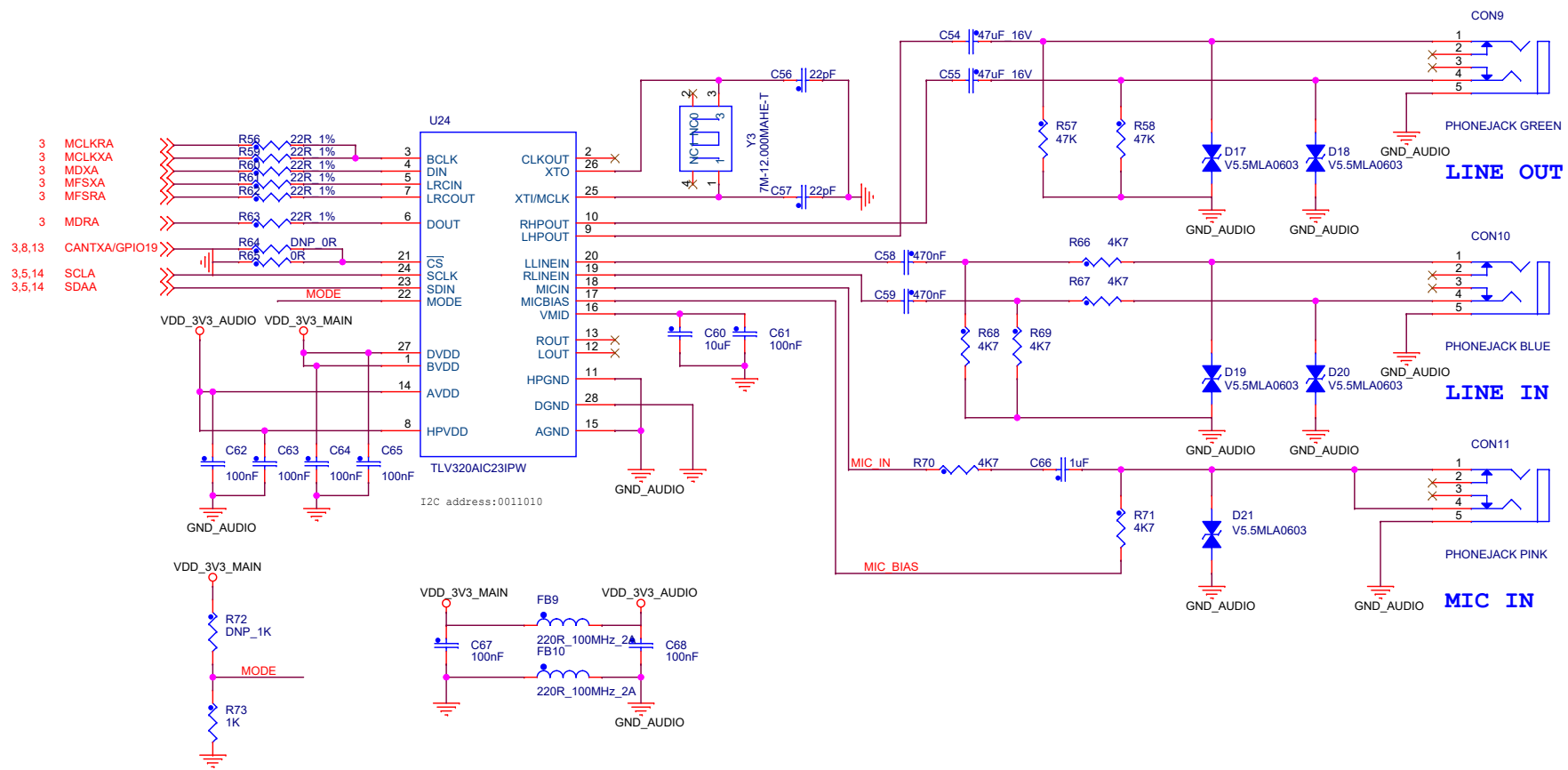


SPI CS



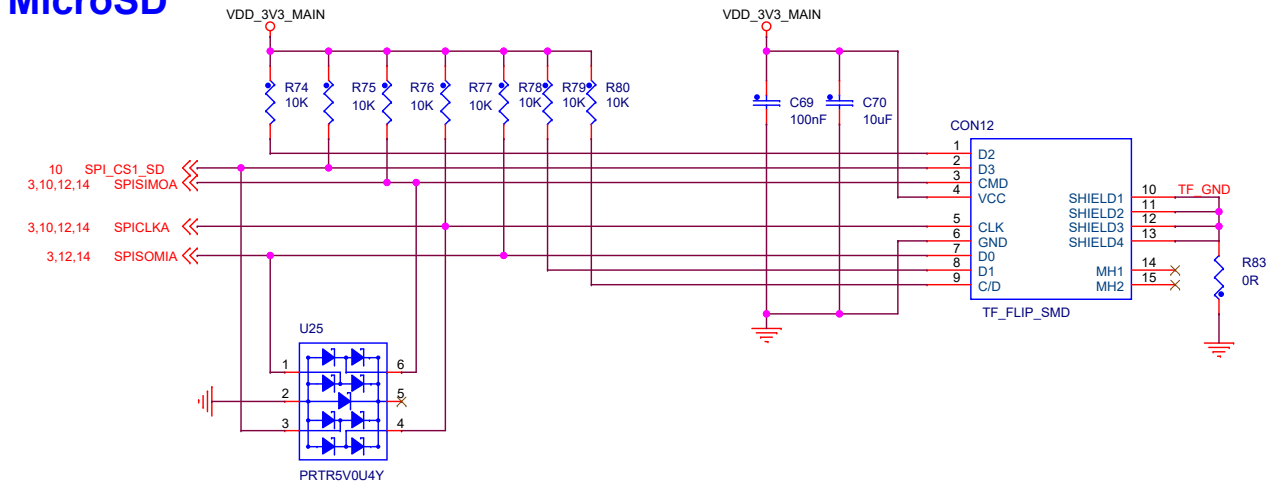
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Title ADC/DAC			
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AUDIO

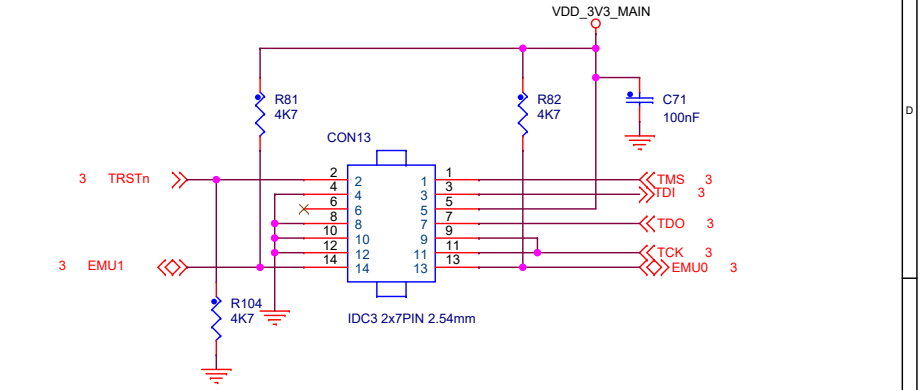


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Title			
AUDIO			
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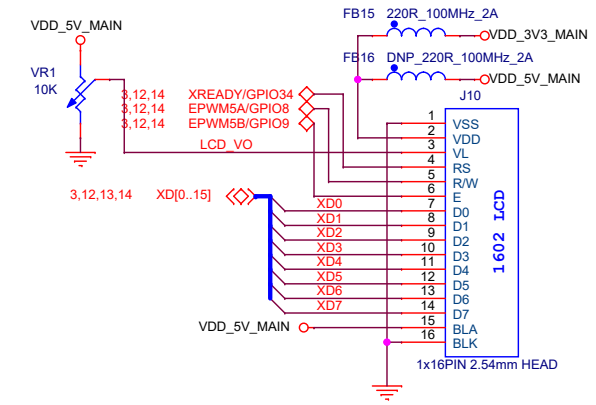
MicroSD



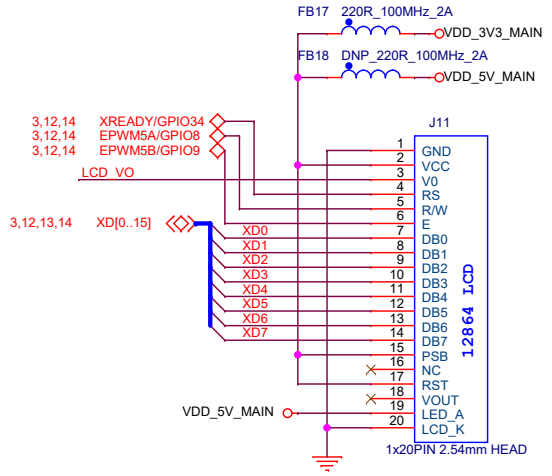
TI Rev B JTAG



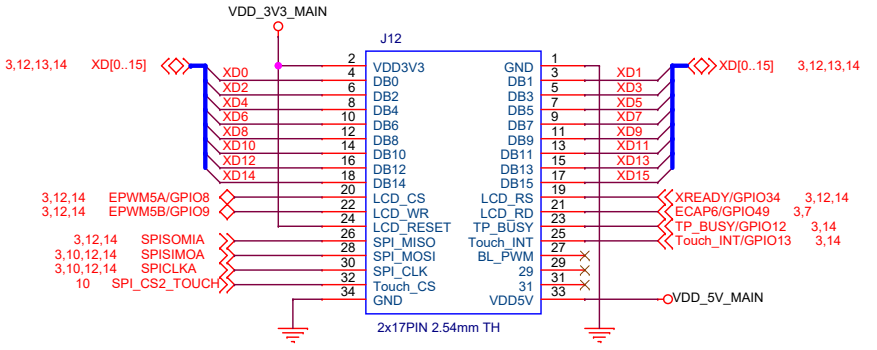
1602 LCD



12864 LCD

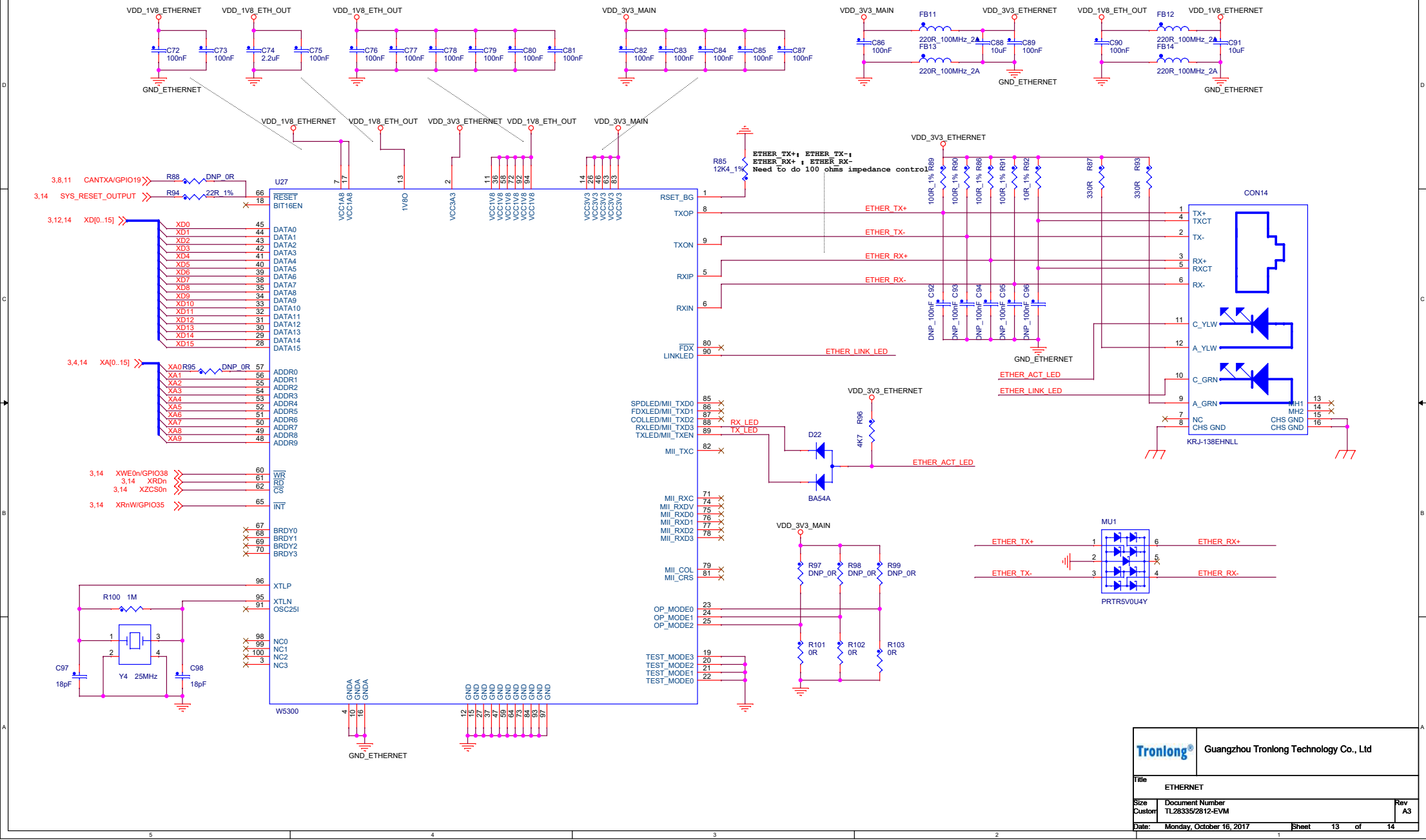


4.3" TFT LCD

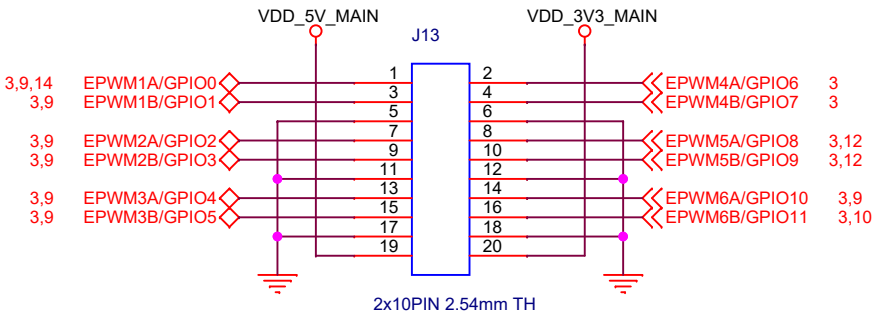


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LCD/SD/JTAG			
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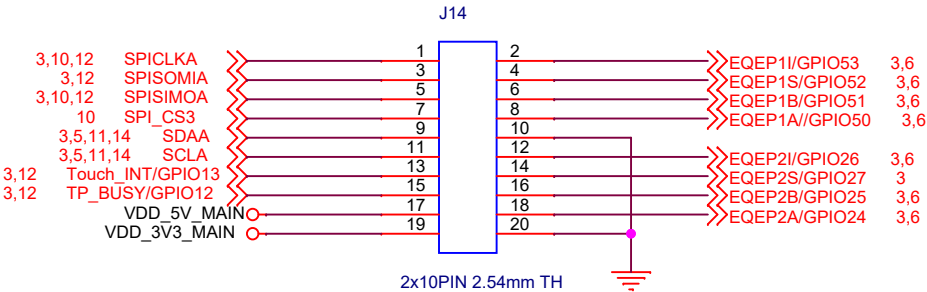
ETHERNET



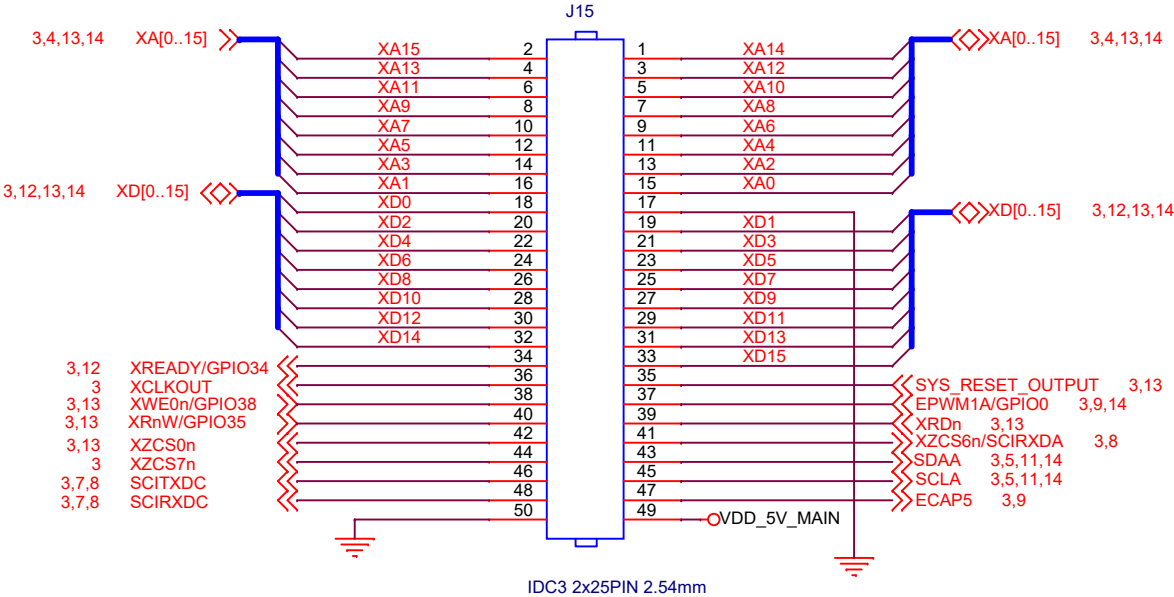
PWM



EQEP/SPI/I2C



XINTF



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