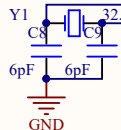


## MCU\_ABC

	WK UP	PA0	40
	RMII REF CLK	PA1	41
USART2 TX	ETH MDIO	PA2	42
USART2 RX	PWM DAC	PA3	47
GBC LED	STM DAC	PA4	50
	STM ADC	PA5	51
	DCMI PCLK	PA6	52
	RMII CRS DV	PA7	53
REMOTE IN	DCMI XCLK	PA8	119
	USART1 TX	PA9	120
	USART1 RX	PA10	121
	USB D-	PA11	122
	USB D+	PA12	123
	JTMS	PA13	124
	JTCK	PA14	137
DCMI RESET	JTDI	PA15	138
	LED1	PB0	56
	LED0	PB1	57
	BOOT1	PB2	58
DCMI SDA	JTDO	PB3	161
DCMI SCL	JTRST	PB4	162
	LCD BL	PB5	163
		PB6	164
	DCMI VSYNC	PB7	165
	DCMI D6	PB8	167
	DCMI D7	PB9	168
USART3 TX		PB10	79
USART3 RX	RMII TX EN	PB11	80
IWIRE DQ	IIC INT	PB12	92
	SPI2 SCK	PB13	93
	SPI2 MISO	PB14	94
	SPI2 MOSI	PB15	95
	FMC SDNWE	PC0	32
	ETH MDC	PC1	33
	FMC SDNE0	PC2	34
	FMC SDCKE0	PC3	35
	RMII RXD0	PC4	54
	RMII RXD1	PC5	55
	DCMI D0	PC6	115
	DCMI D1	PC7	116
SDIO D0	DCMI D2	PC8	117
SDIO D1	DCMI D3	PC9	118
SDIO D2		PC10	139
SDIO D3	DCMI D4	PC11	140
SDIO SCK		PC12	141
	KEY2	PC13	8
			9
			10



U1A

PA0/WK UP/TIM2\_CH1/TIM2\_ETR/TIM5\_CH1/TIM8\_ETR/U2\_CTS/U4\_TX/ETH\_MII CRS/ADC123\_IN0  
PA1/TIM2\_CH2/TIM5\_CH2/U2\_RTS/U4\_RX/ETH\_MII\_RX\_CLK/ETH\_RMII\_REF\_CLK/ADC123\_IN1  
PA2/TIM2\_CH3/TIM5\_CH3/TIM9\_CH1/U2\_TX/ETH\_MDIO/ADC123\_IN2  
PA3/TIM2\_CH4/TIM5\_CH4/TIM9\_CH2/U2\_RX/OTG\_HS\_ULPI\_D0/ETH\_MII\_COL/LCD\_B5/ADC123\_IN3  
PA4/SPI1\_NSS/SPI3\_NSS/I2S3\_WS/U2\_OTG\_HS\_SOF/DCMI\_HSYNC/LCD\_VSYNC/ADC12\_IN4/DAC\_OUT1  
PA5/TIM2\_CH1/TIM2\_ETR/TIM8\_CH1N/SPI1\_SCK/OTG\_HS\_ULPI\_CK/ADC12\_IN5/DAC\_OUT2  
PA6/TIM1\_BKIN/TIM3\_CH1/TIM8\_BKIN/SPI1\_MISO/TIM13\_CH1/DCMI\_PIXCLK/LCD\_G2/ADC12\_IN6  
PA7/TIM1\_CH1N/TIM3\_CH2/TIM8\_CH1N/SPI1\_MOSI/TIM14\_CH1/ETH\_MII\_RX\_DV/ETH\_RMII\_CRS\_DV/ADC12\_IN7  
PA8/MCO1/TIM1\_CH1/I2C3\_SCL/U1\_CK/OTG\_FS\_SOF/LCD\_R6  
PA9/TIM1\_CH2/I2C3\_SMBA/U1\_TX/DCMI\_D0/OTG\_FS\_VBUS  
PA10/TIM1\_CH3/U1\_RX/OTG\_FS\_ID/DCMI\_D1  
PA11/TIM1\_CH4/U1\_CTS/CAN1\_RX/LCD\_R4/OTG\_FS\_DM  
PA12/TIM1\_ETR/U1\_RTS/CAN1\_TX/LCD\_R5/OTG\_FS\_DP  
PA13/JTMS/SWDIO  
PA14/JTCK/SWDCLK  
PA15/JTDI/TIM2\_CH1/TIM2\_ETR/SPI1\_NSS/SPI3\_NSS/I2S3\_WS  
PB0/TIM1\_CH2N/TIM3\_CH3/TIM8\_CH2N/LCD\_R3/OTG\_HS\_ULPI\_D1/ETH\_MII\_RXD2/ADC12\_IN8  
PB1/TIM1\_CH3N/TIM3\_CH4/TIM8\_CH3N/LCD\_R6/OTG\_HS\_ULPI\_D2/ETH\_MII\_RXD3/ADC12\_IN9  
PB2/BOOT1  
PB3/JTDO/TIM2\_CH2/SPI1\_SCK/SPI3\_SCK/I2S3\_CK  
PB4/NTRST/TIM3\_CH1/SPI1\_MISO/SPI3\_MISO/I2S3ext\_SD  
PB5/TIM3\_CH2/I2C1\_SMBA/SPI1\_MOSI/SPI3\_MOSI/I2S3\_SD/CAN2\_RX/OTG\_HS\_ULPI\_D7/ETH\_PPS\_OUT/FMC\_SDCKE1/DCMI\_D10  
PB6/TIM4\_CH1/I2C1\_SCL/U1\_TX/CAN2\_TX/FMC\_SDNE1/DCMI\_D5  
PB7/TIM4\_CH2/I2C1\_SDA/U1\_RX/FMC\_NL/DCMI\_VSYNC  
PB8/TIM4\_CH3/TIM10\_CH1/I2C1\_SCL/CAN1\_RX/ETH\_MII\_TXD3/SDIO\_D4/DCMI\_D6/LCD\_B6  
PB9/TIM4\_CH4/TIM11\_CH1/I2C1\_SDA/SPI2\_NSS/I2S2\_WS/CAN1\_TX/SDIO\_D5/DCMI\_D7/LCD\_B7  
PB10/TIM2\_CH3/I2C2\_SCL/SPI2\_SCK/I2S2\_CK/U3\_TX/OTG\_HS\_ULPI\_D3/ETH\_MII\_RX\_ER/LCD\_G4  
PB11/TIM2\_CH4/I2C2\_SDA/U3\_RX/OTG\_HS\_ULPI\_D4/ETH\_MII\_TX\_EN/ETH\_RMII\_TX\_EN/LCD\_G5  
PB12/TIM1\_BKIN/I2C2\_SMBA/SPI2\_NSS/I2S2\_WS/U3\_CK/CAN2\_RX/OTG\_HS\_ULPI\_D5/ETH\_MII\_TXD0/ETH\_RMII\_TXD0/OTG\_HS\_ID  
PB13/TIM1\_CH1N/SPI2\_SCK/I2S2\_CK/U3\_CTS/CAN2\_TX/OTG\_HS\_ULPI\_D6/ETH\_MII\_TXD1/ETH\_RMII\_TXD1/OTG\_HS\_VBUS  
PB14/TIM1\_CH2N/TIM8\_CH2N/SPI2\_MISO/I2S2ext\_SD/U3\_RTS/TIM12\_CH1/OTG\_HS\_DM  
PB15/RTC\_REFIN/TIM1\_CH3N/TIM8\_CH3N/SPI2\_MOSI/I2S2\_SD/TIM12\_CH2/OTG\_HS\_DP  
PC0/OTG\_HS\_ULPI\_STP/FMC\_SDNWE/ADC123\_IN10  
PC1/ETH\_MDC/ADC123\_IN11  
PC2/SPI2\_MISO/I2S2ext\_SD/OTG\_HS\_ULPI\_DIR/ETH\_MII\_TXD2/FMC\_SDNE0/ADC123\_IN12  
PC3/SPI2\_MOSI/I2S2\_SD/OTG\_HS\_ULPI\_NXT/ETH\_MII\_TX\_CLK/FMC\_SDCKE0/ADC123\_IN13  
PC4/ETH\_MII\_RXD0/ETH\_RMII\_RXD0/ADC12\_IN14  
PC5/ETH\_MII\_RXD1/ETH\_RMII\_RXD1/ADC12\_IN15  
PC6/TIM3\_CH1/TIM8\_CH1/I2S2\_MCK/U6\_TX/SDIO\_D6/DCMI\_D0/LCD\_HSYNC  
PC7/TIM3\_CH2/TIM8\_CH2/I2S3\_MCK/U6\_RX/SDIO\_D7/DCMI\_D1/LCD\_G6  
PC8/TIM3\_CH3/TIM8\_CH3/U6\_CK/SDIO\_D0/DCMI\_D2  
PC9/MCO2/TIM3\_CH4/TIM8\_CH4/I2C3\_SDA/I2S\_CKIN/SDIO\_D1/DCMI\_D3  
PC10/SPI3\_SCK/I2S3\_CK/U3\_TX/U4\_TX/SDIO\_D2/DCMI\_D8/LCD\_R2  
PC11/I2S3ext\_SD/SPI3\_MISO/U3\_RX/U4\_RX/SDIO\_D3/DCMI\_D4  
PC12/SPI3\_MOSI/I2S3\_SD/U3\_CK/U5\_TX/SDIO\_CK/DCMI\_D9  
PC13/TAMP\_1  
PC14/OSC32\_IN  
PC15/OSC32\_OUT

STM32F429IGT6

Title: Apollo STM32F429 CoreBoard CORE ABC	
Author: ATOM@ALIENTEK	Size: SheetSize
Date: 2022/10/8	File: STM32F429 CORE ABC.SchDoc
Revision: V2.0	Version: Version



正点原子

MOTHER BOARD CON

主板接口，由2个2\*30P的3710M端子（公）组成，可插在正点原子阿波罗STM32F4/F7主板上。

J1		
GND	30 31	BOOT0
VBAT	29 32	PG14
PC13	28 33	PG13
PB9	27 34	PG10
PB8	26 35	PD7
PB7	25 36	PD3
PB6	24 37	PD2
PB5	23 38	PC12
PB4	22 39	PC11
PB3	21 40	PC10
PE2	20 41	PA15
PE3	19 42	PA14
PE4	18 43	PA13
PE5	17 44	PA3
PE6	16 45	PA4
PI11	15 46	PA5
PF6	14 47	PA6
PF7	13 48	PA7
PF8	12 49	PC4
PF9	11 50	PC5
RESET	10 51	PA9
PC1	9 52	PA10
PH4	8 53	PA11
PH5	7 54	PA12
PH3	6 55	PB2
PH2	5 56	PB0
PA2	4 57	PB1
PA1	3 58	VCC5
VREF+	2 59	VCC5
GND	1 60	VCC5

3710M060046G3FT01

J2		
PH13	30 31	GND
PH14	29 32	PI2
PH15	28 33	PI1
PD6	27 34	PI0
PD4	26 35	PG11
PG12	25 36	PI4
PH12	24 37	PI5
PD11	23 38	PI6
PD5	22 39	PI7
PD12	21 40	PI8
PA8	20 41	PI3
PC9	19 42	PA0
PC8	18 43	PE0
PC7	17 44	PE1
PC6	16 45	PD14
PG6	15 46	PD15
PD13	14 47	PD0
PG3	13 48	PD1
PH11	12 49	PE7
PH10	11 50	PE8
PH9	10 51	PE9
PH7	9 52	PE10
PH6	8 53	PE11
PB15	7 54	PE12
PB14	6 55	PE13
PB13	5 56	PE14
PB12	4 57	PE15
PH8	3 58	PD8
PB10	2 59	PD9
PB11	1 60	PD10

3710M060046G3FT01

MCU\_DEF

FMC D2	PD0	142
FMC D3	PD1	143
SDIO CMD	PD2	144
DCMI D5	PD3	145
FMC NOE	PD4	146
FMC NWE	PD5	147
FMC NWAIT	PD6	150
FMC NE1	PD7	151
FMC D13	PD8	96
FMC D14	PD9	97
FMC D15	PD10	98
FMC A16_CLE	PD11	99
FMC A17_ALE	PD12	100
FMC A18	PD13	101
FMC D0	PD14	104
FMC D1	PD15	105
FMC NBL0	PE0	169
FMC NBL1	PE1	170
SAI1 MCLKA	PE2	1
SAI1 SDB	PE3	2
SAI1 FSA	PE4	3
SAI1 SCKA	PE5	4
SAI1 SDA	PE6	5
FMC D4	PE7	68
FMC D5	PE8	69
FMC D6	PE9	70
FMC D7	PE10	73
FMC D8	PE11	74
FMC D9	PE12	75
FMC D10	PE13	76
FMC D11	PE14	77
FMC D12	PE15	78
FMC A0	PF0	16
FMC A1	PF1	17
FMC A2	PF2	18
FMC A3	PF3	19
FMC A4	PF4	20
FMC A5	PF5	21
F_CS	PF6	24
SPI5 SCK	PF7	25
SPI5 MISO	PF8	26
SPI5 MOSI	PF9	27
LCD DE	PF10	28
FMC SDNRAS	PF11	59
FMC A6	PF12	60
FMC A7	PF13	63
FMC A8	PF14	64
FMC A9	PF15	65

UIB

PD0/CAN1\_RX/FMC\_D2  
PD1/CAN1\_TX/FMC\_D3  
PD2/TIM3\_ETR/U5\_RX/SDIO\_CMD/DCMI\_D11  
PD3/SPI2\_SCK/I2S2\_CK/U2\_CTS/FMC\_CLK/DCMI\_D5/LCD\_G7  
PD4/U2\_RTS/FMC\_NOE  
PD5/U2\_TX/FMC\_NWE  
PD6/SPI3\_MOSI/I2S3\_SD\_SAI1\_SD\_A/U2\_RX/FMC\_NWAIT/DCMI\_D10/LCD\_B2  
PD7/U2\_CK/FMC\_NE1/FMC\_NCE2  
PD8/U3\_TX/FMC\_D13  
PD9/U3\_RX/FMC\_D14  
PD10/U3\_CK/FMC\_D15/LCD\_B3  
PD11/U3\_CTS/FMC\_A16  
PD12/TIM4\_CH1/U3\_RTS/FMC\_A17  
PD13/TIM4\_CH2/FMC\_A18  
PD14/TIM4\_CH3/FMC\_D0  
PD15/TIM4\_CH4/FMC\_D1

PE0/TIM4\_ETR/U8\_RX/FMC\_NBL0/DCMI\_D2  
PE1/U8\_TX/FMC\_NBL1/DCMI\_D3  
PE2/SPI4\_SCK/SAI1\_MCLK\_A/ETH\_MII\_TXD3/FMC\_A23  
PE3/SAI1\_SD\_B/FMC\_A19  
PE4/SPI4\_NSS/SAI1\_FS\_A/FMC\_A20/DCMI\_D4/LCD\_B0  
PE5/TIM9\_CH1/SPI4\_MISO/SAI1\_SCK\_A/FMC\_A21/DCMI\_D6/LCD\_G0  
PE6/TIM9\_CH2/SPI4\_MOSI/SAI1\_SD\_A/FMC\_A22/DCMI\_D7/LCD\_G1  
PE7/TIM1\_ETR/U7\_RX/FMC\_D4  
PE8/TIM1\_CH1N/U7\_TX/FMC\_D5  
PE9/TIM1\_CH1/FMC\_D6  
PE10/TIM1\_CH2N/FMC\_D7  
PE11/TIM1\_CH2/SPI4\_NSS/FMC\_D8/LCD\_G3  
PE12/TIM1\_CH3N/SPI4\_SCK/FMC\_D9/LCD\_B4  
PE13/TIM1\_CH3/SPI4\_MISO/FMC\_D10/LCD\_DE  
PE14/TIM1\_CH4/SPI4\_MOSI/FMC\_D11/LCD\_CLK  
PE15/TIM1\_BKIN/FMC\_D12/LCD\_R7

PF0/I2C2\_SDA/FMC\_A0  
PF1/I2C2\_SCL/FMC\_A1  
PF2/I2C2\_SMBA/FMC\_A2  
PF3/FMC\_A3/ADC3\_IN9  
PF4/FMC\_A4/ADC3\_IN14  
PF5/FMC\_A5/ADC3\_IN15  
PF6/TIM10\_CH1/SPI5\_NSS/SAI1\_SD\_B/U7\_RX/FMC\_NIORD/ADC3\_IN4  
PF7/TIM11\_CH1/SPI5\_SCK/SAI1\_MCLK\_B/U7\_TX/FMC\_NREG/ADC3\_IN5  
PF8/TIM13\_CH1/SPI5\_MISO/SAI1\_SCK\_B/FMC\_NIOWR/ADC3\_IN6  
PF9/TIM14\_CH1/SPI5\_MOSI/SAI1\_FS\_B/FMC\_CD/ADC3\_IN7  
PF10/FMC\_INTR/DCMI\_D11/LCD\_DE/ADC3\_IN8  
PF11/SPI5\_MOSI/FMC\_SDNRAS/DCMI\_D12  
PF12/FMC\_A6  
PF13/FMC\_A7  
PF14/FMC\_A8  
PF15/FMC\_A9

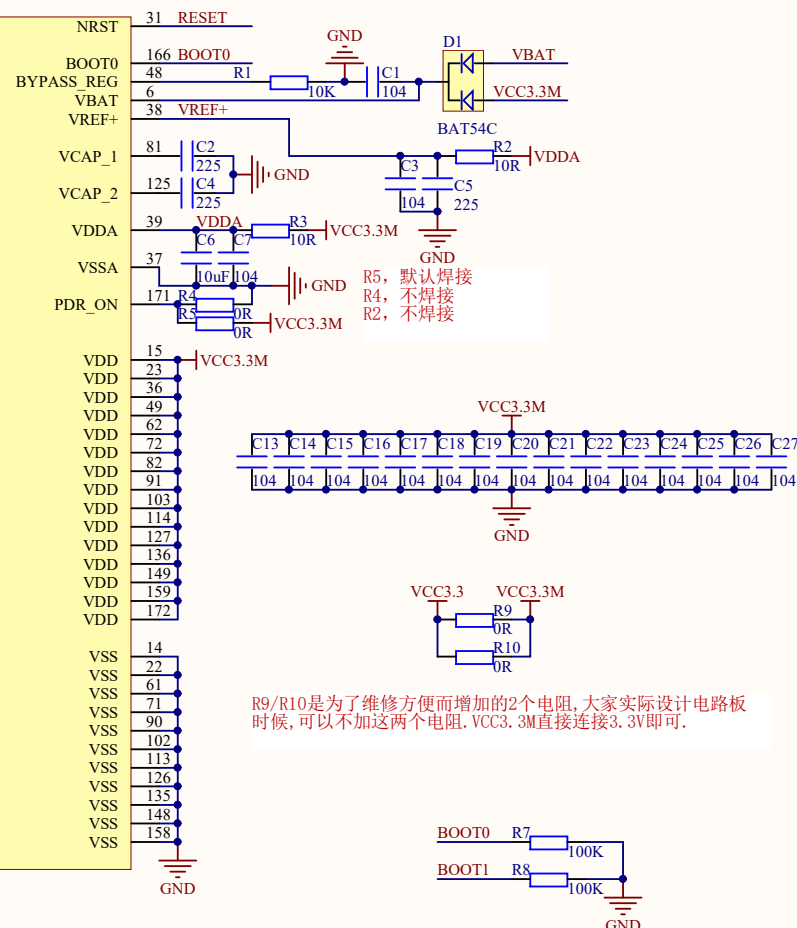
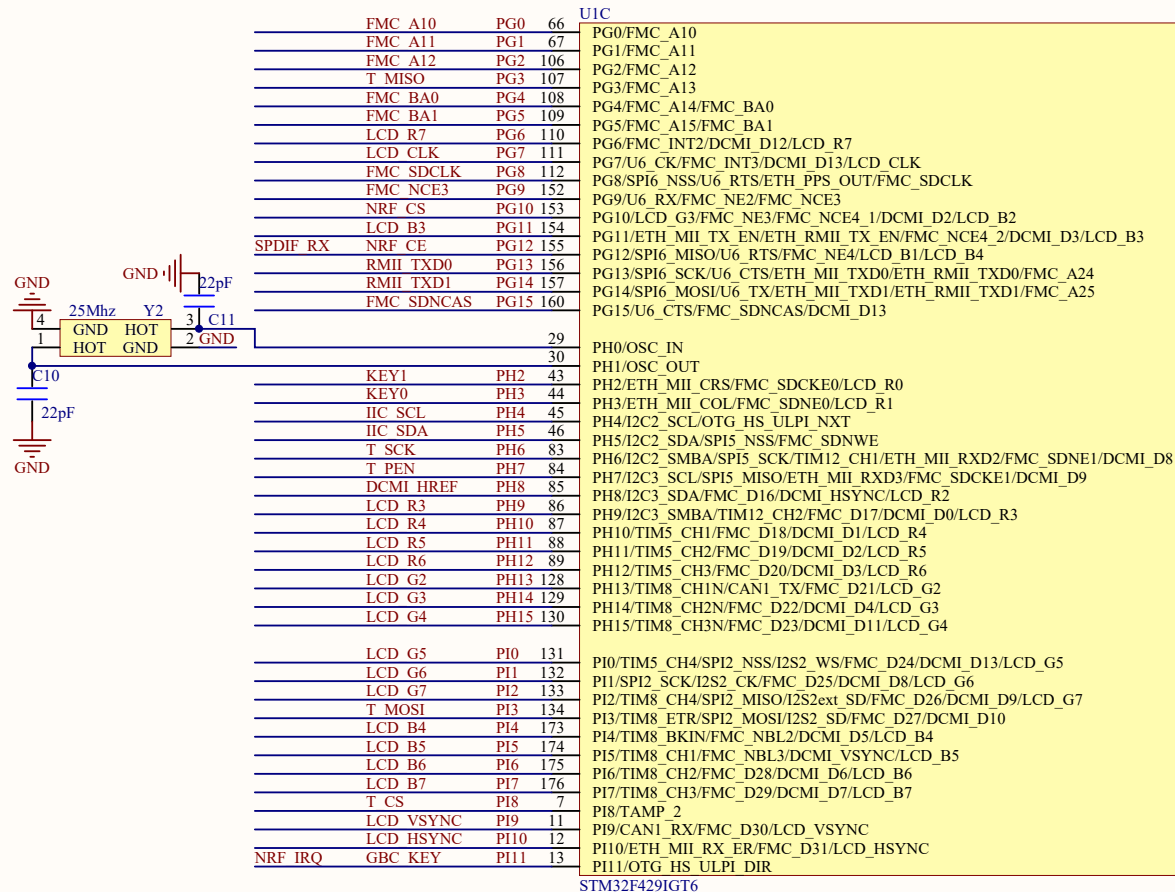
STM32F429IGT6

Title: Apollo STM32F429 CoreBoard CORE DEF	
Author: ATOM@ALIENTEK	Size: SheetSize
Date: 2022/10/8	File: STM32F429 CORE_DEF.SchDoc
Revision: V2.0	Version: Version

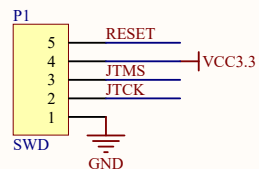


正点原子

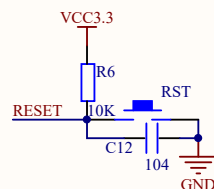
## MCU\_GHI



## SWD



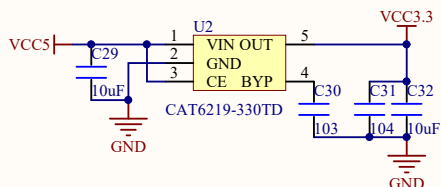
# RESET



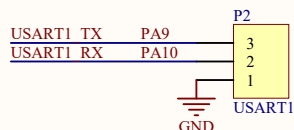
Title:	Apollo STM32F429 CoreBoard CORE GHI
Author:	Size:
ATOM@ALIENTEK	SheetSize
Date:	File:
2022/10/8	STM32F429 CORE GHI.SchDoc
Revision:	Version:
V2.0	Version



## LDO



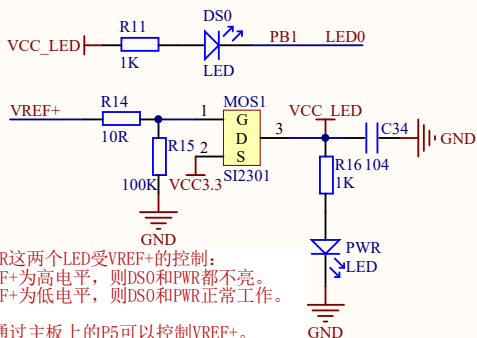
## USART1



## KEY



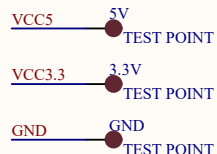
## LED



DS0和PWR这两个LED受VREF+的控制：  
如果VREF+为高电平，则DS0和PWR都不亮。  
如果VREF+为低电平，则DS0和PWR正常工作。

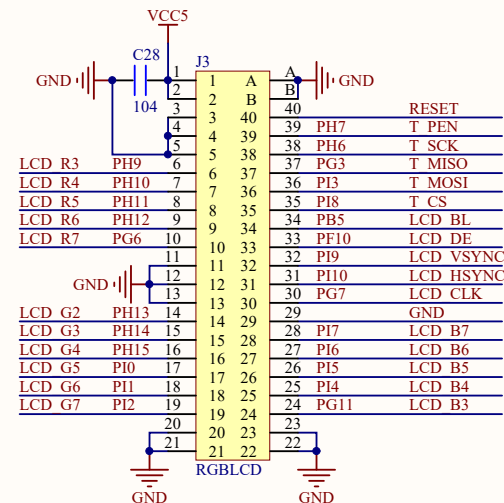
注意：通过主板上的P5可以控制VREF+。

## TEST POINT



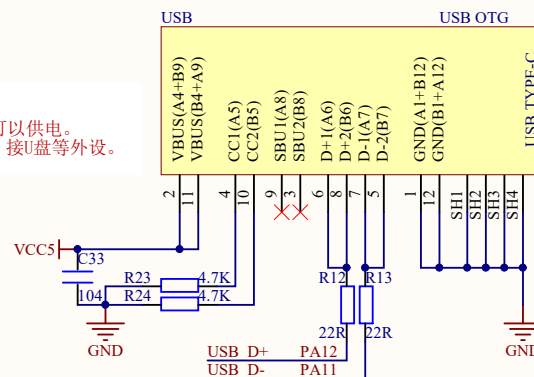
这是三个电源电压测试点。可用来测试核心板的电源是否正常。也可以用来给核心板供电：焊接GND和5V，然后接外部5V电压即可。

## RGB LCD



## Type-C USB

此USB接口有如下功能：  
1，单独使用核心板时，可给核心板供电。  
2，可做USB Slave接口，连接电脑，同时也可以供电。  
3，可做USB Host接口（需Type C转OTG线），接U盘等外设。

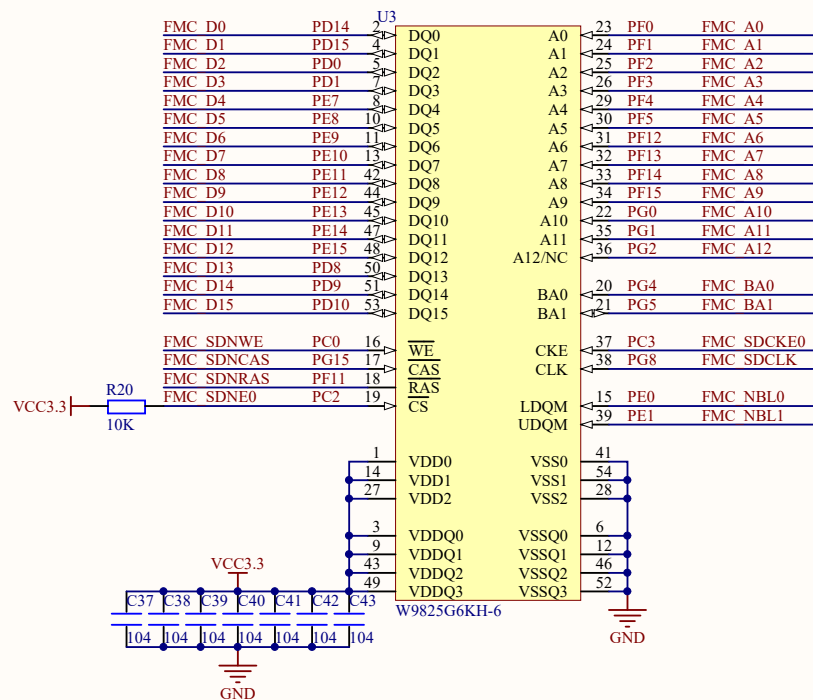


Title: Apollo STM32F429 CoreBoard LCD&POWER	
Author: ATOM@ALIENTEK	Size: SheetSize
Date: 2022/10/8	File: STM32F429 LCD&POWER.SchDoc
Revision: V2.0	Version: Version

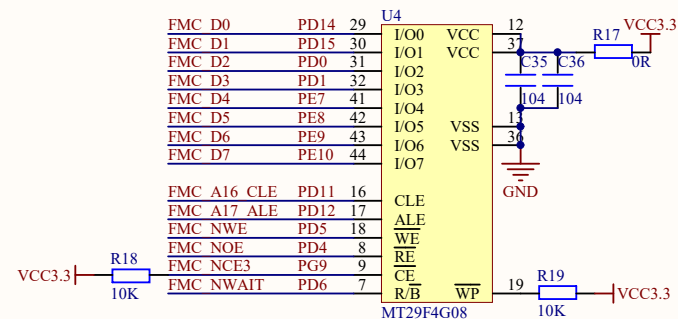


正点原子

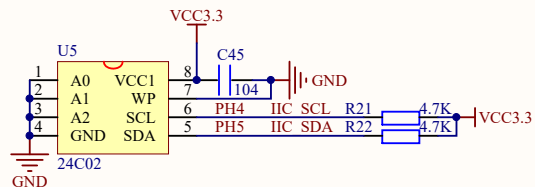
## SDRAM



## NAND FLASH



## EEPROM



## SPI FLASH

