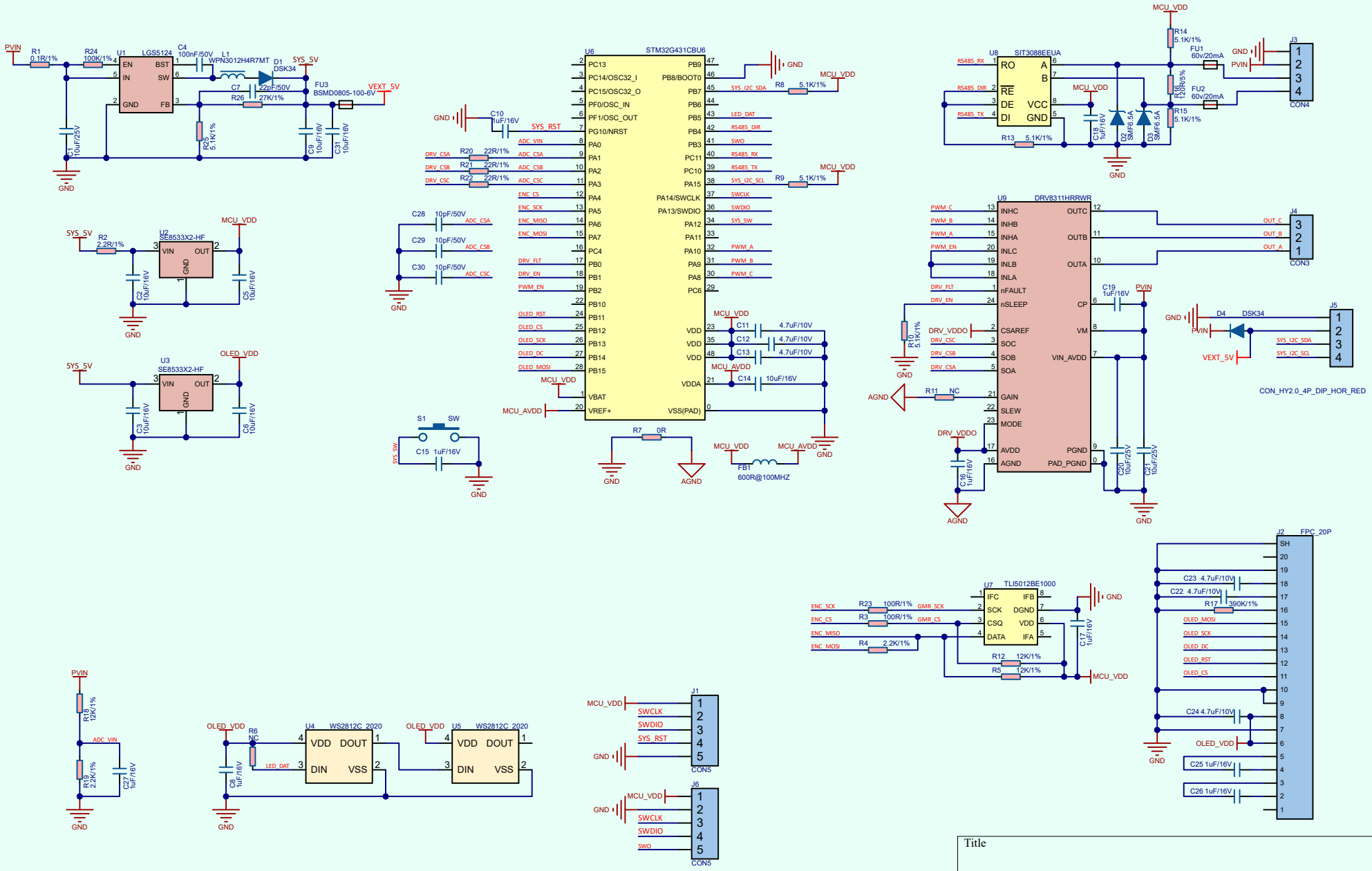
PVIN
R1 0.1R/1%
R24 100K/1%
U1 LGS5124
EN
IN
GND
BST
SW
FB
C4 100nF/50V
L1 WPN3012H4R7MT
D1 DSK34
SYS_5V
C7 22pF/50V
R26 27K/1%
FU3 BSMD0805-100-6V
VEXT_5V
R25 5.1K/1%
C1 10uF/25V
C9 10uF/16V
C31 10uF/16V
U6 STM32G431CBU6
PC13
PC14/OSC32_I
PC15/OSC32_O
PF0/OSC_IN
PF1/OSC_OUT
PG10/NRST
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PC4
PB0
PB1
PB2
PB10
PB11
PB12
PB13
PB14
PB15
VBAT
VREF+
PB9
PB8/BOOT0
PB7
PB6
PB5
PB4
PB3
PC11
PC10
PA15
PA14/SWCLK
PA13/SWDIO
PA12
PA11
PA10
PA9
PA8
PC6
VDD
VDD
VDD
VDDA
VSS(PAD)
SYS_I2C_SDA
SYS_I2C_SCL
LED_DAT
RS485_DIR
SWO
RS485_RX
RS485_TX
SWCLK
SWDIO
SYS_SW
PWM_A
PWM_B
PWM_C
SYS_RST
ADC_VIN
ADC_CSA
ADC_CSB
ADC_CSC
ENC_CS
ENC_SCK
ENC_MISO
ENC_MOSI
DRV_FLT
DRV_EN
PWM_EN
OLED_RST
OLED_CS
OLED_SCK
OLED_DC
OLED_MOSI
R8 5.1K/1%
R9 5.1K/1%
R20 22R/1%
R21 22R/1%
R22 22R/1%
C10 1uF/16V
C28 10pF/50V
C29 10pF/50V
C30 10pF/50V
C11 4.7uF/10V
C12 4.7uF/10V
C13 4.7uF/10V
C14 10uF/16V
R7 0R
FB1 600R@100MHZ
S1 SW
C15 1uF/16V
MCU_VDD
MCU_AVDD
U8 SIT3088EEUA
RO
RE
DE
DI
A
B
VCC
GND
R14 5.1K/1%
R15 5.1K/1%
R16 120R/5%
R13 5.1K/1%
FU1 60v/20mA
FU2 60v/20mA
D2 SMF6.5A
D3 SMF6.5A
C18 1uF/16V
J3
CON4
U9 DRV8311HRRWR
INHC
INHB
INHA
INLC
INLB
INLA
nFAULT
nSLEEP
CSAREF
SOC
SOB
SOA
GAIN
SLEW
MODE
AVDD
AGND
OUTC
OUTB
OUTA
CP
VM
VIN_AVDD
PGND
PAD_PGND
DRV_VDDO
R10 5.1K/1%
R11 NC
C19 1uF/16V
C16 1uF/16V
C20 10uF/25V
C21 10uF/25V
J4
CON3
D4 DSK34
J5
CON_HY2.0_4P_DIP_HOR_RED
U2 SE8533X2-HF
U3 SE8533X2-HF
VIN
OUT
GND
R2 2.2R/1%
C2 10uF/16V
C5 10uF/16V
C3 10uF/16V
C6 10uF/16V
U7 TLI5012BE1000
IFC
SCK
CSQ
DATA
IFB
DGND
VDD
IFA
R23 100R/1%
R3 100R/1%
R4 2.2K/1%
R12 12K/1%
R5 12K/1%
C17 1uF/16V
GMR_SCK
GMR_CS
J2 FPC_20P
C23 4.7uF/10V
C22 4.7uF/10V
R17 390K/1%
C24 4.7uF/10V
C25 1uF/16V
C26 1uF/16V
R18 12K/1%
R19 2.2K/1%
C27 1uF/16V
U4 WS2812C_2020
U5 WS2812C_2020
VDD
DOUT
DIN
VSS
R6 NC
C8 1uF/16V
J1
J6
CON5
Title
Size
A4
Number
Revision
Date: 6/12/2024
File: D:\M5\..\schematic.SchDoc
Sheet of
Drawn By: