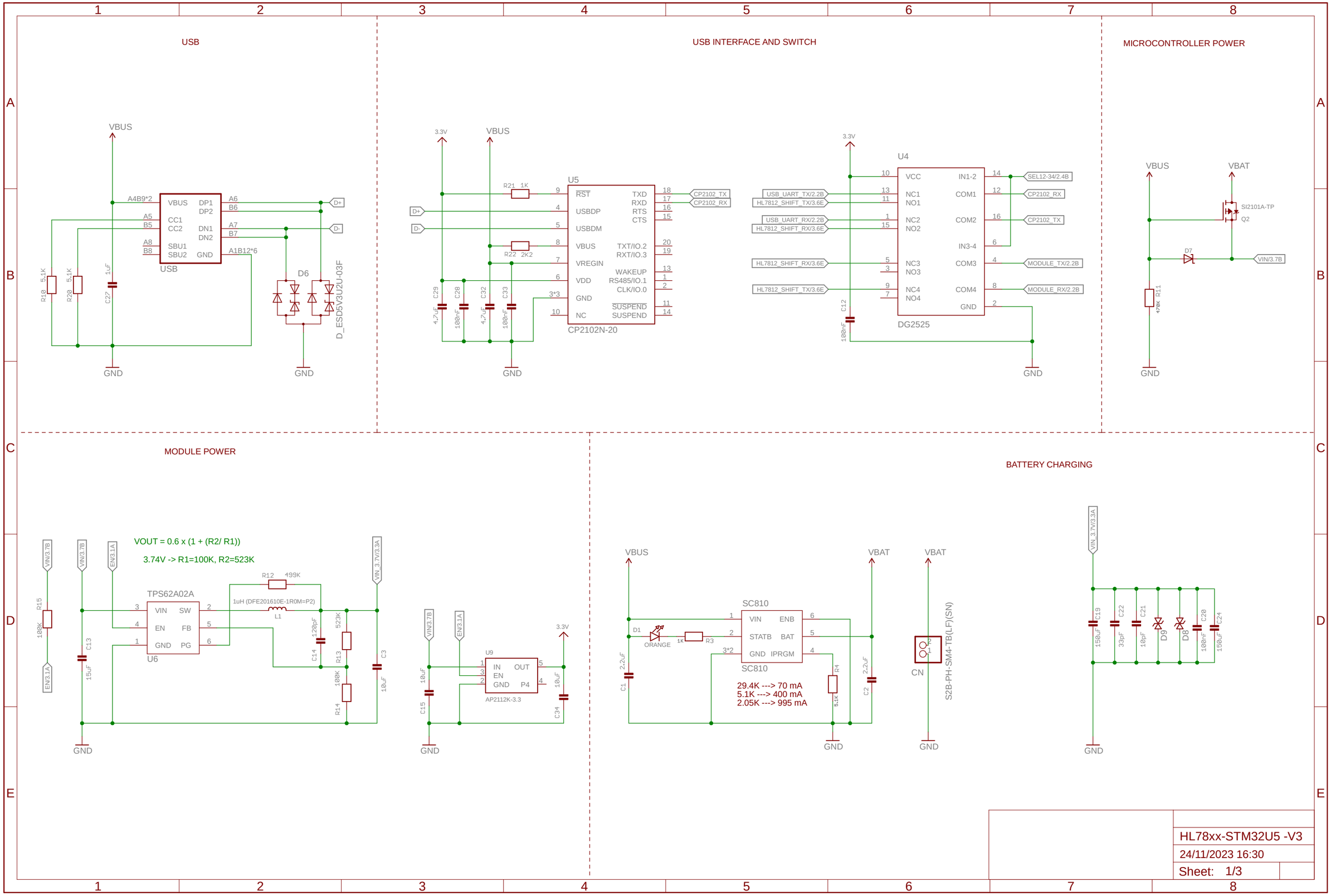

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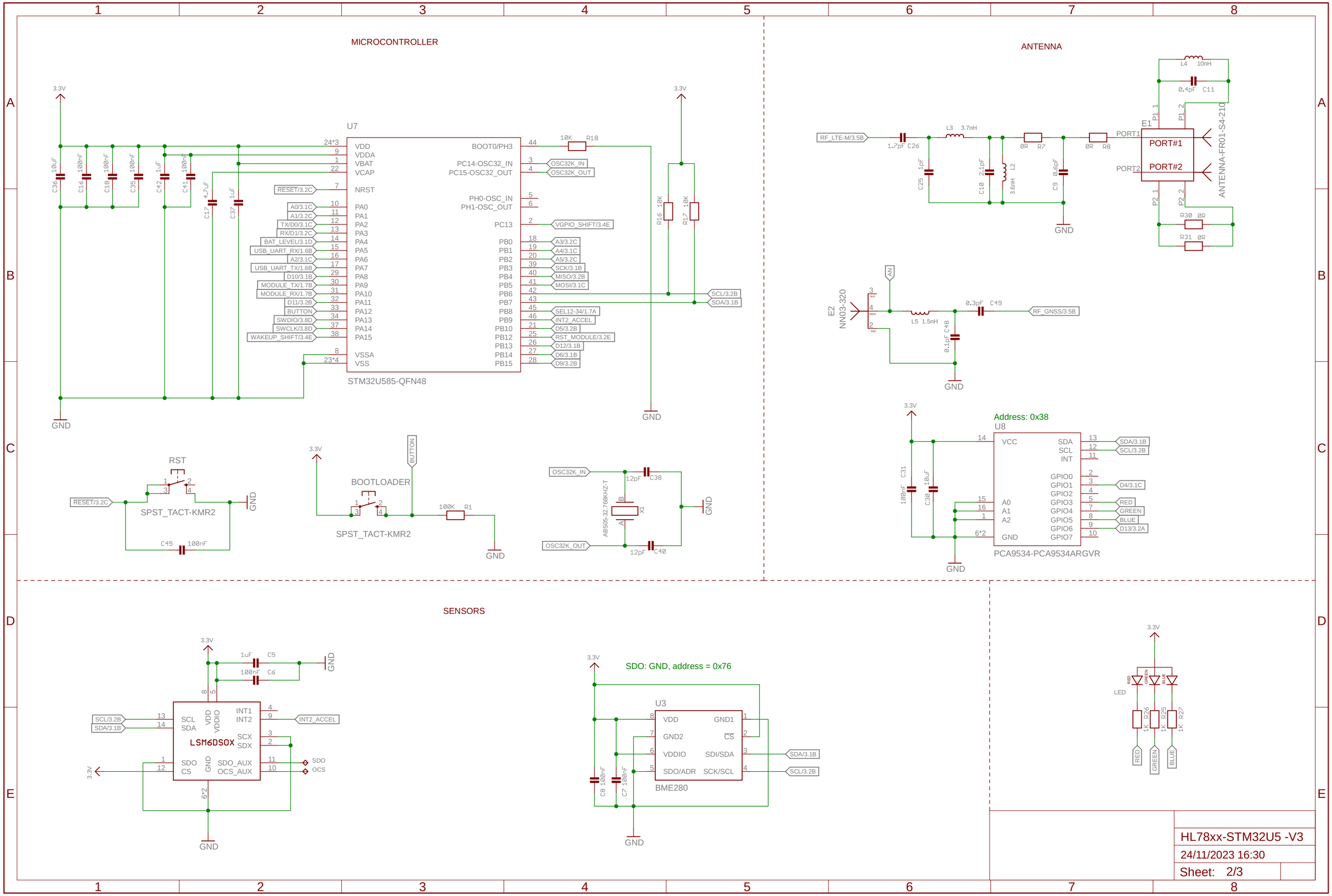
MICROCONTROLLER
U7
STM32U585-QFN48
VDD
VDDA
VBAT
VCAP
NRST
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
VSSA
VSS
BOOT0/PH3
PC14-OSC32_IN
PC15-OSC32_OUT
PH0-OSC_IN
PH1-OSC_OUT
PC13
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB12
PB13
PB14
PB15
RESET/3.2C
A0/3.1C
A1/3.2C
TX/D0/3.1C
RX/D1/3.2C
BAT_LEVEL/3.1D
USB_UART_RX/1.6B
A2/3.1C
USB_UART_TX/1.6B
D10/3.1B
MODULE_TX/1.7B
MODULE_RX/1.7B
D11/3.2B
BUTTON
SWDIO/3.8D
SWCLK/3.8D
WAKEUP_SHIFT/3.4E
OSC32K_IN
OSC32K_OUT
VGPIO_SHIFT/3.4E
A3/3.2C
A4/3.1C
A5/3.2C
SCK/3.1B
MISO/3.2B
MOSI/3.1C
SEL12-34/1.7A
INT2_ACCEL
D5/3.2B
RST_MODULE/3.2E
D12/3.1B
D6/3.1B
D9/3.2B
SCL/3.2B
SDA/3.1B
3.3V
GND
ANTENNA
E1
ANTENNA-FR01-S4-210
PORT#1
PORT#2
PORT1
PORT2
RF_LTE-M/3.5B
RF_GNSS/3.5B
E2
NN03-320
ANT
Address: 0x38
U8
PCA9534-PCA9534ARGVR
VCC
SDA
SCL
INT
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
A0
A1
A2
D4/3.1C
RED
GREEN
BLUE
D13/3.2A
RST
SPST_TACT-KMR2
BOOTLOADER
ABS05-32.768KHZ-T
X1
SENSORS
LSM6DSOX
INT1
INT2
SCX
SDX
SDO
CS
SDO_AUX
OCS_AUX
SDO: GND, address = 0x76
U3
BME280
VDD
GND1
GND2
CS
VDDIO
SDI/SDA
SDO/ADR
SCK/SCL
LED
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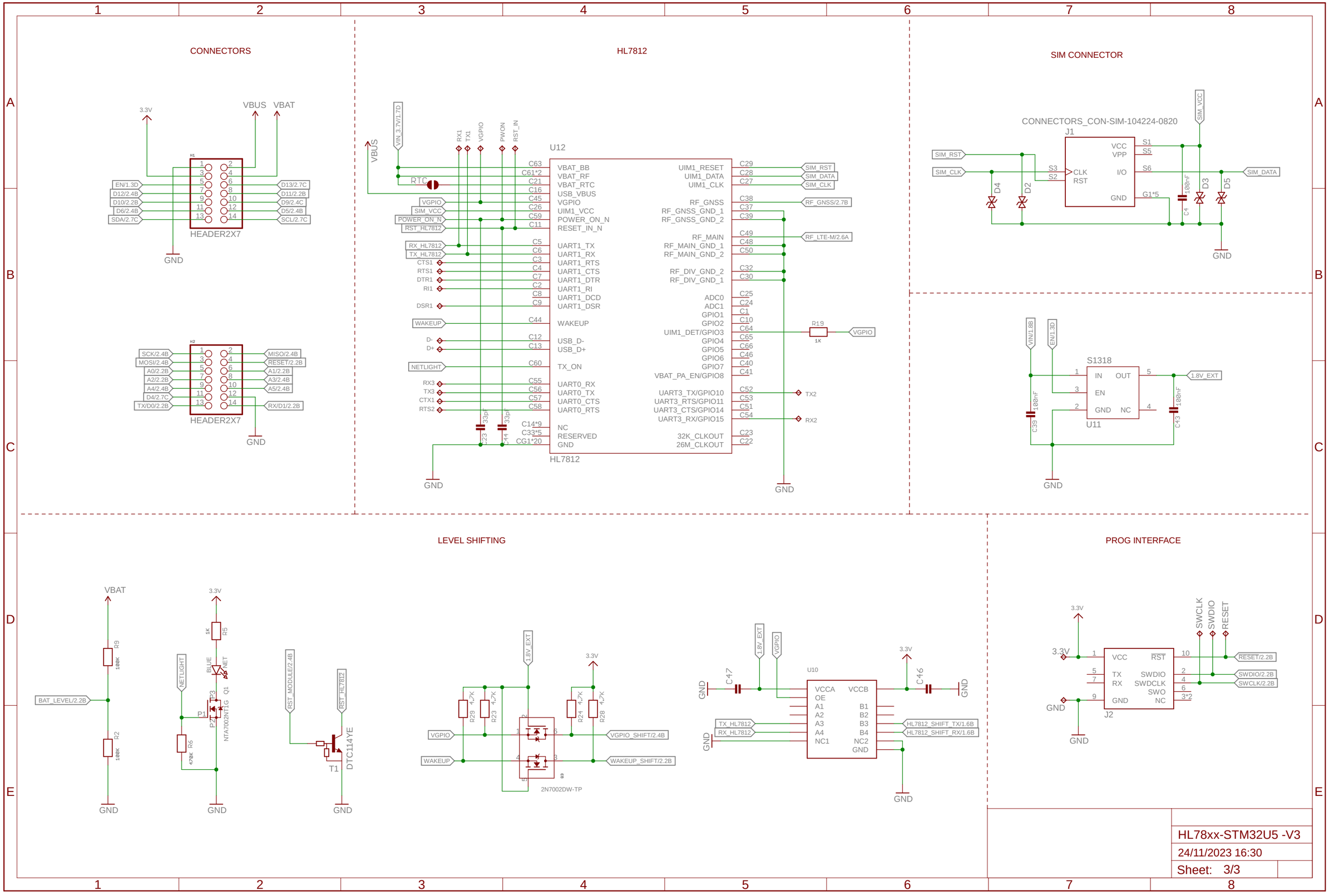
CONNECTORS
3.3V
VBUS
VBAT
H1
EN/1.3D
D12/2.4B
D10/2.2B
D6/2.4B
SDA/2.7C
D13/2.7C
D11/2.2B
D9/2.4C
D5/2.4B
SCL/2.7C
HEADER2X7
GND
H2
SCK/2.4B
MOSI/2.4B
A0/2.2B
A2/2.2B
A4/2.4B
D4/2.7C
TX/D0/2.2B
MISO/2.4B
RESET/2.2B
A1/2.2B
A3/2.4B
A5/2.4B
RX/D1/2.2B
HEADER2X7
GND
HL7812
VIN_3.7V/1.7D
VBUS
RX1
TX1
VGPIO
PWON
RST_IN
U12
RTC
VGPIO
SIM_VCC
POWER_ON_N
RST_HL7812
RX_HL7812
TX_HL7812
CTS1
RTS1
DTR1
RI1
DSR1
WAKEUP
D-
D+
NETLIGHT
RX3
TX3
CTX1
RTS2
C63
C61*2
C21
C16
C45
C26
C59
C11
C5
C6
C3
C4
C7
C2
C8
C9
C44
C12
C13
C60
C55
C56
C57
C58
C14*9
C33*5
CG1*20
VBAT_BB
VBAT_RF
VBAT_RTC
USB_VBUS
VGPIO
UIM1_VCC
POWER_ON_N
RESET_IN_N
UART1_TX
UART1_RX
UART1_RTS
UART1_CTS
UART1_DTR
UART1_RI
UART1_DCD
UART1_DSR
WAKEUP
USB_D-
USB_D+
TX_ON
UART0_RX
UART0_TX
UART0_CTS
UART0_RTS
NC
RESERVED
GND
HL7812
UIM1_RESET
UIM1_DATA
UIM1_CLK
RF_GNSS
RF_GNSS_GND_1
RF_GNSS_GND_2
RF_MAIN
RF_MAIN_GND_1
RF_MAIN_GND_2
RF_DIV_GND_2
RF_DIV_GND_1
ADC0
ADC1
GPIO1
GPIO2
UIM1_DET/GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
VBAT_PA_EN/GPIO8
UART3_TX/GPIO10
UART3_RTS/GPIO11
UART3_CTS/GPIO14
UART3_RX/GPIO15
32K_CLKOUT
26M_CLKOUT
C29
C28
C27
C38
C37
C39
C49
C48
C50
C32
C30
C25
C24
C1
C10
C64
C65
C66
C46
C40
C41
C52
C53
C51
C54
C23
C22
SIM_RST
SIM_DATA
SIM_CLK
RF_GNSS/2.7B
RF_LTE-M/2.6A
R19
1K
VGPIO
TX2
RX2
C23
33pF
C14
33pF
GND
GND
SIM CONNECTOR
CONNECTORS_CON-SIM-104224-0820
J1
SIM_VCC
SIM_RST
SIM_CLK
S3
S2
CLK
RST
VCC
VPP
I/O
GND
S1
S5
S6
G1*5
SIM_DATA
D4
D2
C4
100nF
D3
D5
GND
VIN/1.8B
EN/1.3D
S1318
IN
OUT
EN
GND
NC
U11
1.8V_EXT
C35
100nF
C43
100nF
GND
LEVEL SHIFTING
VBAT
R9
100K
BAT_LEVEL/2.2B
R2
100K
GND
3.3V
R5
1K
NETLIGHT
BLUE
NET
P3
Q1
NTA7002N-T1G
P1
P2
R6
470K
GND
RST_MODULE/2.4B
RST_HL7812
T1
DTC114YE
GND
1.8V_EXT
3.3V
R29
4.7K
R23
4.7K
R24
4.7K
R28
4.7K
VGPIO
WAKEUP
VGPIO_SHIFT/2.4B
WAKEUP_SHIFT/2.2B
2N7002DW-TP
GND
C47
1.8V_EXT
VGPIO
U10
VCCA
OE
A1
A2
A3
A4
NC1
VCCB
B1
B2
B3
B4
NC2
GND
3.3V
C46
GND
TX_HL7812
RX_HL7812
HL7812_SHIFT_TX/1.6B
HL7812_SHIFT_RX/1.6B
GND
PROG INTERFACE
3.3V
SWCLK
SWDIO
RESET
VCC
RST
TX
RX
SWDIO
SWDCLK
SWO
GND
NC
J2
RESET/2.2B
SWDIO/2.2B
SWCLK/2.2B
GND
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