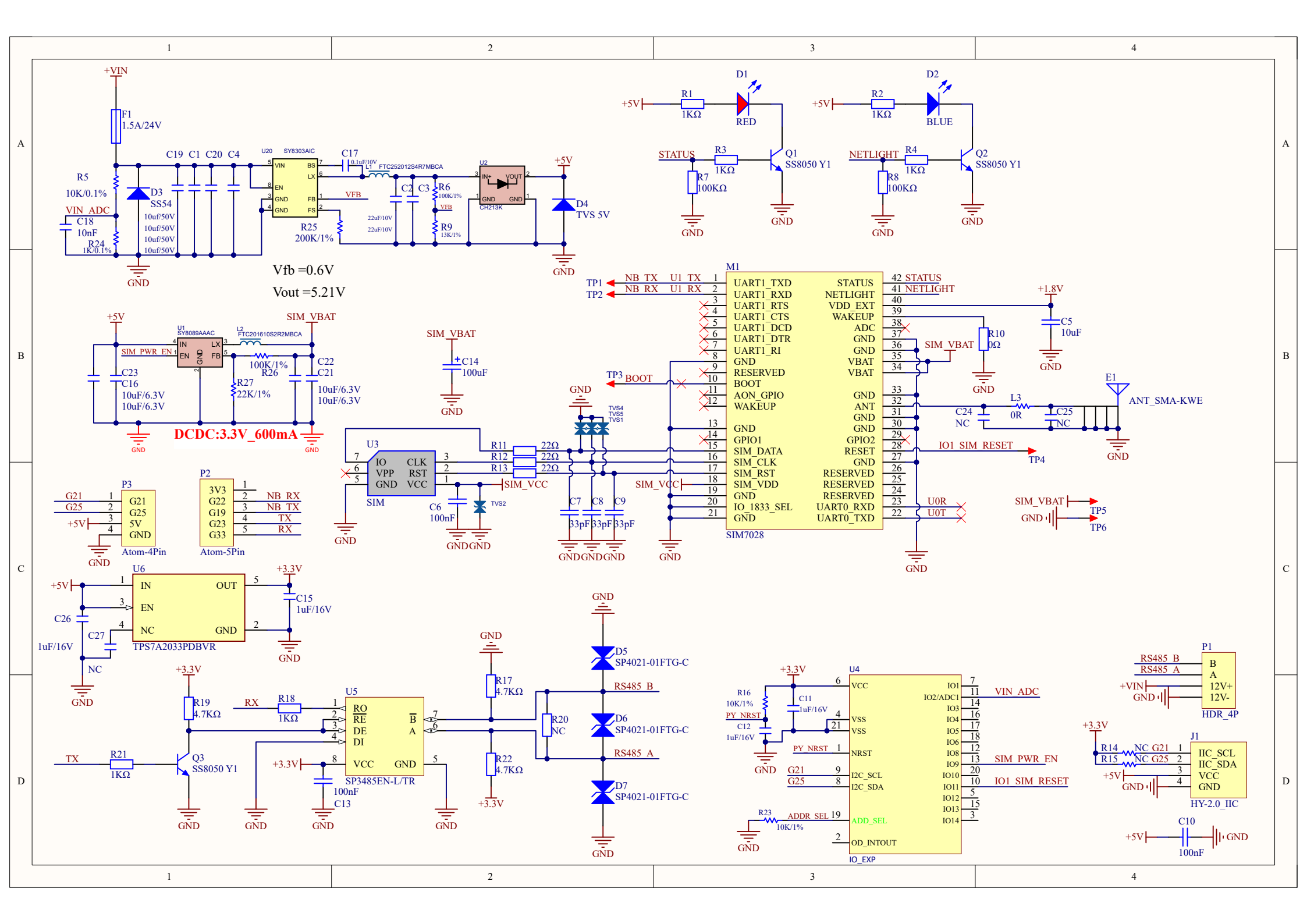
+VIN
F1
1.5A/24V
C19 C1 C20 C4
U20 SY8303AIC
C17
0.1uF/10V
L1 FTC252012S4R7MBCA
R5
10K/0.1%
D3
SS54
VIN_ADC
C18
10nF
R24
1K/0.1%
10uf/50V
10uf/50V
10uf/50V
10uf/50V
R25
200K/1%
VFB
C2 C3
22uF/10V
22uF/10V
R6
100K/1%
R9
13K/1%
U2
CH213K
D4
TVS 5V
+5V
GND
Vfb =0.6V
Vout =5.21V
D1
RED
D2
BLUE
R1
1KΩ
R2
1KΩ
STATUS
NETLIGHT
R3
R4
Q1
SS8050 Y1
Q2
SS8050 Y1
R7
100KΩ
R8
100KΩ
U1
SY8089AAAC
L2
FTC201610S2R2MBCA
SIM_PWR_EN
SIM_VBAT
C23
C16
10uF/6.3V
10uF/6.3V
100K/1%
R26
R27
22K/1%
C22
C21
10uF/6.3V
10uF/6.3V
DCDC:3.3V_600mA
C14
100uF
M1
SIM7028
TP1
TP2
NB_TX
U1_TX
NB_RX
U1_RX
TP3 BOOT
UART1_TXD
UART1_RXD
UART1_RTS
UART1_CTS
UART1_DCD
UART1_DTR
UART1_RI
RESERVED
BOOT
AON_GPIO
WAKEUP
GPIO1
SIM_DATA
SIM_CLK
SIM_RST
SIM_VDD
IO_1833_SEL
STATUS
NETLIGHT
VDD_EXT
WAKEUP
ADC
ANT
RESET
RESERVED
RESERVED
RESERVED
UART0_RXD
UART0_TXD
+1.8V
C5
10uF
R10
0Ω
C24
NC
L3
0R
C25
NC
E1
ANT_SMA-KWE
IO1_SIM_RESET
TP4
U0R
U0T
SIM_VBAT
TP5
TP6
U3
SIM
IO
VPP
CLK
RST
VCC
R11
R12
R13
22Ω
22Ω
22Ω
SIM_VCC
C6
100nF
TVS2
TVS4
TVS5
TVS1
C7
C8
C9
33pF
33pF
33pF
P3
Atom-4Pin
P2
Atom-5Pin
G21
G25
5V
GND
3V3
G22
G19
G23
G33
NB_RX
NB_TX
TX
RX
U6
TPS7A2033PDBVR
IN
EN
NC
OUT
GND
C26
C27
1uF/16V
C15
1uF/16V
+3.3V
U5
SP3485EN-L/TR
RO
RE
DE
DI
B
A
VCC
GND
R17
4.7KΩ
R18
1KΩ
R19
4.7KΩ
R20
NC
R21
1KΩ
R22
4.7KΩ
Q3
SS8050 Y1
100nF
C13
D5
SP4021-01FTG-C
D6
SP4021-01FTG-C
D7
SP4021-01FTG-C
RS485_B
RS485_A
U4
IO_EXP
VCC
VSS
NRST
I2C_SCL
I2C_SDA
ADD_SEL
OD_INTOUT
R16
10K/1%
C11
1uF/16V
C12
1uF/16V
PY_NRST
R23
10K/1%
ADDR_SEL
IO1
IO2/ADC1
IO3
IO4
IO5
IO6
IO8
IO9
IO10
IO11
IO12
IO13
IO14
VIN_ADC
SIM_PWR_EN
IO1_SIM_RESET
P1
HDR_4P
B
A
12V+
12V-
RS485_B
RS485_A
+VIN
J1
HY-2.0_IIC
IIC_SCL
IIC_SDA
VCC
GND
R14
R15
NC G21
NC G25
C10
100nF