POWER

MCU

USB

INTERFACE

FLASH

FONT--GT30L32S4W

VCC
R3 1K R4 1K
0805 green 0805 red
RXD1 TXD1
RXD TXD

P2
1 2 3
PWR_SW

F1 500mA 5V U2 3.3V
C1 10uF/16V C2 0.1uF IN OUT / GND OUT ASM1117-3.3 C4 10uF/16V C5 0.1uF

Current test1 A1 A2

P1
A1B12
A4B9
B8
A3
B3
A6
A7
B6
A8
B5
A9B4
A12B1
Type-C
VBUS
D+
D-
VBUS

VCC R2 1K LED1 GND
0805 red

P4
5V 1 / 3.3V 2 / GND 5 / 5V 4 / 3.3V 2 / GND 6
P6
3.3V 1 / VCC 2 / 5V 3
POWER SELECT

EPD drive is 3.3V

GND GND U3 VCC C7 0.1uF GND
C6 0.1uF
GND RXD TXD RXD RS232 RTS# DTR# DCD# RI DSR# CTS#
N_C1 22pF N_X1 12M N_C2 22pF
CH340G
D+ D- UD+ UD- XI XO
DTR

P5
BUSY 8
RES 7
D/C 6
CS 5
SPI_SCK 4
SPI_MOSI 3
GND 2
3.3V_S2 1
EPD DRIVE

P3 PWR_Jump
B1 B2
Current test2
3.3V R1 0Ω 3.3V_S2

MARK1
MARK2

S1 RESET SW-PB4
GND

VCC R6 10K
DTR C8 0.1uF RESET

N_C3 22pF XTAL2
N_X2 16M
N_C4 22pF XTAL1
GND

P7
5V 1
RESET 2
3.3V 3
5V 4
GND 5
GND 6
GND 7
VIN 8
POWER

C9 0.1uF VCC
GND

VCC R5 1K L1 IO13
0805 green

U4
RESET 29 PC6/RESET/PCINT14
XTAL2 8 PB7(TOSC2/XTAL2/PCINT7)
XTAL1 7 PB6(TOSC1/XTAL1/PCINT6)
AREF 20 AREF
AVCC 18
VCC 6
VCC 4
GND 5
GND 3
GND 21
AD7 22 ADC7
AD6 19 ADC6
PB5(SCK/PCINT5) 17 SPI_SCK
PB4(MISO/PCINT4) 16 SPI_MISO
PB3(MOSI/OC2A/PCINT3) 15 SPI_MOSI
PB2(OC1B/SS/PCINT2) 14 IO10
PB1(OC1A/PCINT1) 13 SPI_CS2
PB0(ICP1/CLKO/PCINT0) 12 SPI_CS1
PC5(ADC5/SCL/PCINT13) 28 AD5/SCL
PC4(ADC4/SDA/PCINT12) 27 AD4/SDA
PC3(ADC3/PCINT11) 26 AD3
PC2(ADC2/PCINT10) 25 AD2
PC1(ADC1/PCINT9) 24 AD1
PC0(ADC0/PCINT8) 23 AD0
PD7(AIN1/PCINT23) 11 CS
PD6(AIN0/OC0A/PCINT22) 10 D/C
PD5(T1/OX0B/PCINT21) 9 RES
PD4(T0/XCK/PCINT20) 2 BUSY
PD3(INT1/OC2B/PCINT19) 1 IO3
PD2(INT0/PCINT18) 32 IO2
PD1(TXD/PCINT17) 31 IO1
PD0(RXD/PCINT16) 30 IO0
ATMEGA328P-AU

RXD R8 1K
TXD R7 1K

P8
IO12 1 2 VCC
IO13 3 4 IO11
RESET 5 6 GND
ICSP

P9
AD5/SCL 10
AD4/SDA 9
AREF 8
GND 7
IO13 6
IO12 5
IO11 4
IO10 3
IO9 2
IO8 1
IOH

P10
AD5/SCL 6
AD4/SDA 5
AD3 4
AD2 3
AD1 2
AD0 1
AD

P11
IO7 8
IO6 7
IO5 6
IO4 5
IO3 4
IO2 3
IO1 2
IO0 1
IOL

U1
SPI_CS1 1 CS VCC 8 3.3V
SPI_MISO 2 SO HOLD 7 C3 0.1uF GND
NC 3 NC CLK 6 SPI_SCK
4 GND SI 5 SPI_MOSI
GT30L32S4W

U5
SPI_CS2 1 CS VCC 8 3.3V C10 0.1uF GND
SPI_MISO 2 SO HOLD 7
3.3V 3 WP CLK 6 SPI_SCK
4 GND SI 5 SPI_MOSI
W25Q16

Title
Size C Number Revision
Date: 2022/6/23 Sheet of
File: F:\ \..\Arduino UNO-L.SCH Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
Plug	Plug	A1, A2, B1, B2	PIN1	Plug	4
10uF/16V		C1, C4	12001_钽电解电容器10μF/	ELECTRO1	2
0.1uF	贴片陶瓷电容	C2, C3, C5, C6, C7, C8, C9, C10	C0603	10001_CAP普通电容器, CAP, CPC, M	8
Fuse	保险丝	F1	1812	Fuse 2	1
0805 green	发光二极管	L1, RX1	LED_0805	LED0	2
0805 red	发光二极管	LED1, TX1	LED_0805	LED0	2
MARK		MARK1, MARK2	MARK	MARK	2
22pF	贴片陶瓷电容	N_C1, N_C2, N_C3, N_C4	C0603	MYCAP	4
12M	贴片无源晶振	N_X1	CR5030	7.	1
16M	贴片无源晶振	N_X2	CR5030	7.	1
Type-C	Header, 12-Pin	P1	USB-TYPE-C_16PIN--MINI	Header 12	1
PWR_SW	Connector	P2	SWITCH	CON3	1
PWR_Jump	Header, 2-Pin	P3	HDR1X2	Header 2	1
	Header, 3-Pin, Dual row	P4	HDR2X3	Header 3X2	1
EPD DRIVE	Header, 8-Pin	P5	HDR1X8	Header 8	1
POWER SELECT	Header, 3-Pin	P6	HDR1X3	Header 3	1
POWER	Header, 8-Pin	P7	HDR1X8	Header 8	1
ICSP	Header, 3-Pin, Dual row	P8	HDR2X3	Header 3X2	1
IOH	Header, 10-Pin	P9	HDR1X10	Header 10	1
AD	Header, 6-Pin	P10	HDR1X6	Header 6	1
IOL	Header, 8-Pin	P11	HDR1X8	Header 8	1
0Ω	贴片电阻	R1	R0603	Res1	1
1K	贴片电阻	R2, R3, R4, R5, R7, R8	R0603	Res1	6
10K	贴片电阻	R6	R0603	Res1	1
SW-PB4	微动开关	S1	按键	SW-PB4	1
GT30L32S4W		U1	SOIC8_W	W25X32_1	1
ASM1117-3.3	3.3V稳压芯片	U2	SOT-223	ASM1117	1
CH340G		U3	SOP16	CH340G	1
ATMEGA328P-AU		U4	TQFP.04*8	ATMEGA328P-AU	1
W25Q16		U5	SOIC8_W	W25X32_1	1