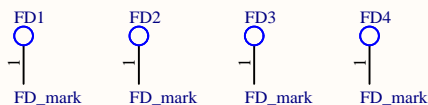
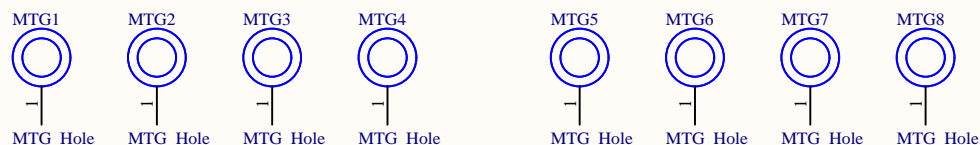
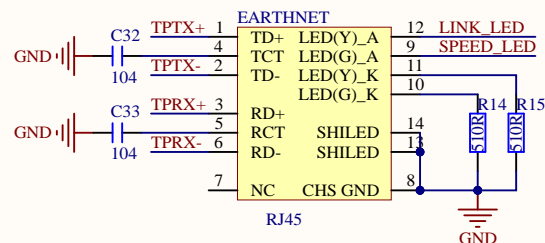
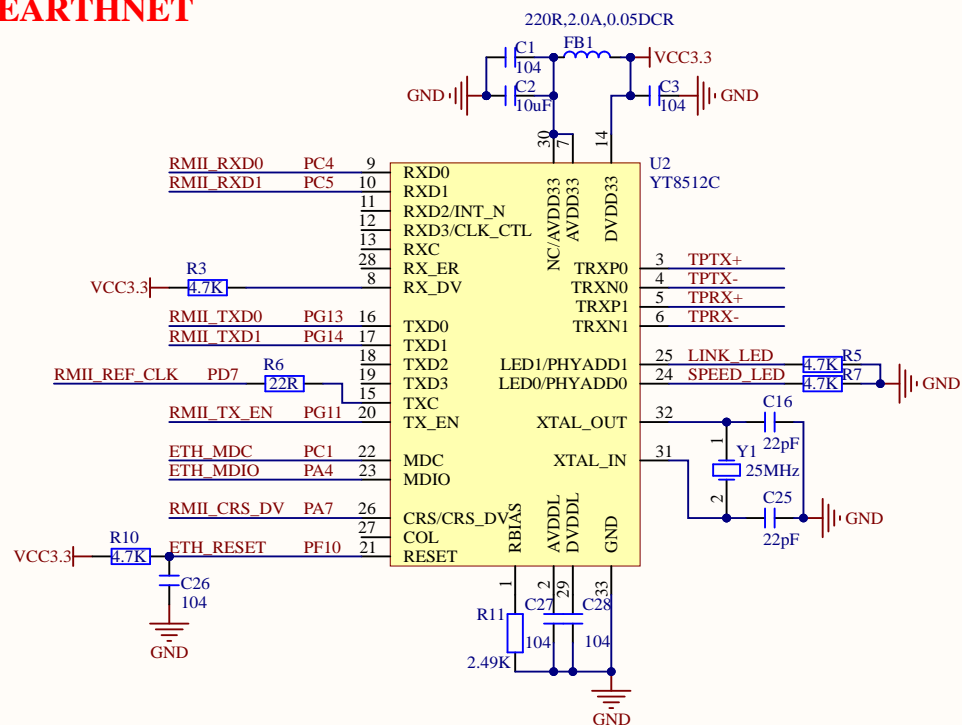
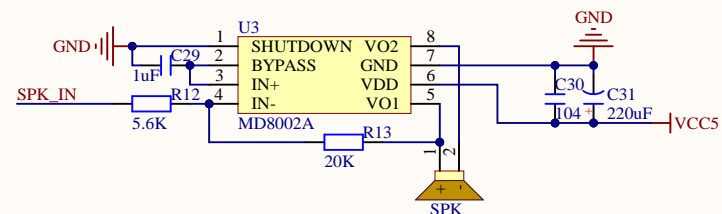
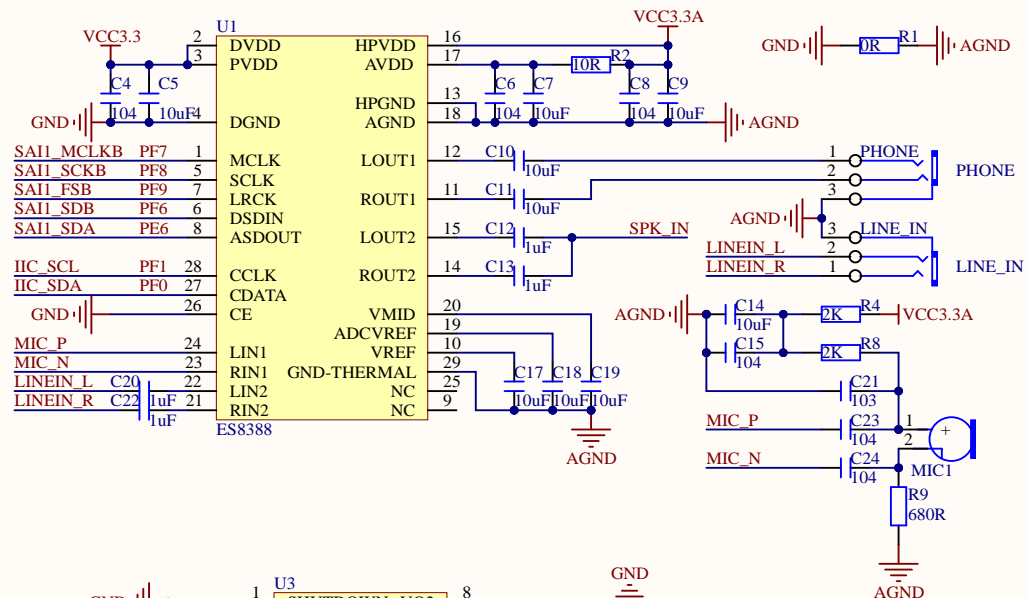


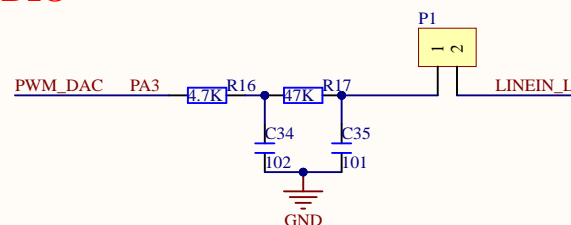
# EARTHNET




## I2S DAC&ADC



## PWM DAC/AUDIO



Title: DNNH7RX.PriPcb		 <b>正点原子</b>
Author: ALIENTEK	Size: A4	
Date: 2024/07/26/星期五	File: AUDIO&ETHNET.SchDoc	
Revision: 0	Version: V1.0	

# CORE BOARD

		M1							
USART2_TX	PD5 J1_1	PD5 PF1	J1_70 PF1	IIC_SCL					
GBC_LED	PF3 J1_2	PF3 PF0	J1_69 PF0	IIC_SDA					
NRF_IRQ	GBC_KEY	PF2 J1_3	J1_68 PF4	USB_PWR					
NRF_CE	PM14 J1_4	PM14 VBAT	J1_67 VBAT						
	BOOT0 J1_5	BOOT0 PB8	J1_66 PB8	DCMIPP_D6					
USB_FS_D-	PM12 J1_6	PM12 PE2	J1_65 PE2	DCMIPP_RST					
UART7_TX	PM9 J1_7	PM9 PE0	J1_64 PE0	DCMIPP_D2					
LCD_G2	FMC_D6	PA1 J1_8	J1_63 PB5	FMC_D12	LCD_R2				
LCD_G3	FMC_D7	PA0 J1_9	J1_62 PB4	FMC_D13	LCD_R3				
LCD_G4	FMC_D8	PB13 J1_10	J1_61 PB3	FMC_D14	LCD_R4				
LCD_G5	FMC_D9	PB12 J1_11	J1_60 PA15	FMC_D15	LCD_R5				
LCD_G6	FMC_D10	PB11 J1_12	J1_59 PG1		LCD_R6				
LCD_G7	FMC_D11	PB10 J1_13	J1_58 PG0		LCD_R7				
LCD_B2	FMC_D0	PA12 J1_14	J1_57 PM13		NRF_CS				
LCD_B3	FMC_D1	PA11 J1_15	J1_56 PG3	DCMIPP_HSYNC					
LCD_B4	FMC_D2	PA10 J1_16	J1_55 PM0	USB_PD_CC1					
LCD_B5	FMC_D3	PA9 J1_17	J1_54 PM11	USB_FS_D+					
LCD_B6	FMC_D4	PA8 J1_18	J1_53 PM8		UART7_RX				
LCD_B7	FMC_D5	PA2 J1_19	J1_52 PM6	USB_HS_D+					
		GND J1_20	J1_51 PM5	USB_HS_D-					
		GND J1_21	J1_50 PM1	USB_PD_CC2					
RMII_REF_CLK	PD7 J1_22	GND J1_23	J1_49 PM3	DCMIPP_SCL					
		GND J1_24	J1_48 PM2	DCMIPP_SDA					
LCD_CLK	FMC_NOE	PA5 J1_25	J1_47 PD3		SPI2_SCK				
SDIO_SCK		GND J1_26	J1_46 PD1		UART4_TX				
		PC12 J1_27	J1_45 PD2		SDIO_CMD				
LCD_HSYNC		PG2 J1_28	J1_44 PD0		UART4_RX				
LCD_VSYNC		PE11 J1_29	J1_43 PC10		SDIO_D2				
LCD_DE	FMC_NE1	PD12 J1_30	J1_42 PE15	T_CS					
LCD_BL		PD15 J1_31	J1_41 PE14	T_MOSI					
		PD14 J1_32	J1_40 PE13	T_MISO					
		PA14 J1_33	J1_39 PE12	T_SCK					
SDIO_D3		PC11 J1_34	J1_38 PD4	T_PEN					
		PC7 J1_35	J1_37 PC8		SDIO_D0				
DCMIPP_D1		PC6 J1_36	J1_36 PC9		SDIO_D1				
DCMIPP_D0		PC6 J1_35							

CNH7R7

		J2_1							
RESET		J2_1	RESET	GND	J2_70	GND			
LED0	PD14 J2_2	J2_69	PD6		J2_68	PB7	DCMIPP_VSYNC	USART2_RX	
DCMIPP_D5	PB6 J2_3	J2_67	PB15		J2_66	PB14		USART1_RX	
WK_UP	PC13 J2_4	J2_65	PD13		J2_64	PP9		USART1_TX	
IIC_INT	PE3 J2_5	J2_63	PP8		J2_62	PO5			
BEEP	PE5 J2_6	J2_61	PP15		J2_60	PO1			
RMII_TXD0	PG13 J2_7	J2_59	PF6	SAII_SDB	J2_58	PF7	SAII_MCLKB		
	PP10 J2_8	J2_57	PF8	SAII_SCKB	J2_56	PG15	1WIRE_DQ		
	PO3 J2_9	J2_55	PF5	DCMIPP_PWDN	J2_54	PG11	RMII_TX_EN		
	PP13 J2_10	J2_53	PG12	SPDIF_RX	J2_52	PC4	RMII_RXD0		
	PP11 J2_11	J2_51	PB2	FMC_NWE	J2_50	PB1	RGB_LED		
KEY0	PE9 J2_12	J2_49	PA3	PWM_DAC	J2_48	PC2		SPI2_MISO	
FMC_A15	PE10 J2_13	J2_47	PC1	ETH_MDC	J2_46	PG14	RMII_TXD1		
KEY1	PE8 J2_14	J2_45	PC3		J2_44	PC0	LED1		
	PP14 J2_15	J2_43	PF9	SAII_FSB	J2_42	PE4	DCMIPP_D4		
KEY2	PE7 J2_16	J2_41	PE6	SAII_SDA	J2_40	PE6			
	PP12 J2_17	J2_39	3V3		J2_38	GND			
RS485_RE	PF11 J2_18	J2_37	VCC5		J2_36	GND			
	GND J2_19	J2_35	GND						
STM_ADC	PB0 J2_20	J2_34	GND						
	GND J2_21	J2_33	GND						
DCMIPP_PCLK	PA6 J2_22	J2_32	GND						
	GND J2_23	J2_31	GND						
RMII_CRS_DV	PA7 J2_24	J2_30	GND						
RMII_RXD1	PC5 J2_25	J2_29	GND						
ETH_MDIO	PA4 J2_26	J2_28	GND						
ETH_RESET	PF10 J2_27	J2_27	GND						
DCMIPP_D7	PB9 J2_28	J2_26	GND						
DCMIPP_D3	PE1 J2_29	J2_25	GND						
	GND J2_30	J2_24	GND						
		J2_23	GND						
		J2_22	GND						
		J2_21	GND						
		J2_20	GND						
		J2_19	GND						
		J2_18	GND						
		J2_17	GND						
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		J2_12	GND						
		J2_11	GND						
		J2_10	GND						
		J2_9	GND						
		J2_8	GND						
		J2_7	GND						
		J2_6	GND						
		J2_5	GND						
		J2_4	GND						
		J2_3	GND						
		J2_2	GND						
		J2_1	GND						

## IO

		P2							
PC0	1	2	PD14						
PE3	3	4	PE5						
PG15	5	6	PF0						
PD13	7	8	PF1						
PP12	9	10	PP14						
PF5	11	12	PA7						
PA6	13	14	PB9						
PB8	15	16	PE1						
PE4	17	18	PC7						
PE0	19	20	PE2						
PF4	21	22	PC6						
PG3	23	24	PM2						
PB7	25	26	PM3						
PM1	27	28	PM0						
PG0	29	30	PC10						
PG1	31	32	PC12						
PC11	33	34	PC8						
PC12	35	36	PM13						
PC9	37	38	PM14						
PM14	39	40	PC3						
PC2	41	42	PE10						
PB2	43	44							

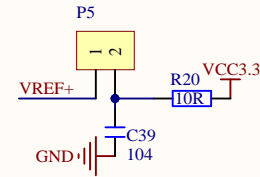
Header 22X2

Header 22X2

## VBAT

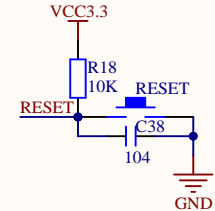


## VREF

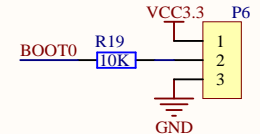


MCU参考电压选择端口，同时可以控制核心板上LED的亮灭，如果P5短接，则核心板上面的电源灯(PWR)和DSO都不会亮。如果需要核心板上的LED亮，拔掉P5的跳线帽即可。

## RESET



## BOOT

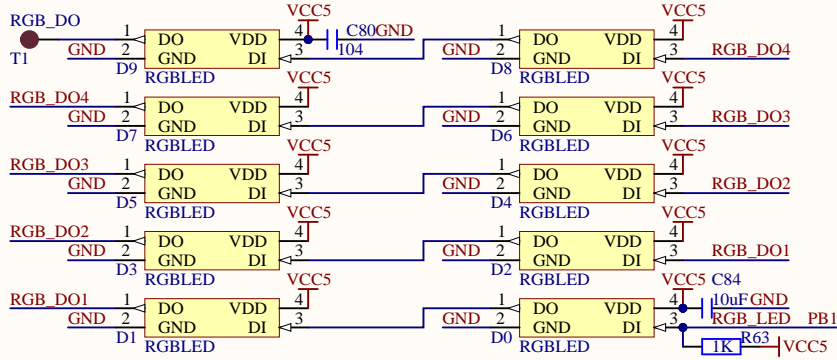


Title: DNH7RX.PrjPcb		
Author: ALIENTEK	Size: A4	
Date: 2024/07/26/星期五	File: CORE.SchDoc	
Revision: 0	Version: V1.0	

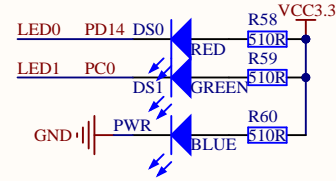
正点原子



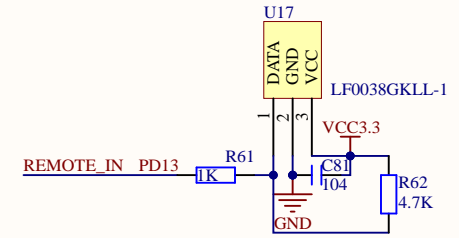
## RGBLED



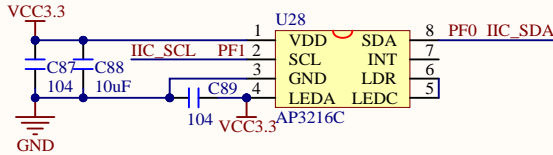
## LED



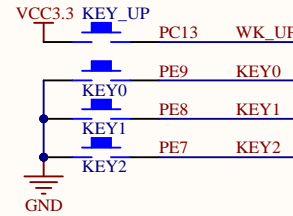
## REMOTE



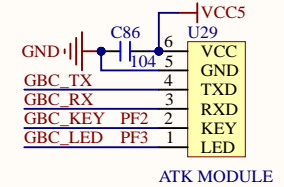
## ALS&PS SENSOR



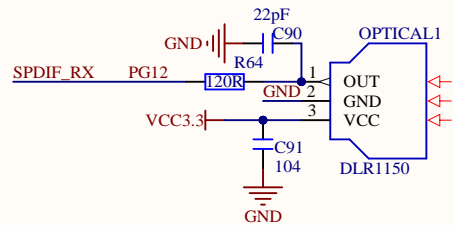
## KEY



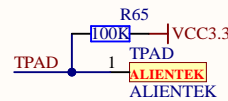
## ATK MODULE



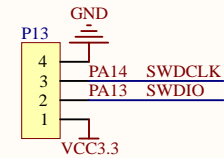
## OPTICAL IN



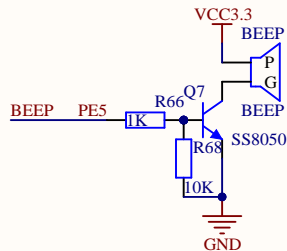
## TOUCH\_KEY



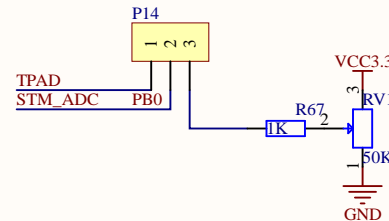
## SWD



## BEEP



## ADC&TPAD



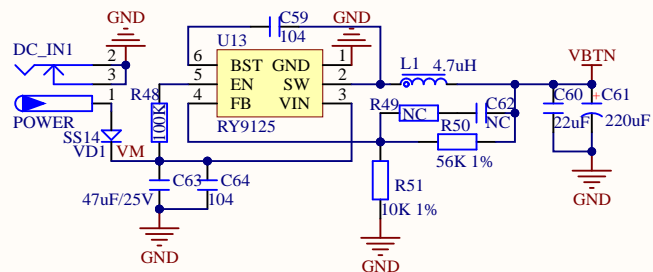
Title:  
DNH7RX.PrjPcb  
Author:  
ALIENTEK  
Date:  
2024/07/26/星期五  
Revision:  
0

Size:  
A4  
File:  
DEVICE2.SchDoc  
Version:  
V1.0

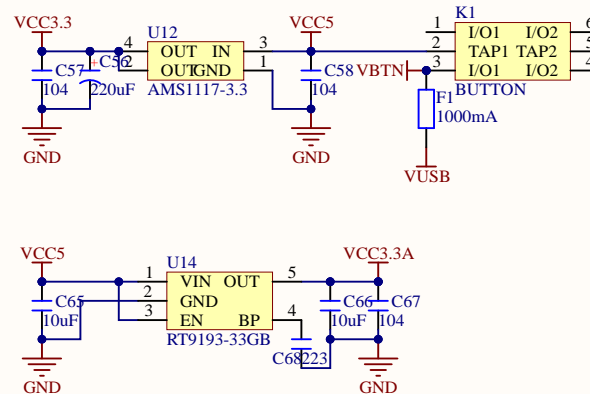


正点原子

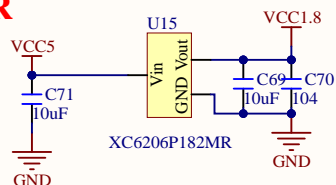
## DC POWER IN



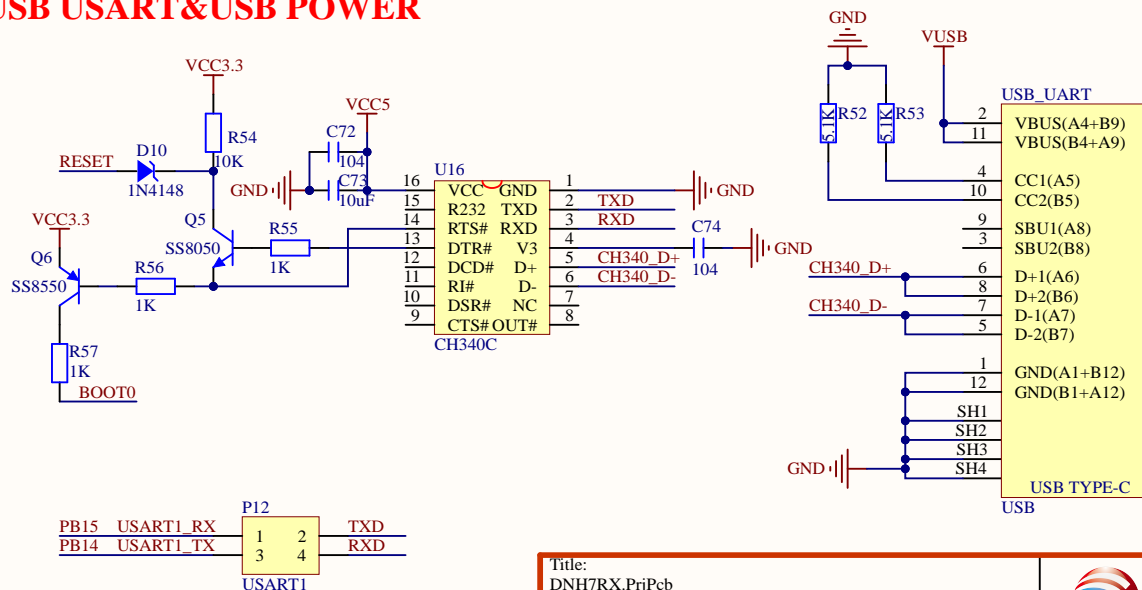
## 3.3V & POWER SWITCH



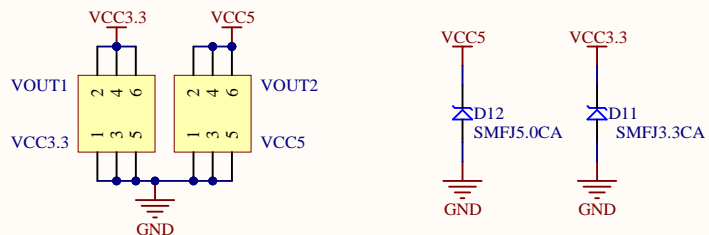
## 1.8V POWER



## USB USART&USB POWER



## ON BOARD POWER SOURCE



Title: DNH7RX.PrjPcb	
Author: ALIENTEK	Size: A4
Date: 2024/07/26/星期五	File: POWER&USB_USART.SchDoc
Revision: 0	Version: V1.0



121.00mm

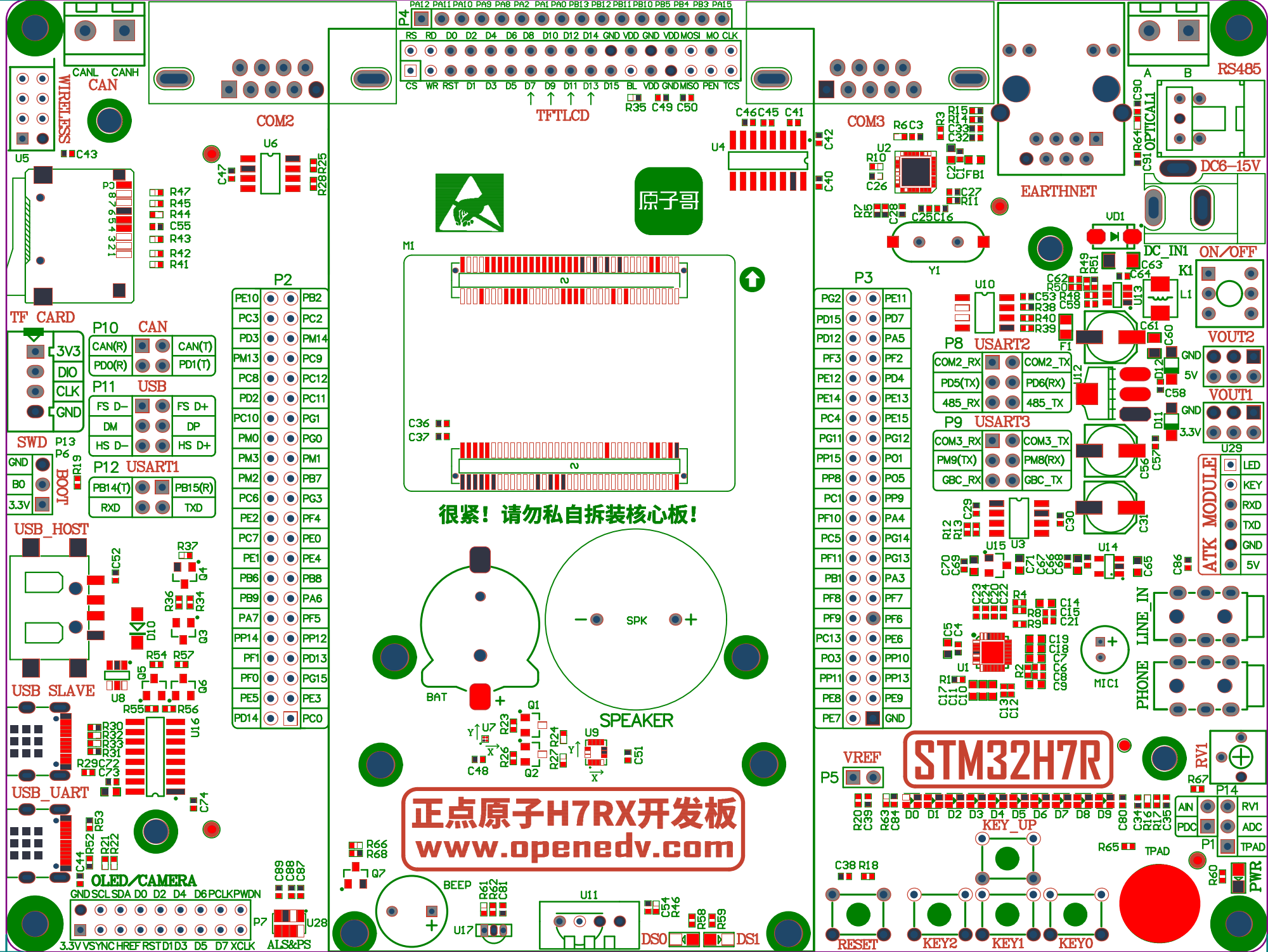
160.00mm



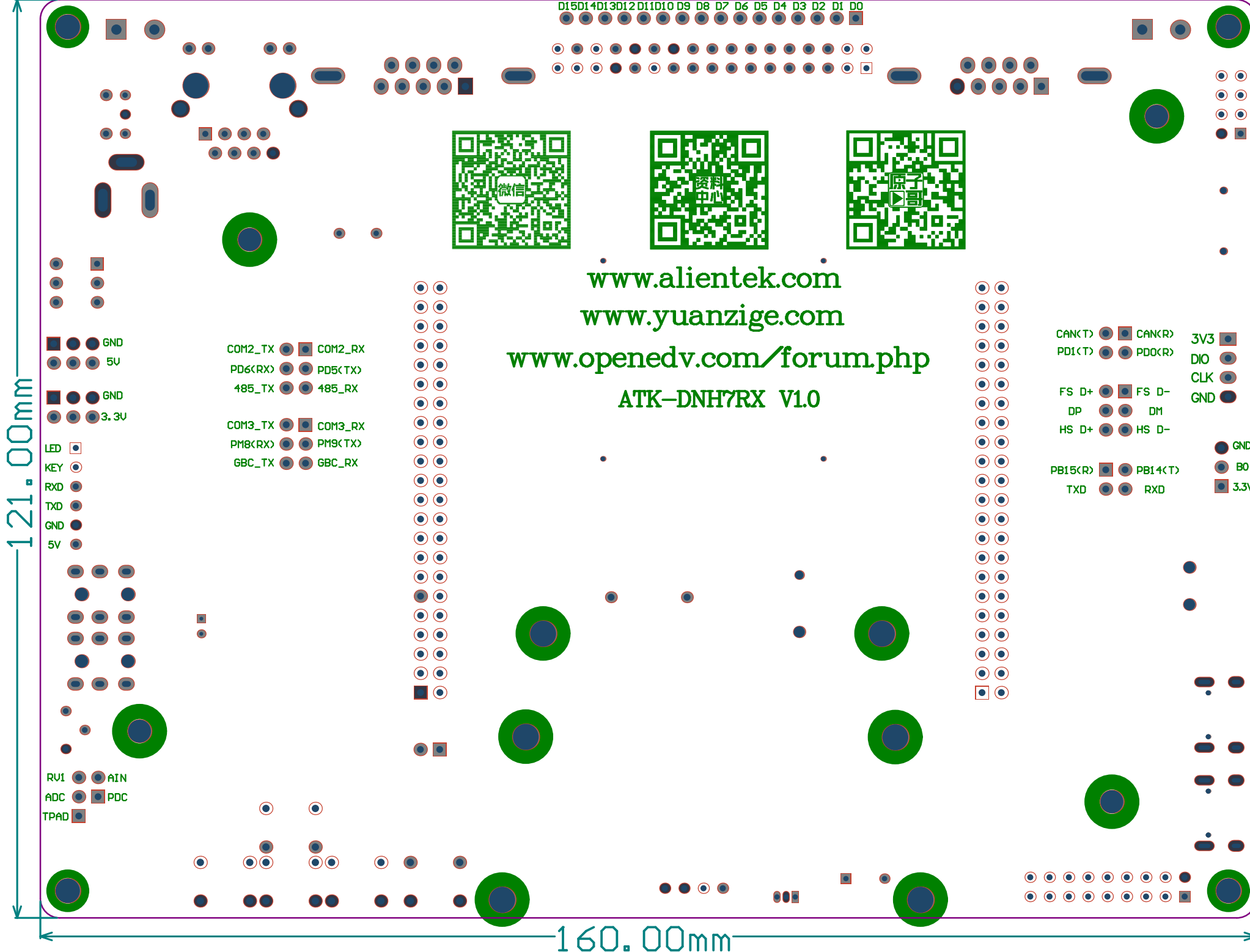
很紧！请勿私自拆装核心板！

正点原子H7RX开发板  
www.openedv.com

STM32H7R







121.00mm

160.00mm

[www.alientek.com](http://www.alientek.com)  
[www.yuanzige.com](http://www.yuanzige.com)  
[www.openedv.com/forum.php](http://www.openedv.com/forum.php)  
ATK-DNH7RX V1.0

D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0

GND  
5V  
GND  
3.3V

LED  
KEY  
RXD  
TXD  
GND  
5V

RV1  
ADC  
TPAD

COM2\_TX  
COM2\_RX  
PD6<RX>  
PD5<TX>  
485\_TX  
485\_RX

COM3\_TX  
COM3\_RX  
PM8<RX>  
PM9<TX>  
GBC\_TX  
GBC\_RX

CAN<T>  
CAN<R>  
PD1<T>  
PD0<R>  
FS D+  
FS D-  
DP  
DM  
HS D+  
HS D-  
PB15<R>  
PB14<T>  
TXD  
RXD  
3V3  
DIO  
CLK  
GND  
GND  
B0  
3.3V