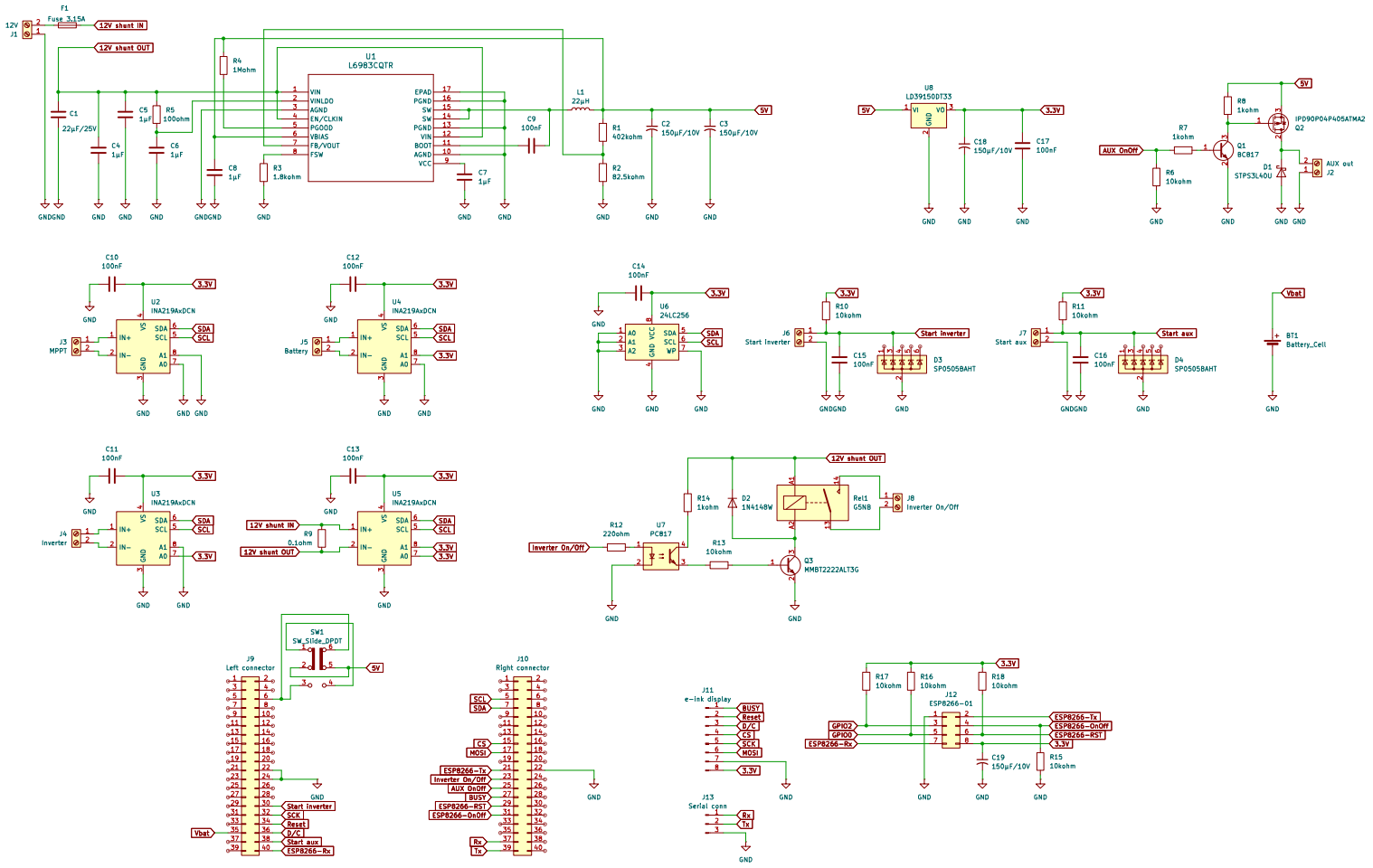
12V
J1
F1
Fuse 3.15A
12V shunt IN
12V shunt OUT
C1
22µF/25V
C4
1µF
C5
1µF
R5
100ohm
C6
1µF
R4
1Mohm
C8
1µF
R3
1.8kohm
U1
L6983CQTR
VIN
VINLDO
AGND
EN/CLKIN
PGOOD
VBIAS
FB/VOUT
FSW
EPAD
PGND
SW
SW
PGND
VIN
BOOT
AGND
VCC
C9
100nF
C7
1µF
L1
22µH
R1
402kohm
R2
82.5kohm
C2
150µF/10V
C3
150µF/10V
5V
GND
U8
LD39150DT33
VI
GND
VO
3.3V
C18
150µF/10V
C17
100nF
R8
1kohm
IPD90P04P405ATMA2
Q2
R7
1kohm
AUX OnOff
Q1
BC817
R6
10kohm
D1
STPS3L40U
AUX out
J2
C10
100nF
U2
INA219AxDCN
J3
MPPT
IN+
IN−
VS
GND
SDA
SCL
A1
A0
C12
100nF
U4
INA219AxDCN
J5
Battery
C14
100nF
U6
24LC256
A0
A1
A2
GND
VCC
SDA
SCL
WP
R10
10kohm
J6
Start Inverter
C15
100nF
D3
SP0505BAHT
Start Inverter
R11
10kohm
J7
Start aux
C16
100nF
D4
SP0505BAHT
Start aux
Vbat
BT1
Battery_Cell
C11
100nF
U3
INA219AxDCN
J4
Inverter
C13
100nF
U5
INA219AxDCN
R9
0.1ohm
R14
1kohm
D2
1N4148W
Re1
G5NB
J8
Inverter On/Off
R12
220ohm
U7
PC817
R13
10kohm
Q3
MMBT2222ALT3G
SW1
SW_Slide_DPDT
J9
Left connector
SCK
Reset
D/C
Start aux
ESP8266-Rx
J10
Right connector
SCL
SDA
CS
MOSI
ESP8266-Tx
Inverter On/Off
AUX OnOff
BUSY
ESP8266-RST
ESP8266-OnOff
Rx
Tx
J11
e-ink display
BUSY
Reset
D/C
CS
SCK
MOSI
J13
Serial conn
R17
10kohm
R16
10kohm
R18
10kohm
J12
ESP8266-01
GPIO2
GPIO0
ESP8266-Rx
ESP8266-Tx
ESP8266-OnOff
ESP8266-RST
C19
150µF/10V
R15
10kohm