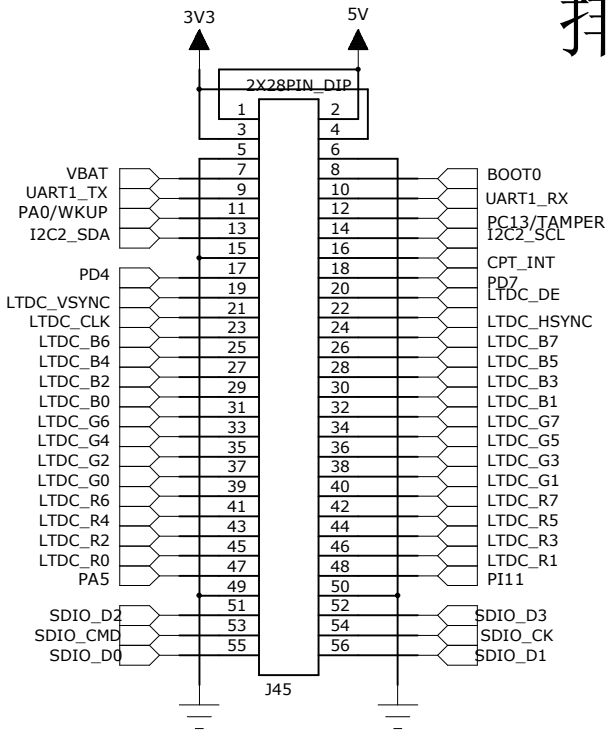
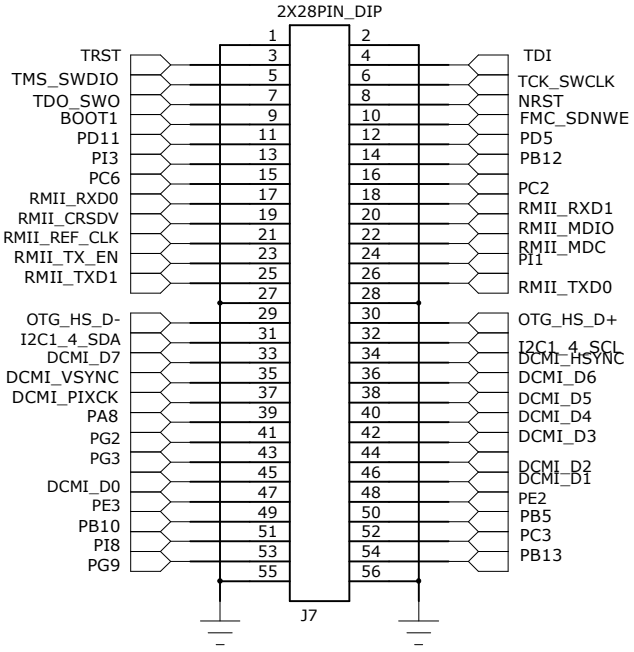
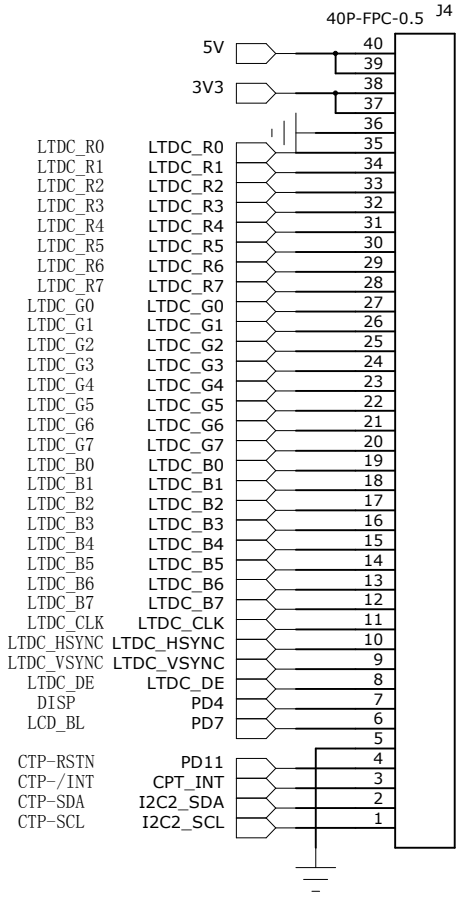
排针



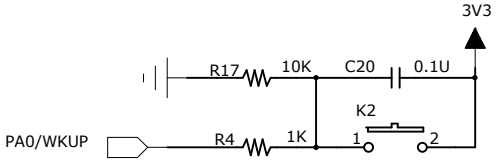


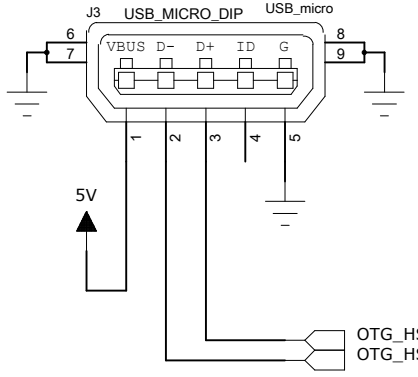
液晶接口-RGB888模式

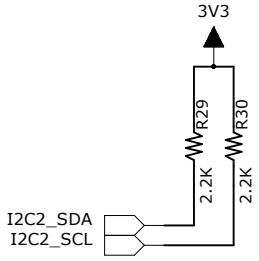


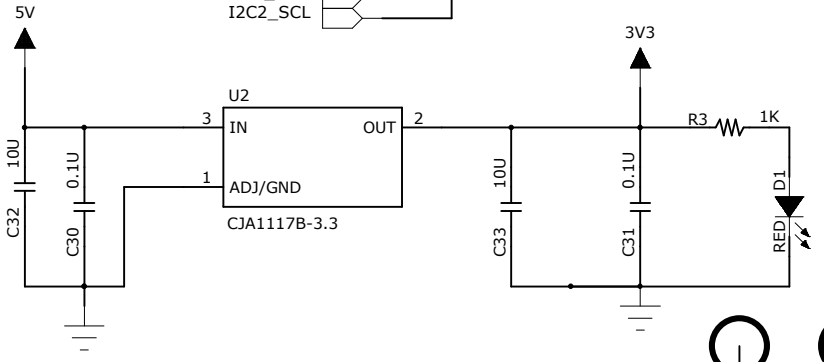
KEY

按键设计上是上升沿中断的

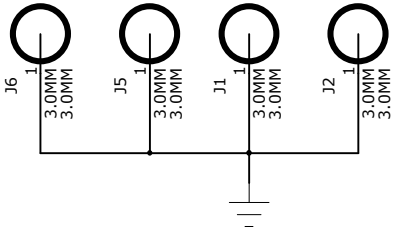


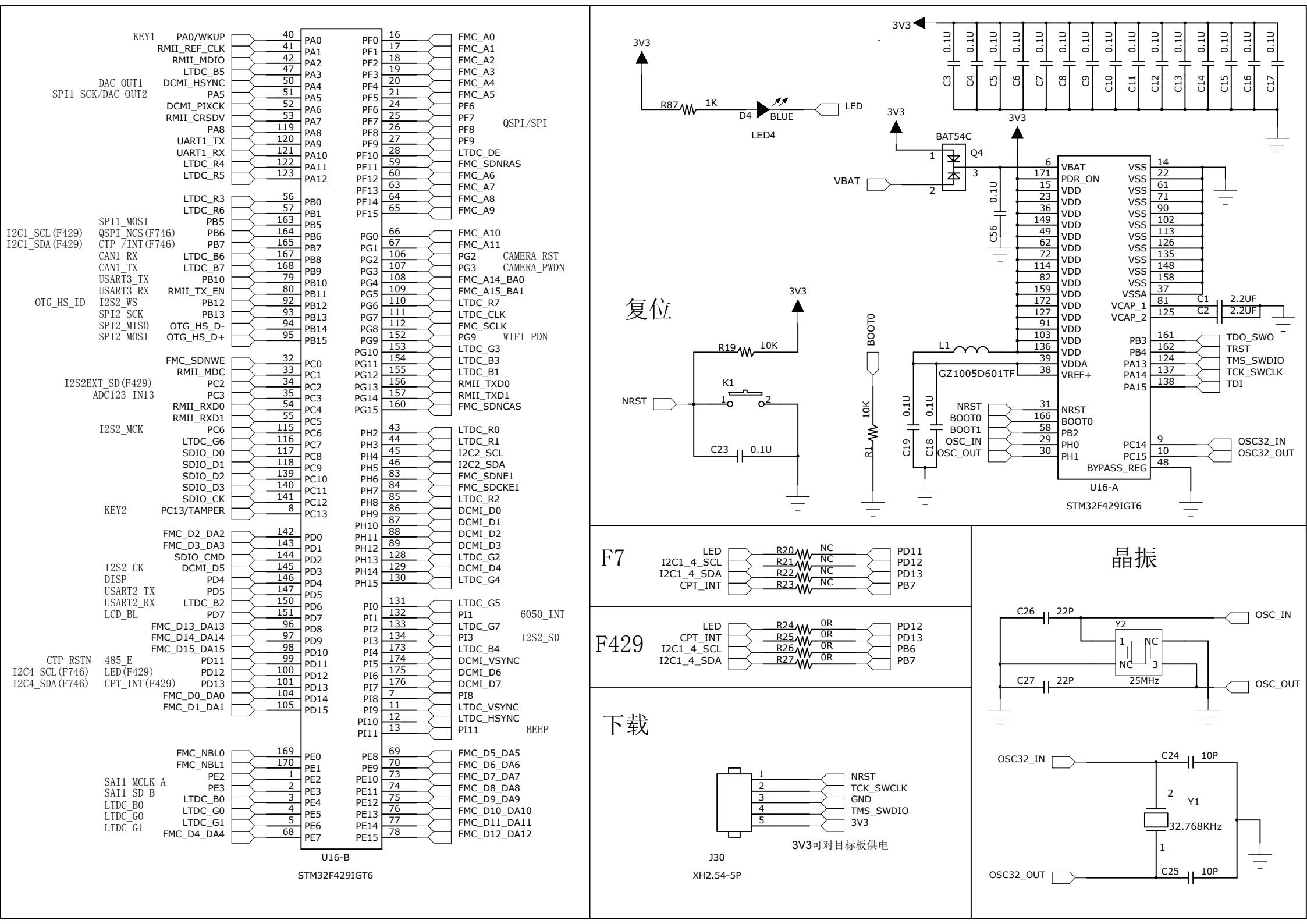




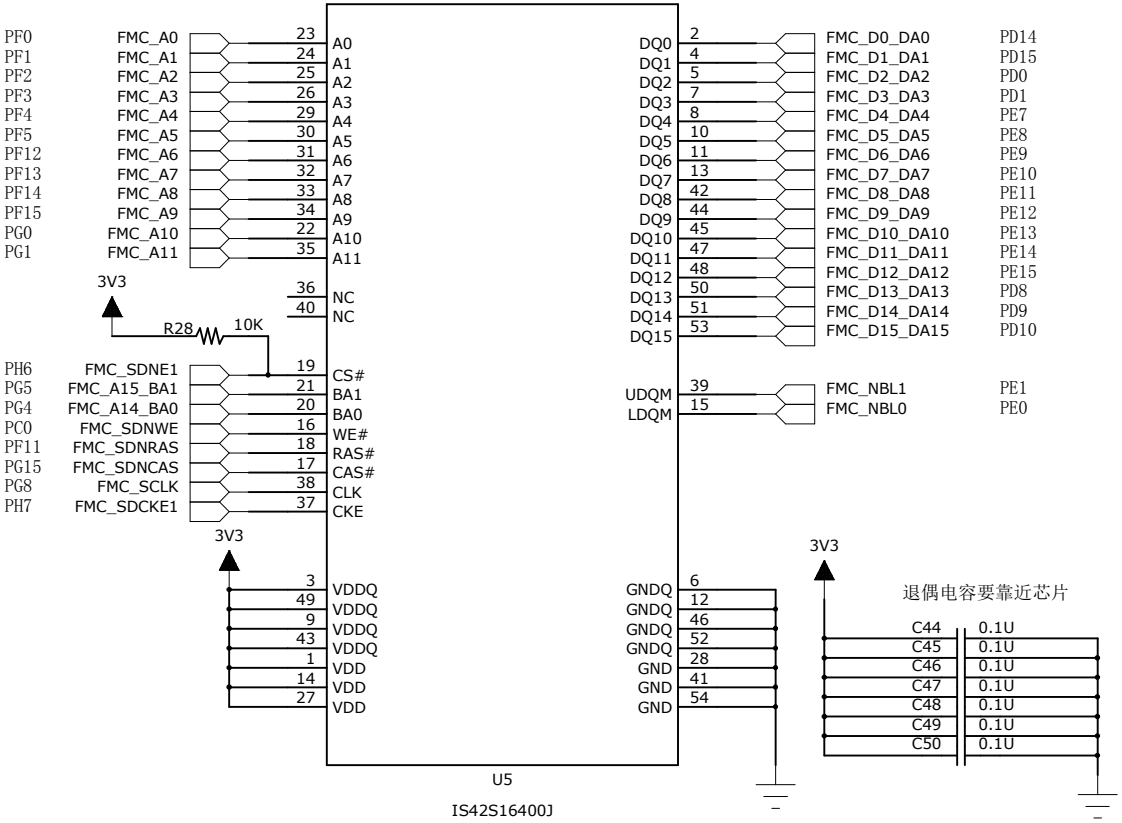


电源指示灯



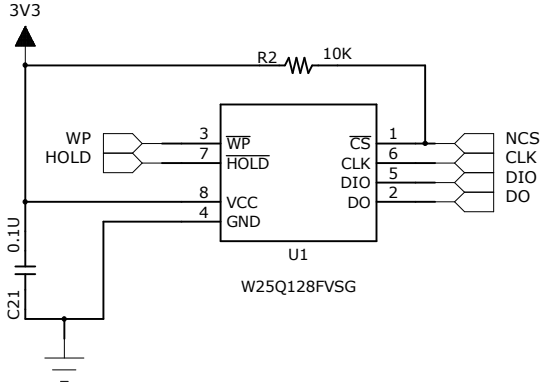
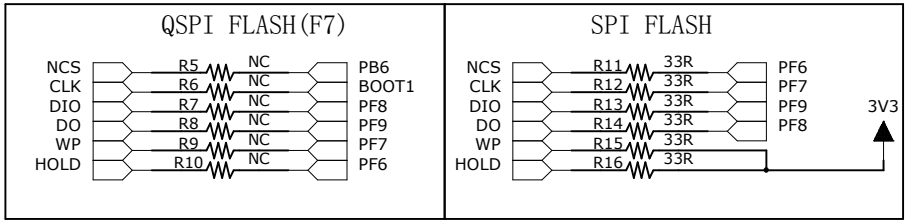

KEY1 PA0/WKUP 40 PA0
RMII_REF_CLK 41 PA1
RMII_MDIO 42 PA2
LTDC_B5 47 PA3
DAC_OUT1 DCMI_HSYNC 50 PA4
SPI1_SCK/DAC_OUT2 PA5 51 PA5
DCMI_PIXCK 52 PA6
RMII_CRSDV 53 PA7
PA8 119 PA8
UART1_TX 120 PA9
UART1_RX 121 PA10
LTDC_R4 122 PA11
LTDC_R5 123 PA12
LTDC_R3 56 PB0
LTDC_R6 57 PB1
SPI1_MOSI PB5 163 PB5
I2C1_SCL(F429) QSPI_NCS(F746) PB6 164 PB6
I2C1_SDA(F429) CTP-/INT(F746) PB7 165 PB7
CAN1_RX LTDC_B6 167 PB8
CAN1_TX LTDC_B7 168 PB9
USART3_TX PB10 79 PB10
USART3_RX RMII_TX_EN 80 PB11
OTG_HS_ID I2S2_WS PB12 92 PB12
SPI2_SCK PB13 93 PB13
SPI2_MISO OTG_HS_D- 94 PB14
SPI2_MOSI OTG_HS_D+ 95 PB15
FMC_SDNWE 32 PC0
RMII_MDC 33 PC1
I2S2EXT_SD(F429) PC2 34 PC2
ADC123_IN13 PC3 35 PC3
RMII_RXD0 54 PC4
RMII_RXD1 55 PC5
I2S2_MCK PC6 115 PC6
LTDC_G6 116 PC7
SDIO_D0 117 PC8
SDIO_D1 118 PC9
SDIO_D2 139 PC10
SDIO_D3 140 PC11
SDIO_CK 141 PC12
KEY2 PC13/TAMPER 8 PC13
FMC_D2_DA2 142 PD0
FMC_D3_DA3 143 PD1
SDIO_CMD 144 PD2
I2S2_CK DCMI_D5 145 PD3
DISP PD4 146 PD4
USART2_TX PD5 147 PD5
USART2_RX LTDC_B2 150 PD6
LCD_BL PD7 151 PD7
FMC_D13_DA13 96 PD8
FMC_D14_DA14 97 PD9
FMC_D15_DA15 98 PD10
CTP-RSTN 485_E PD11 99 PD11
I2C4_SCL(F746) LED(F429) PD12 100 PD12
I2C4_SDA(F746) CPT_INT(F429) PD13 101 PD13
FMC_D0_DA0 104 PD14
FMC_D1_DA1 105 PD15
FMC_NBL0 169 PE0
FMC_NBL1 170 PE1
SAI1_MCLK_A PE2 1 PE2
SAI1_SD_B PE3 2 PE3
LTDC_B0 3 PE4
LTDC_G0 4 PE5
LTDC_G1 5 PE6
FMC_D4_DA4 68 PE7
PF0 16 FMC_A0
PF1 17 FMC_A1
PF2 18 FMC_A2
PF3 19 FMC_A3
PF4 20 FMC_A4
PF5 21 FMC_A5
PF6 24 PF6
PF7 25 PF7
PF8 26 PF8
PF9 27 PF9
PF10 28 LTDC_DE
PF11 59 FMC_SDNRAS
PF12 60 FMC_A6
PF13 63 FMC_A7
PF14 64 FMC_A8
PF15 65 FMC_A9
PG0 66 FMC_A10
PG1 67 FMC_A11
PG2 106 CAMERA_RST
PG3 107 CAMERA_PWDN
PG4 108 FMC_A14_BA0
PG5 109 FMC_A15_BA1
PG6 110 LTDC_R7
PG7 111 LTDC_CLK
PG8 112 FMC_SCLK
PG9 152 WIFI_PDN
PG10 153 LTDC_G3
PG11 154 LTDC_B3
PG12 155 LTDC_B1
PG13 156 RMII_TXD0
PG14 157 RMII_TXD1
PG15 160 FMC_SDNCAS
PH2 43 LTDC_R0
PH3 44 LTDC_R1
PH4 45 I2C2_SCL
PH5 46 I2C2_SDA
PH6 83 FMC_SDNE1
PH7 84 FMC_SDCKE1
PH8 85 LTDC_R2
PH9 86 DCMI_D0
PH10 87 DCMI_D1
PH11 88 DCMI_D2
PH12 89 DCMI_D3
PH13 128 LTDC_G2
PH14 129 DCMI_D4
PH15 130 LTDC_G4
PI0 131 LTDC_G5
PI1 132 6050_INT
PI2 133 LTDC_G7
PI3 134 I2S2_SD
PI4 173 LTDC_B4
PI5 174 DCMI_VSYNC
PI6 175 DCMI_D6
PI7 176 DCMI_D7
PI8 7 PI8
PI9 11 LTDC_VSYNC
PI10 12 LTDC_HSYNC
PI11 13 BEEP
PE8 69 FMC_D5_DA5
PE9 70 FMC_D6_DA6
PE10 73 FMC_D7_DA7
PE11 74 FMC_D8_DA8
PE12 75 FMC_D9_DA9
PE13 76 FMC_D10_DA10
PE14 77 FMC_D11_DA11
PE15 78 FMC_D12_DA12
QSPI/SPI
U16-B
STM32F429IGT6
3V3
R87 1K
D4 BLUE
LED
LED4
C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 0.1U
BAT54C
Q4
VBAT
C56 0.1U
复位
R19 10K
K1
NRST
C23 0.1U
BOOT0
R1 10K
L1
GZ1005D601TF
C19 0.1U
C18 0.1U
OSC_IN
OSC_OUT
VBAT PDR_ON VDD VDDA VREF+
VSS VSSA VCAP_1 VCAP_2
C1 2.2UF
C2 2.2UF
PB3 PB4 PA13 PA14 PA15
TDO_SWO TRST TMS_SWDIO TCK_SWCLK TDI
NRST BOOT0 PB2 PH0 PH1
PC14 PC15 BYPASS_REG
OSC32_IN OSC32_OUT
U16-A
STM32F429IGT6
F7
F429
LED I2C1_4_SCL I2C1_4_SDA CPT_INT
R20 R21 R22 R23 NC
R24 R25 R26 R27 0R
PD11 PD12 PD13 PB7 PB6
下载
1 NRST
2 TCK_SWCLK
3 GND
4 TMS_SWDIO
5 3V3
3V3可对目标板供电
J30
XH2.54-5P
晶振
C26 22P
C27 22P
Y2
25MHz
OSC_IN
OSC_OUT
OSC32_IN
C24 10P
Y1
32.768KHz
C25 10P
OSC32_OUT

SDRAM



IS42S16400J-7TLI
容量：8M BYTE
频率143MHZ 速度 7ns
温度范围：-40°~85° 适合工业场合

SDRAM部分 参考了 STM32F429I-disco 的SDRAM原理图
硬件和软件都完全兼容

串行FLASH

容量:16MB