

MOTHER BOARD CON

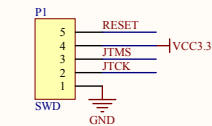
主板接口，由2个*30P的3710M端子（公）组成，可插在ALIENTEK阿波罗STM32H743T6主板上。

J1	30	31	BOOT0
VBAT	29	32	PG14
PC13	28	33	PG15
PB9	27	34	PG16
PB8	27	34	PD7
PB7	26	35	PD3
PB6	25	36	PD10
PB5	24	37	PD2
PB4	23	38	PD1
PB3	22	39	PC11
PB2	21	40	PC10
PB1	20	41	JTCK
PC4	19	42	PA14
PC3	18	43	PA13
PC2	17	44	PA3
PC1	16	45	PA2
PA15	15	46	PA5
PA14	14	47	PA6
PA13	13	48	PA7
PA12	12	49	PA8
PA11	11	50	PA9
PA10	10	51	PA10
PA9	9	52	PA11
PA8	8	53	PA12
PA7	7	54	PA13
PA6	6	55	PA14
PA5	5	56	PA15
PA4	4	57	PA16
PA3	3	58	PA17
PA2	2	59	PA18
PA1	1	60	PA19
GND			VCC5

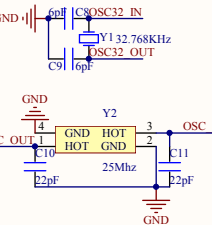
3710M060046G3FT01

J2	30	31	GND
PH14	29	32	PI2
PH15	29	32	PI1
PD6	28	33	PA10
PD4	27	34	PI0
PG12	26	35	PG11
PH2	25	36	PH3
PH1	24	37	PH6
PD5	23	38	PI7
PD12	21	40	PI8
PA8	20	41	PI9
PC9	19	42	PA0
PC8	18	43	PA1
PC7	18	43	PE1
PC6	17	44	PD14
PG6	15	46	PD15
PD13	14	47	PD7
PC3	13	48	PD1
PH11	12	49	PE8
PH10	11	50	PE9
PH9	10	51	PE10
PH7	9	52	PE11
PH6	8	53	PE12
PH5	7	54	PE13
PH4	6	55	PE14
PH3	5	56	PE15
PH2	4	57	PE16
PH1	3	58	PE17
PH0	2	59	PD9
PH11	1	60	PD10
GND			PE18

3710M060046G3FT01



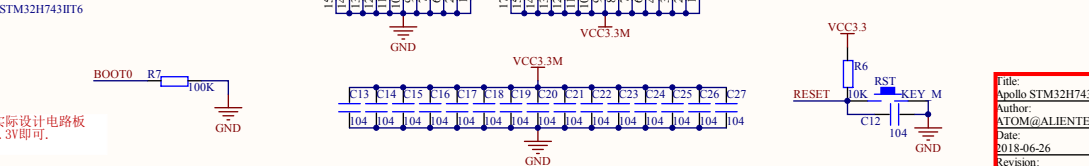
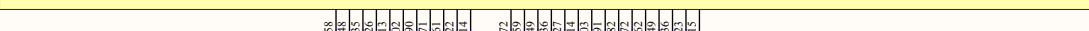
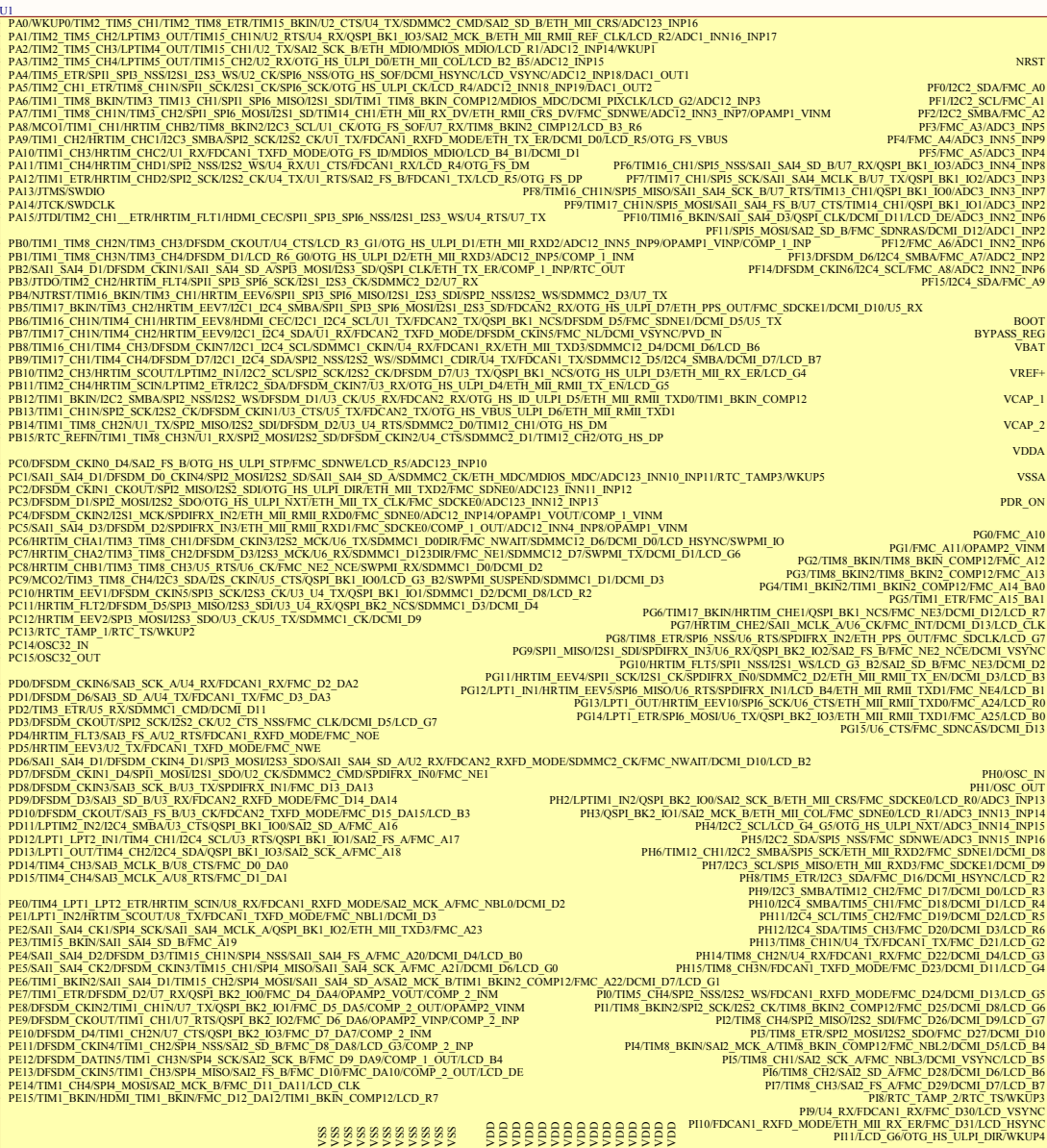
XTAL



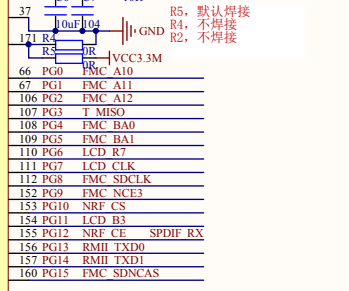
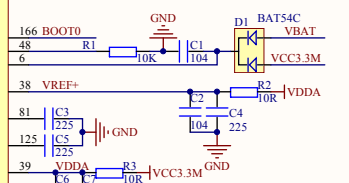
MCU

WK UP	PA0	40	U1
RMII REF CLK	PA1	41	
ETH MDIO	PA2	42	
USART2_TX	PWM DAC	PA3	47
USART2_RX	STM DAC	PA4	50
GBC_LED	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
	OSPI_BK1_CLK	PB2	58
DCMI_SDA	JTDO	PB3	161
DCMI_SCL	JTRST	PB4	162
	LCD_BL	PB5	163
	OSPI_BK1_NCS	PB6	164
	DCMI_VSYNC	PB7	165
	DCMI_D7	PB8	167
	DCMI_D6	PB9	168
USART3_TX	RMII_TX_EN	PB10	79
USART3_RX	IC_IN1	PB11	80
TWIRE_DQ	SP2_SCK	PB13	93
	SP2_SCK	PB13	93
	SP2_MISO	PB14	94
	SP2_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
	DCMI_D2	PC8	117
SDIO_D0	DCMI_D3	PC9	118
SDIO_D1	DCMI_D4	PC10	119
SDIO_D2	DCMI_D5	PC11	140
SDIO_SCK	KEY2	PC12	141
	OS3C2_IN	PC13	8
	OS3C2_OUT	PC14	10
	FMC_D2	PD0	142
	FMC_D3	PD1	143
SDIO_CMD	FMC_D4	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_NB10	PE0	169
	FMC_NB11	PE1	170
	SAIL_MCLKA	PE2	1
	SAIL_SDB	PE3	2
	SAIL_FSA	PE4	3
	SAIL_SCKA	PE5	4
	SAIL_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

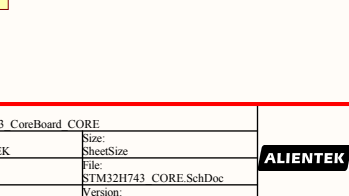
R8/R9是为了维修方便而增加的2个电阻，大家实际设计电路板时候，可以不加这两个电阻。VCC3_3M直接连接3.3V即可。



31	RESET
16	PF0 FMC A0
17	PF1 FMC A1
18	PF2 FMC A2
19	PF3 FMC A3
20	PF4 FMC A4
21	PF5 FMC A5
22	PF6 OSPI BK1 IO3
23	PF7 OSPI BK1 IO2
24	PF8 OSPI BK1 IO1
25	PF9 OSPI BK1 IO0
26	PF10 LCD DE
27	PF11 FMC SDNRAS
28	PF12 FMC A6
29	PF13 FMC A7
30	PF14 FMC A8
31	PF15 FMC A9

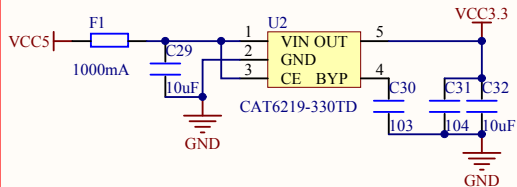


66	PG0 FMC A10
67	PG1 FMC A11
68	PG2 FMC A12
69	PG3 T MIS2
70	PG4 FMC BA0
71	PG5 FMC BA1
72	PG6 LCD R7
73	PG7 LCD CLK
74	PG8 FMC SDCLK
75	PG9 FMC NCE3
76	PG10 NRF CS
77	PG11 LCD B3
78	PG12 NRF CE SPDIF RX
79	PG13 RMII TXD0
80	PG14 RMII TXD1
81	PG15 FMC SNCAS

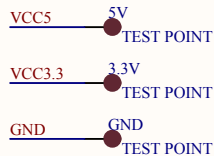


File: ApolloSTM32H743 CoreBoard CORE
 Author: ATOM@ALIENTEK
 Date: 2018-06-26
 Revision: V1.0
 Size: SheetSize
 File: STM32H743 CORE SchDoc
 Version: V1.0
ALIENTEK

LDO

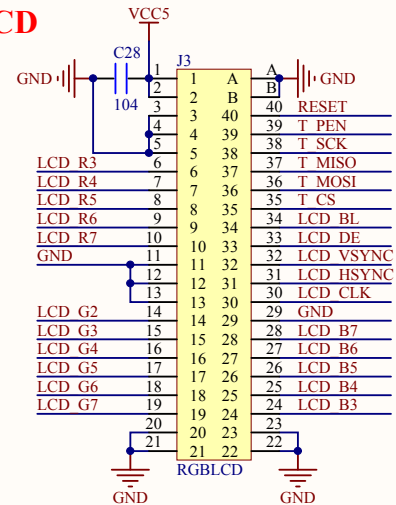


TEST POINT

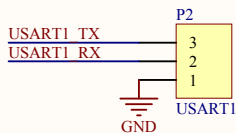


这是三个电源电压测试点。可用来测试核心板的电源是否正常。也可以用来给核心板供电：焊接GND和5V，然后接外部5V电压即可。

RGB LCD



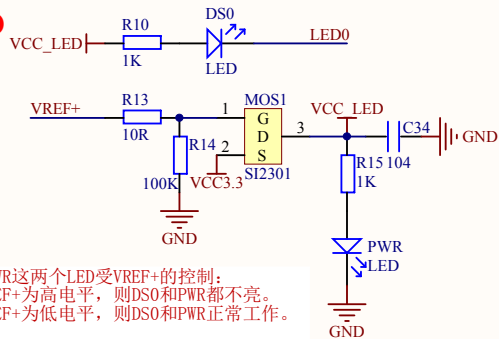
USART1



KEY



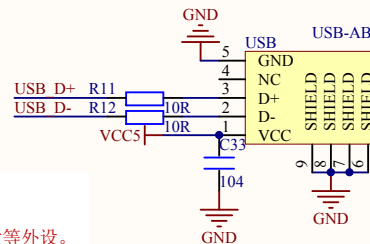
LED



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+。

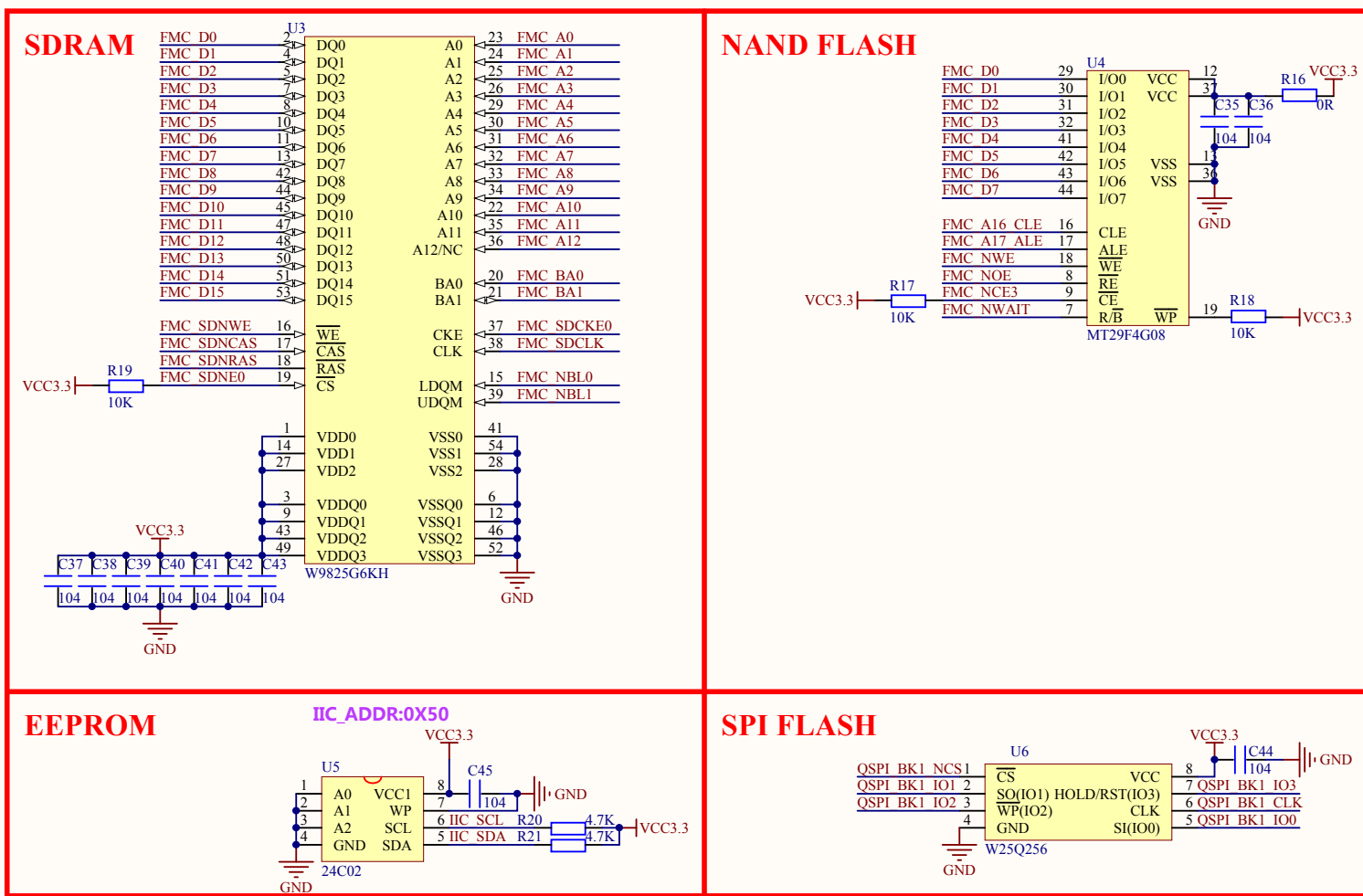
MicroUSB



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

Title: Apollo STM32H743 CoreBoard LCD&POWER	
Author: ATOM@ALIENTEK	SheetSize
Date: 2018-06-26	File: STM32H743 LCD&POWER.SchDoc
Revision: V1.0	Version: Version





Title: Apollo STM32H743 CoreBoard MEMORY	
Author: ATOM@ALIENTEK	Size: SheetSize
Date: 2018-06-26	File: STM32H743 MEMORY.SchDoc
Revision: V1.0	Version: Version



65.00mm

45.00mm

ALIEN TEK

STM32H743 Core Board V1.0

