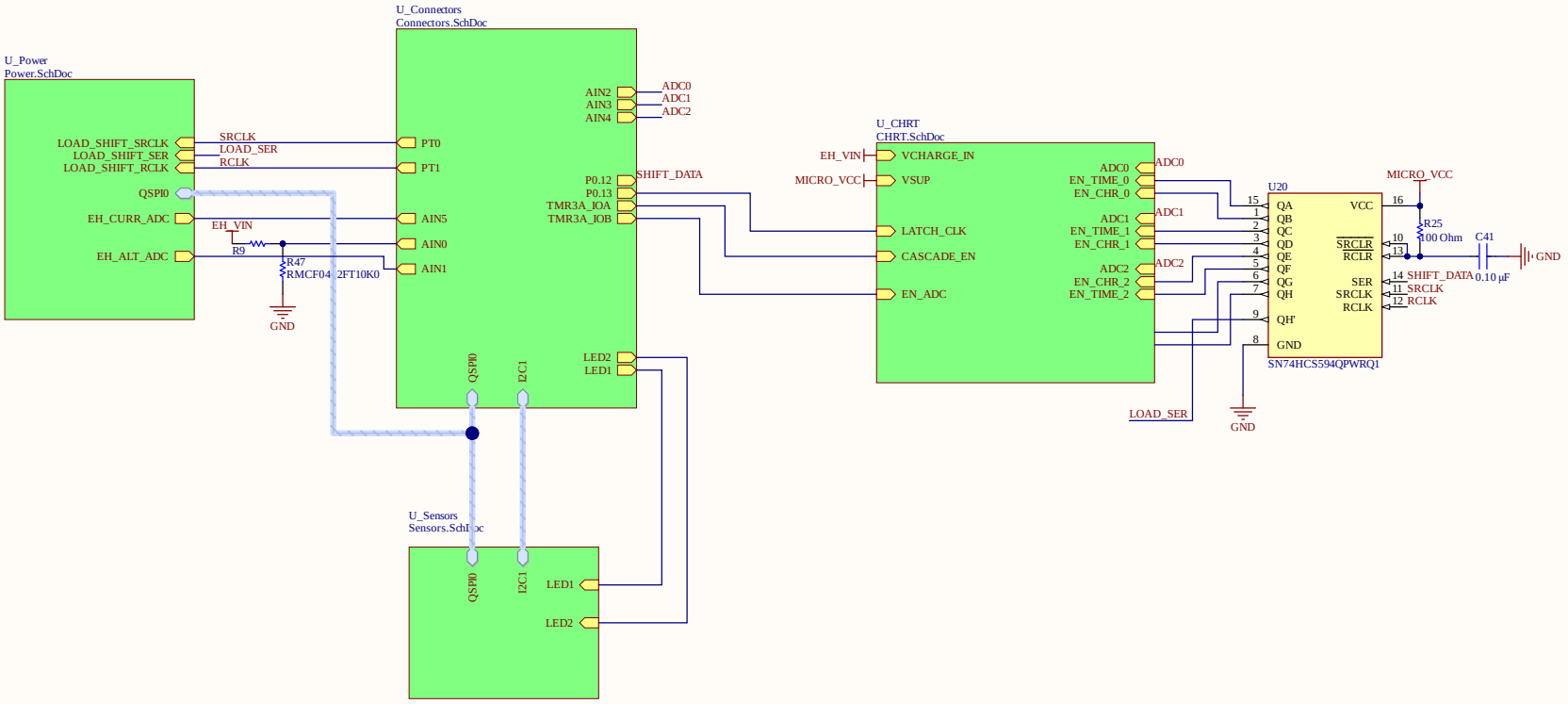

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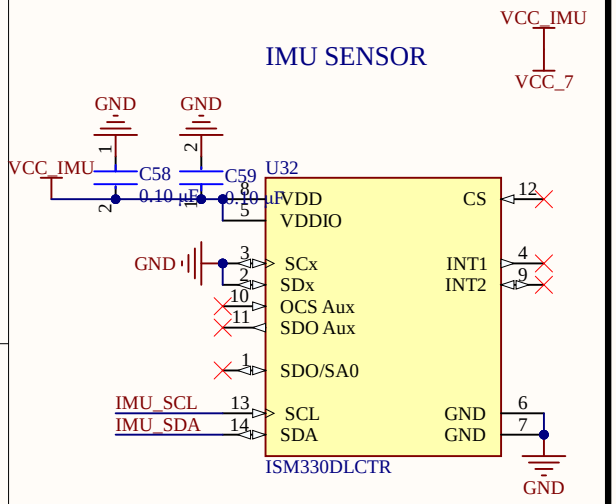
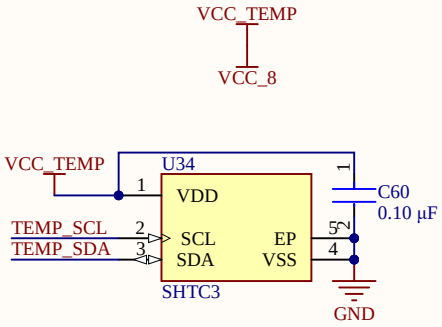
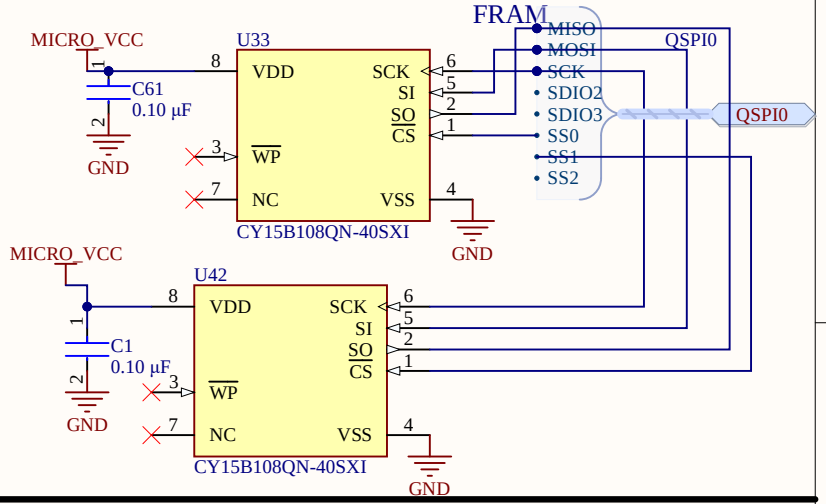
IMU SENSOR



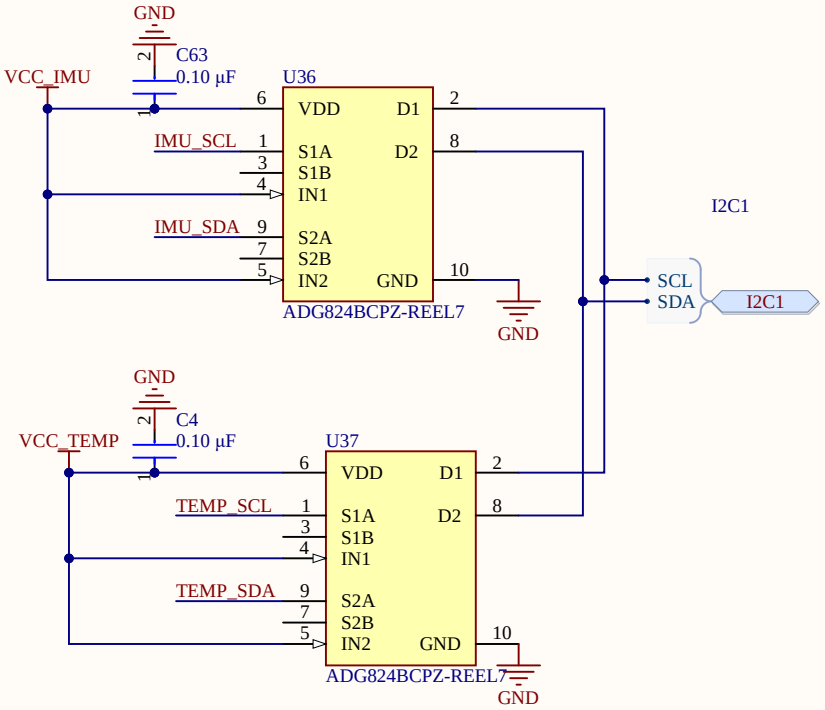
TEMPERATURE SENSOR

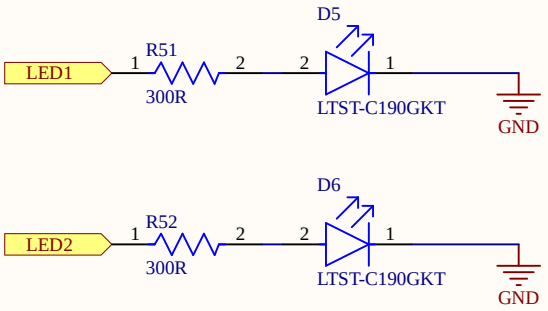


FRAM



SIGNAL ISOLATING SWITCHES FOR I2C





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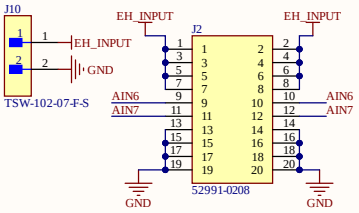
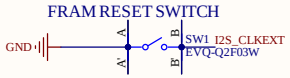
HARVESTER CONNECTOR



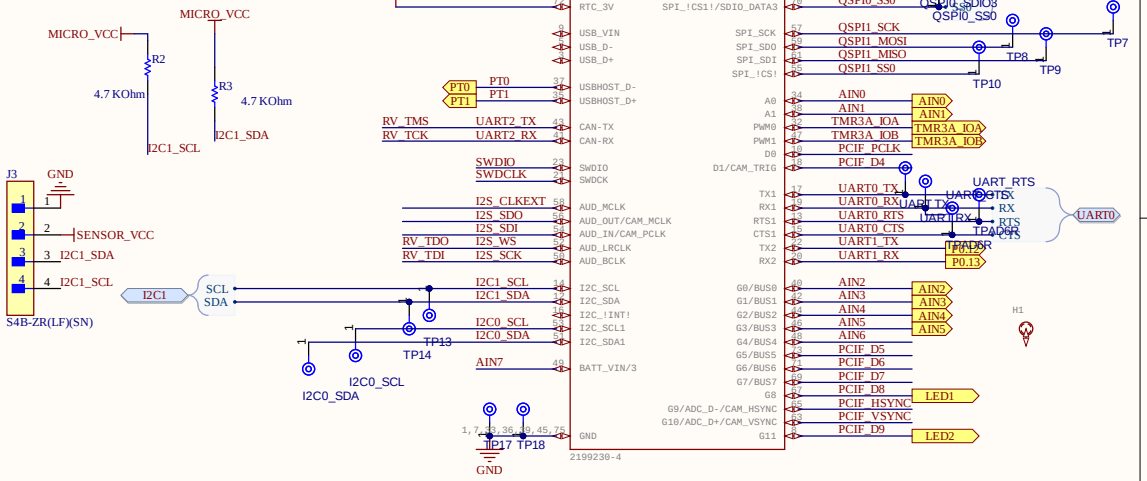
FRAM RESET SWITCH



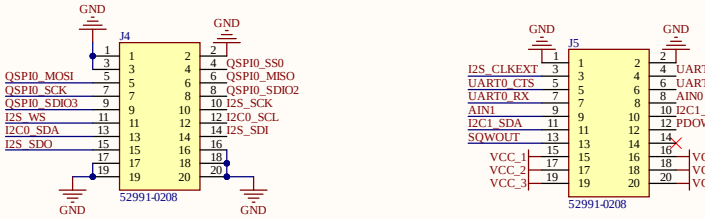
MICRO RESET SWITCH

MICROCONTROLLER CONNECTOR

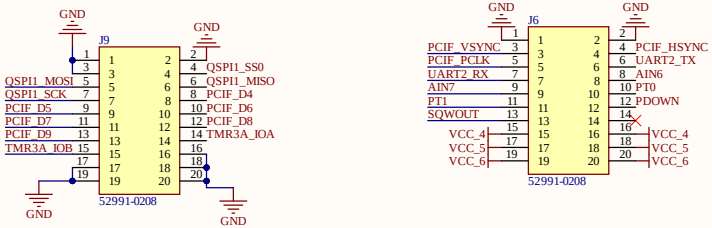
ONLY POPULATE EITHER R37 OR R38



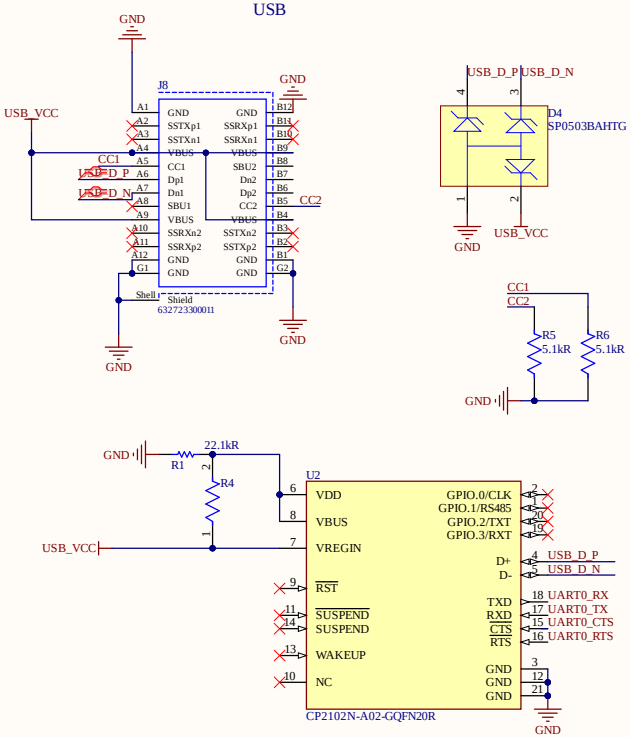
PERIPHERAL CONNECTOR 1



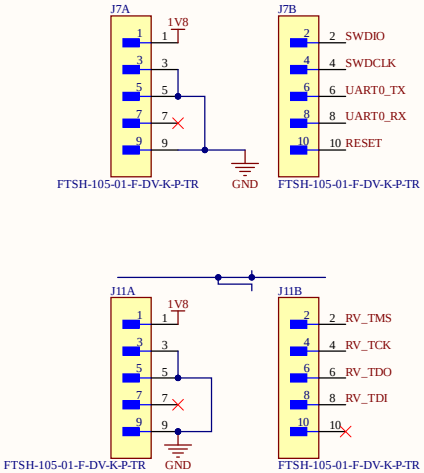
PERIPHERAL CONNECTOR 2



USB



DEBUG SWD CONNECTORS



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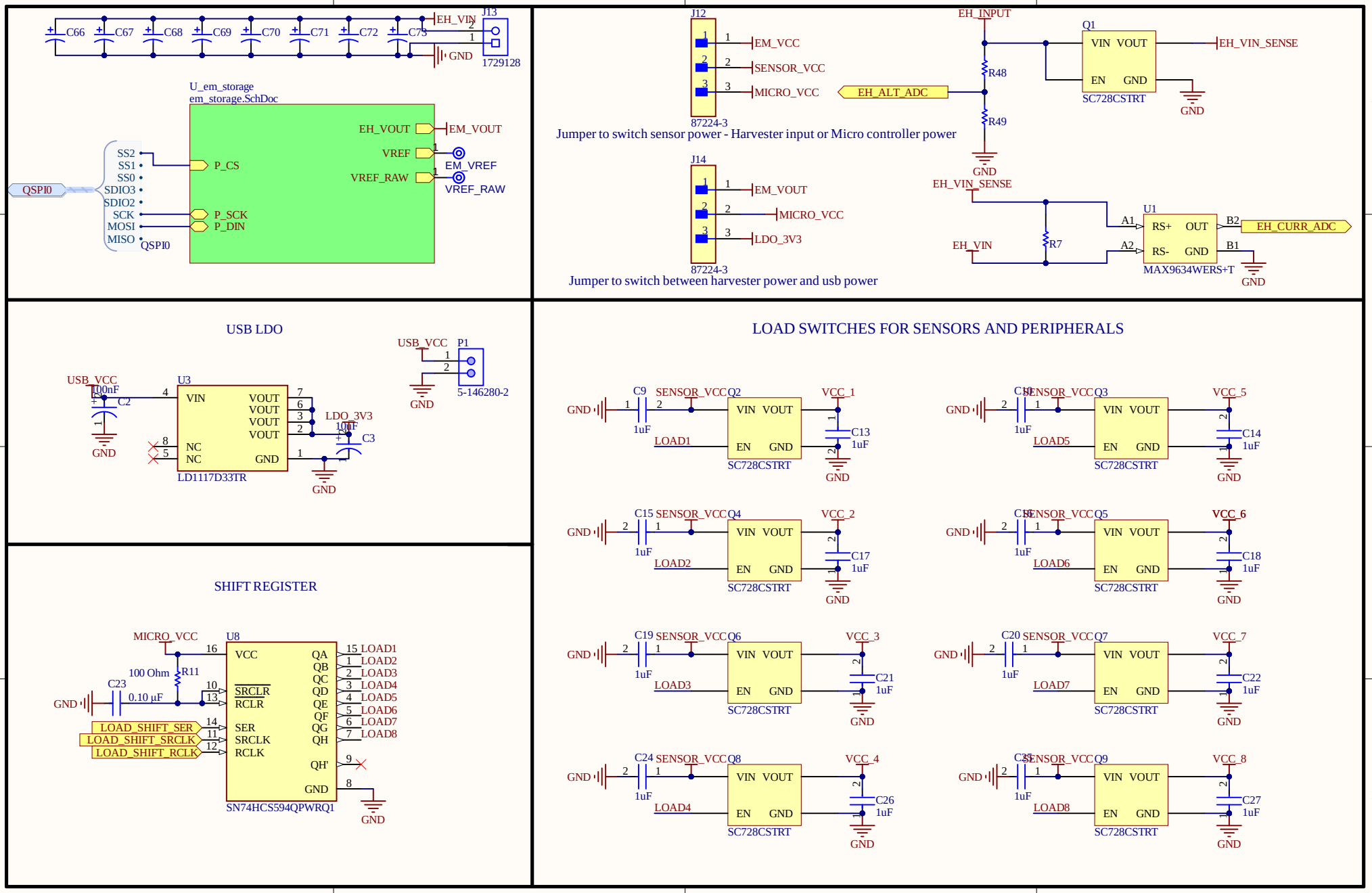
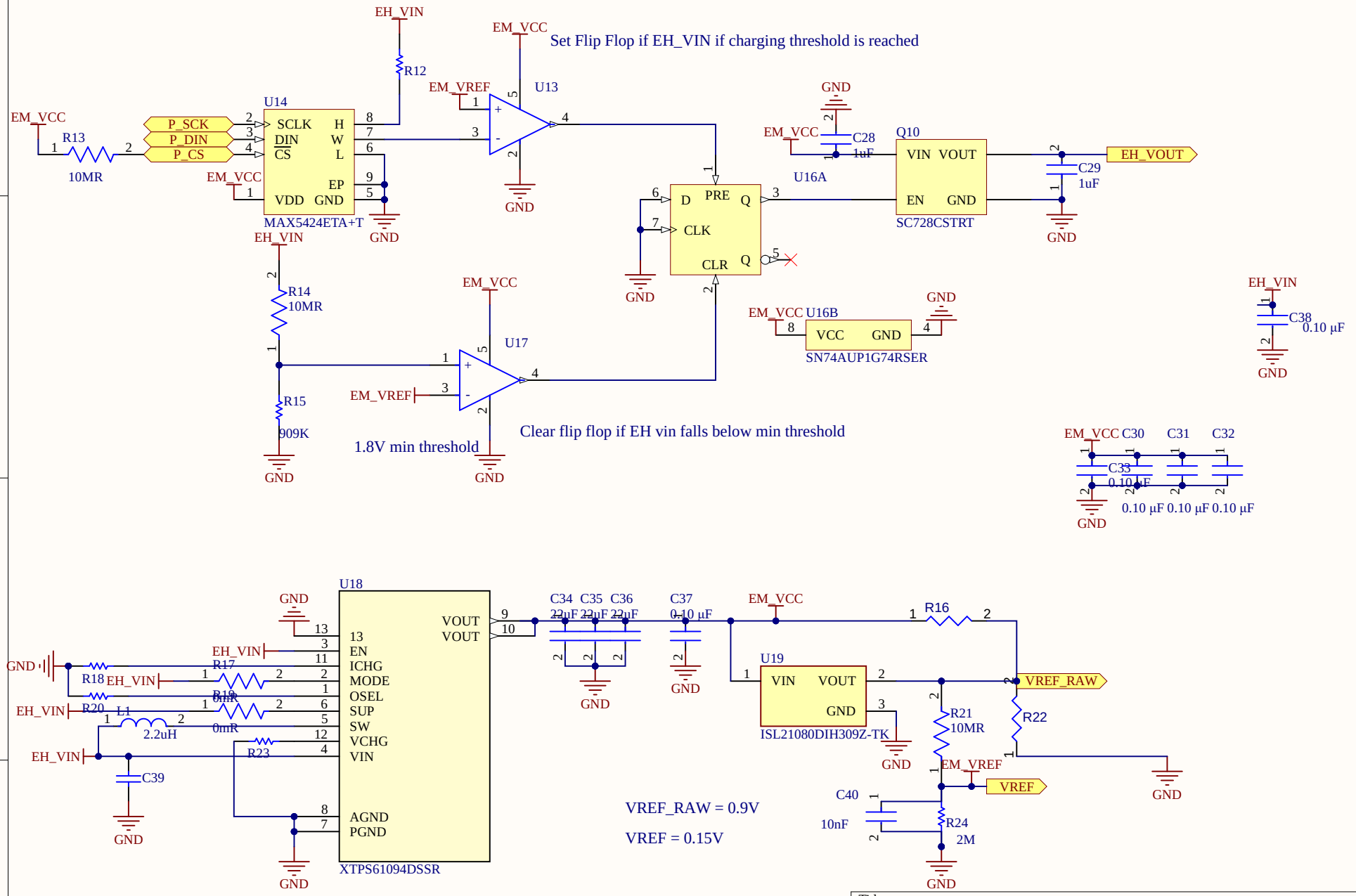

C66 C67 C68 C69 C70 C71 C72 C73
EH_VIN
GND
J13
1729128
U_em_storage
em_storage.SchDoc
QSPI0
SS2
SS1
SS0
SDIO3
SDIO2
SCK
MOSI
MISO
QSPI0
P_CS
P_SCK
P_DIN
EH_VOUT
VREF
VREF_RAW
EM_VOUT
EM_VREF
VREF_RAW
J12
EM_VCC
SENSOR_VCC
MICRO_VCC
87224-3
Jumper to switch sensor power - Harvester input or Micro controller power
J14
EM_VOUT
MICRO_VCC
LDO_3V3
87224-3
Jumper to switch between harvester power and usb power
EH_INPUT
R48
EH_ALT_ADC
R49
GND
Q1
VIN VOUT
EN GND
SC728CSTRT
EH_VIN_SENSE
EH_VIN
R7
U1
RS+ OUT
RS- GND
MAX9634WERS+T
A1
A2
B1
B2
EH_CURR_ADC
USB LDO
USB_VCC
P1
5-146280-2
100nF
C2
U3
VIN
VOUT
NC
GND
LD1117D33TR
LDO_3V3
10uF
C3
SHIFT REGISTER
MICRO_VCC
U8
VCC
SRCLR
RCLK
SER
SRCLK
RCLK
QA QB QC QD QE QF QG QH QH'
GND
SN74HCS594QPWRQ1
100 Ohm
R11
C23
0.10 µF
LOAD_SHIFT_SER
LOAD_SHIFT_SRCLK
LOAD_SHIFT_RCLK
LOAD1 LOAD2 LOAD3 LOAD4 LOAD5 LOAD6 LOAD7 LOAD8
LOAD SWITCHES FOR SENSORS AND PERIPHERALS
C9 SENSOR_VCC Q2 VCC_1 LOAD1 C13 1uF
C10 SENSOR_VCC Q3 VCC_5 LOAD5 C14 1uF
C15 SENSOR_VCC Q4 VCC_2 LOAD2 C17 1uF
C16 SENSOR_VCC Q5 VCC_6 LOAD6 C18 1uF
C19 SENSOR_VCC Q6 VCC_3 LOAD3 C21 1uF
C20 SENSOR_VCC Q7 VCC_7 LOAD7 C22 1uF
C24 SENSOR_VCC Q8 VCC_4 LOAD4 C26 1uF
C25 SENSOR_VCC Q9 VCC_8 LOAD8 C27 1uF
1uF
SC728CSTRT
VIN VOUT
EN GND



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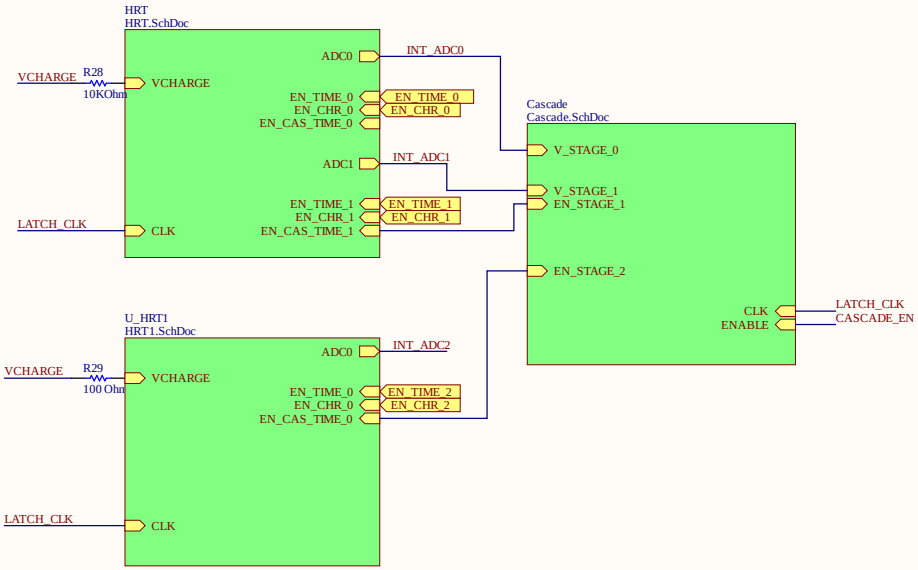
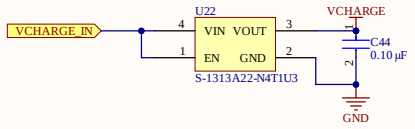
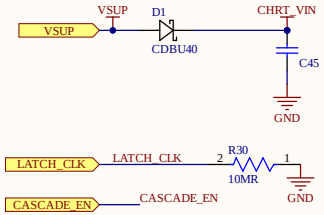
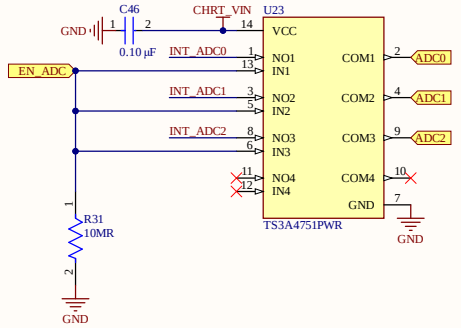
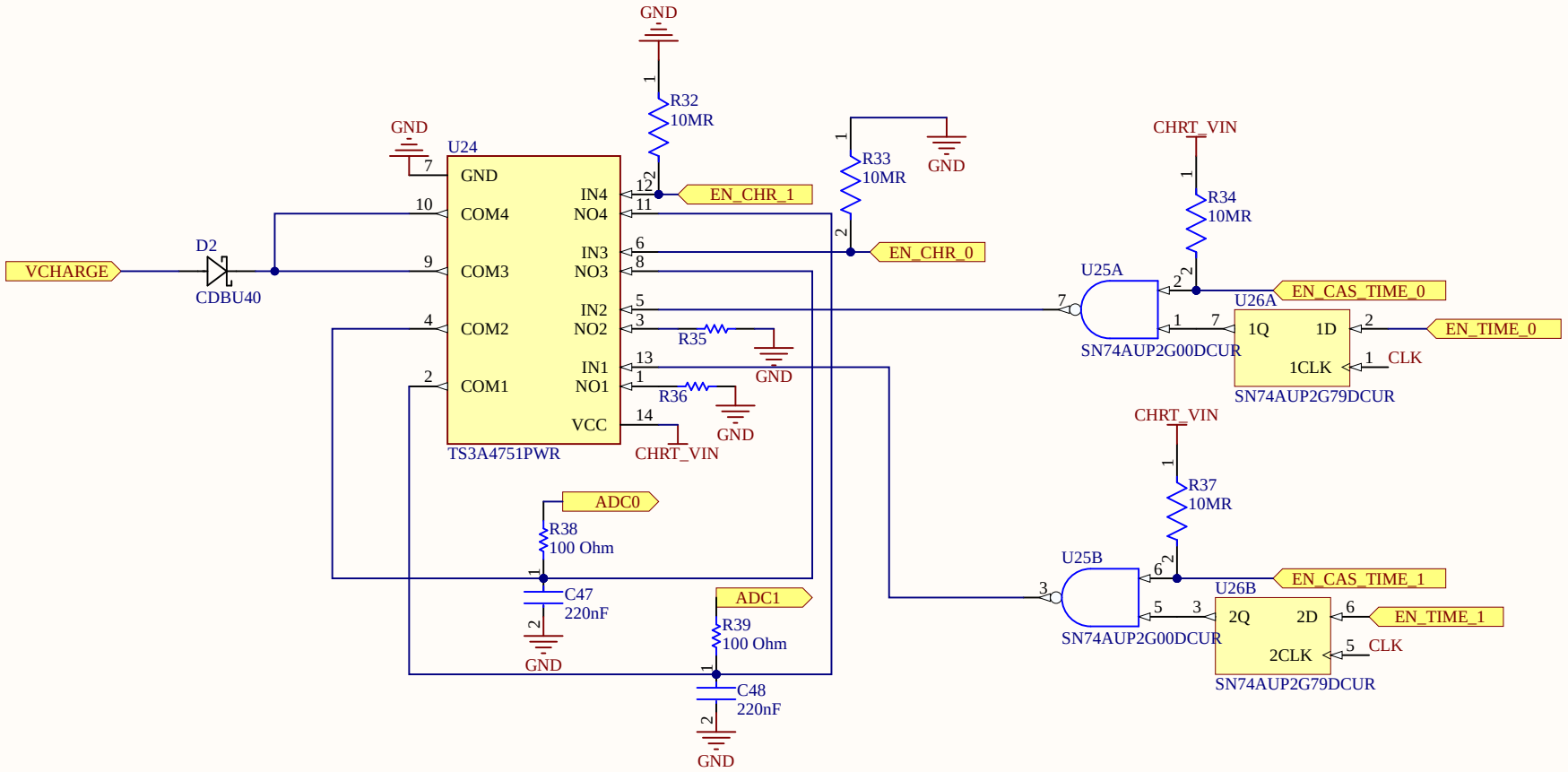

HRT
HRT.SchDoc
VCHARGE
R28
10KOhm
VCHARGE
LATCH_CLK
CLK
ADC0
EN_TIME_0
EN_CHR_0
EN_CAS_TIME_0
ADC1
EN_TIME_1
EN_CHR_1
EN_CAS_TIME_1
INT_ADC0
EN_TIME_0
EN_CHR_0
INT_ADC1
EN_TIME_1
EN_CHR_1
Cascade
Cascade.SchDoc
V_STAGE_0
V_STAGE_1
EN_STAGE_1
EN_STAGE_2
CLK
ENABLE
LATCH_CLK
CASCADE_EN
U_HRT1
HRT1.SchDoc
VCHARGE
R29
100 Ohm
VCHARGE
LATCH_CLK
CLK
ADC0
EN_TIME_0
EN_CHR_0
EN_CAS_TIME_0
INT_ADC2
EN_TIME_2
EN_CHR_2


VCHARGE_IN
U22
VIN
VOUT
EN
GND
S-1313A22-N4T1U3
VCHARGE
C44
0.10 µF
GND


VSUP
D1
CDBU40
CHRT_VIN
C45
GND
LATCH_CLK
R30
10MR
CASCADE_EN


C46
0.10 µF
GND
CHRT_VIN
U23
VCC
EN_ADC
INT_ADC0
INT_ADC1
INT_ADC2
NO1
IN1
NO2
IN2
NO3
IN3
NO4
IN4
COM1
COM2
COM3
COM4
GND
ADC0
ADC1
ADC2
TS3A4751PWR
R31
10MR



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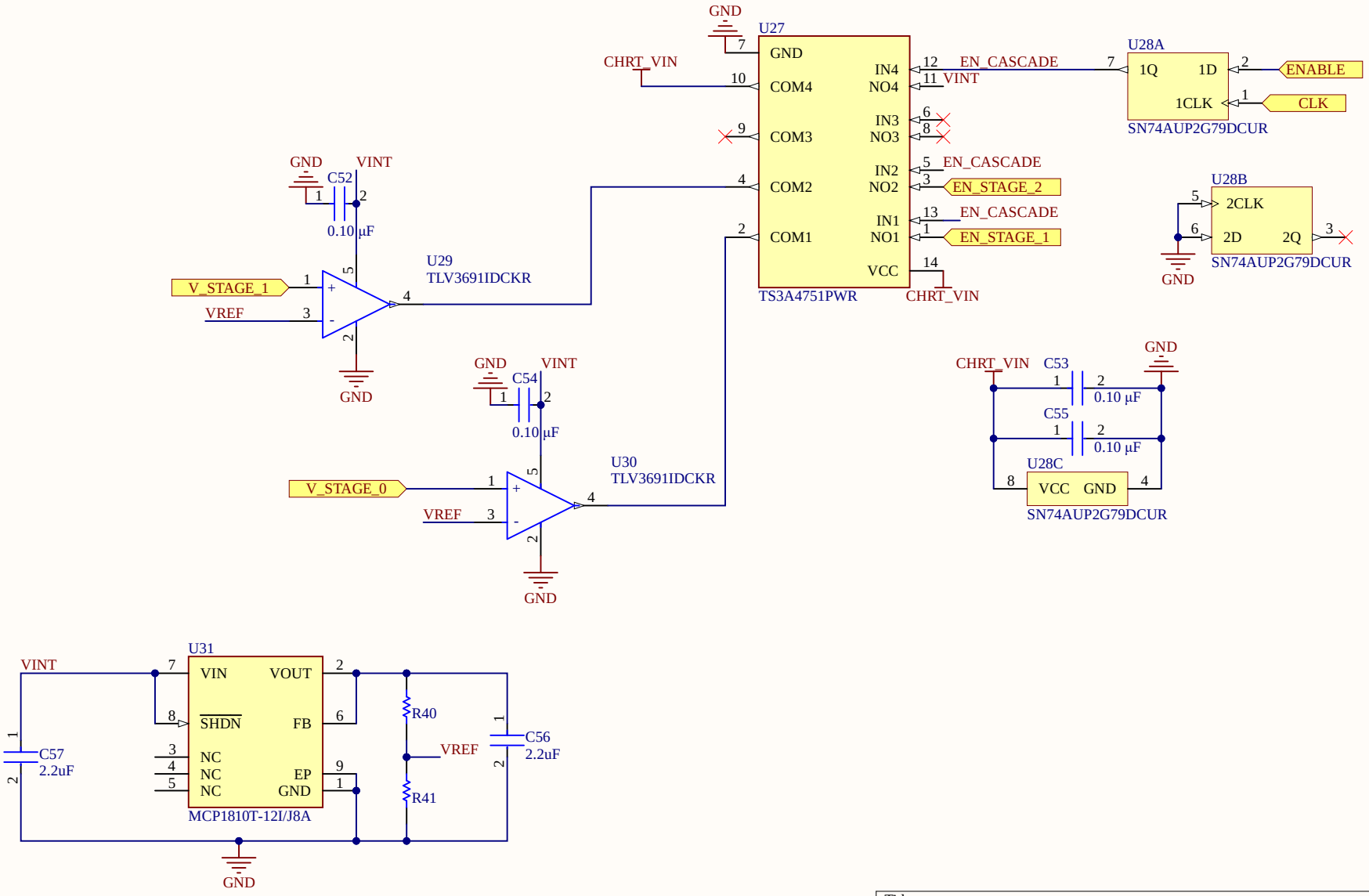

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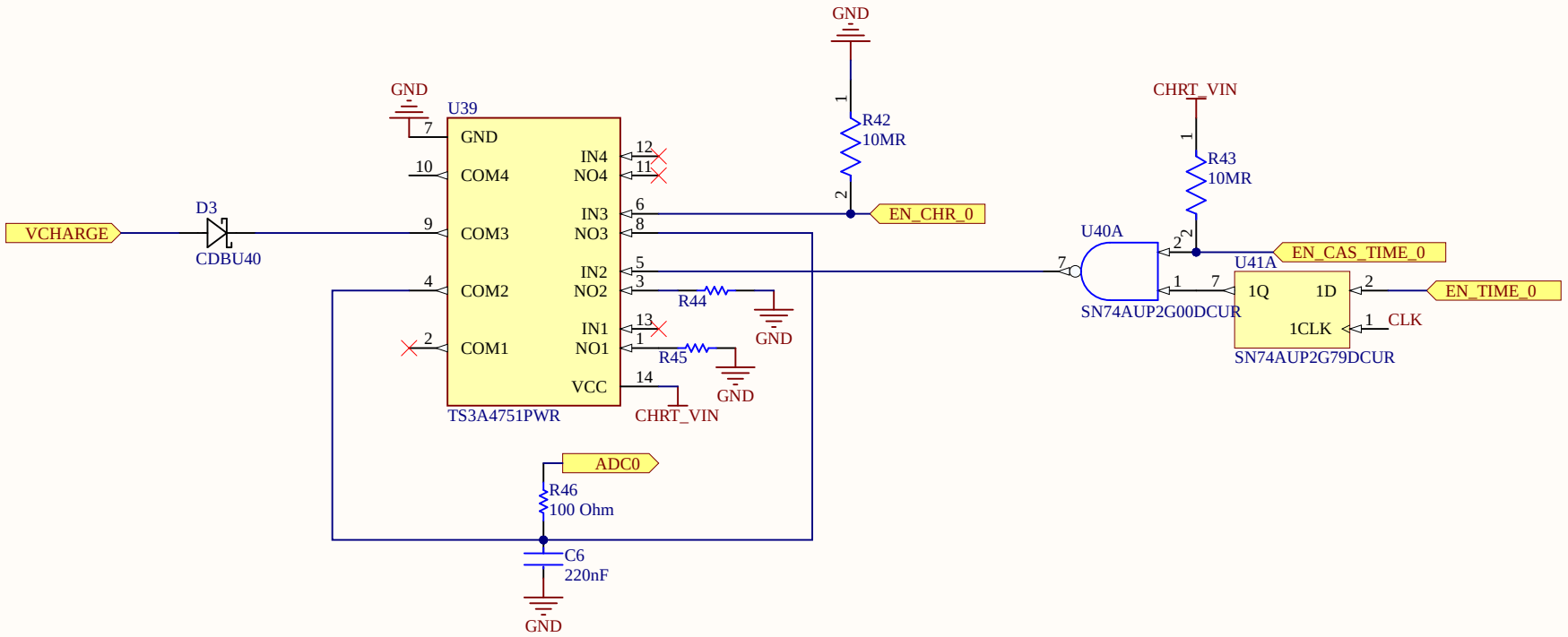

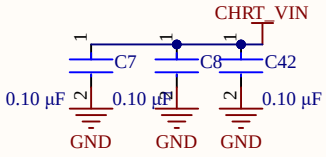

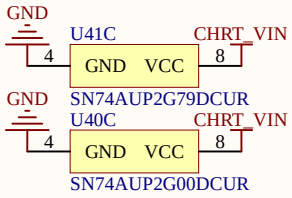

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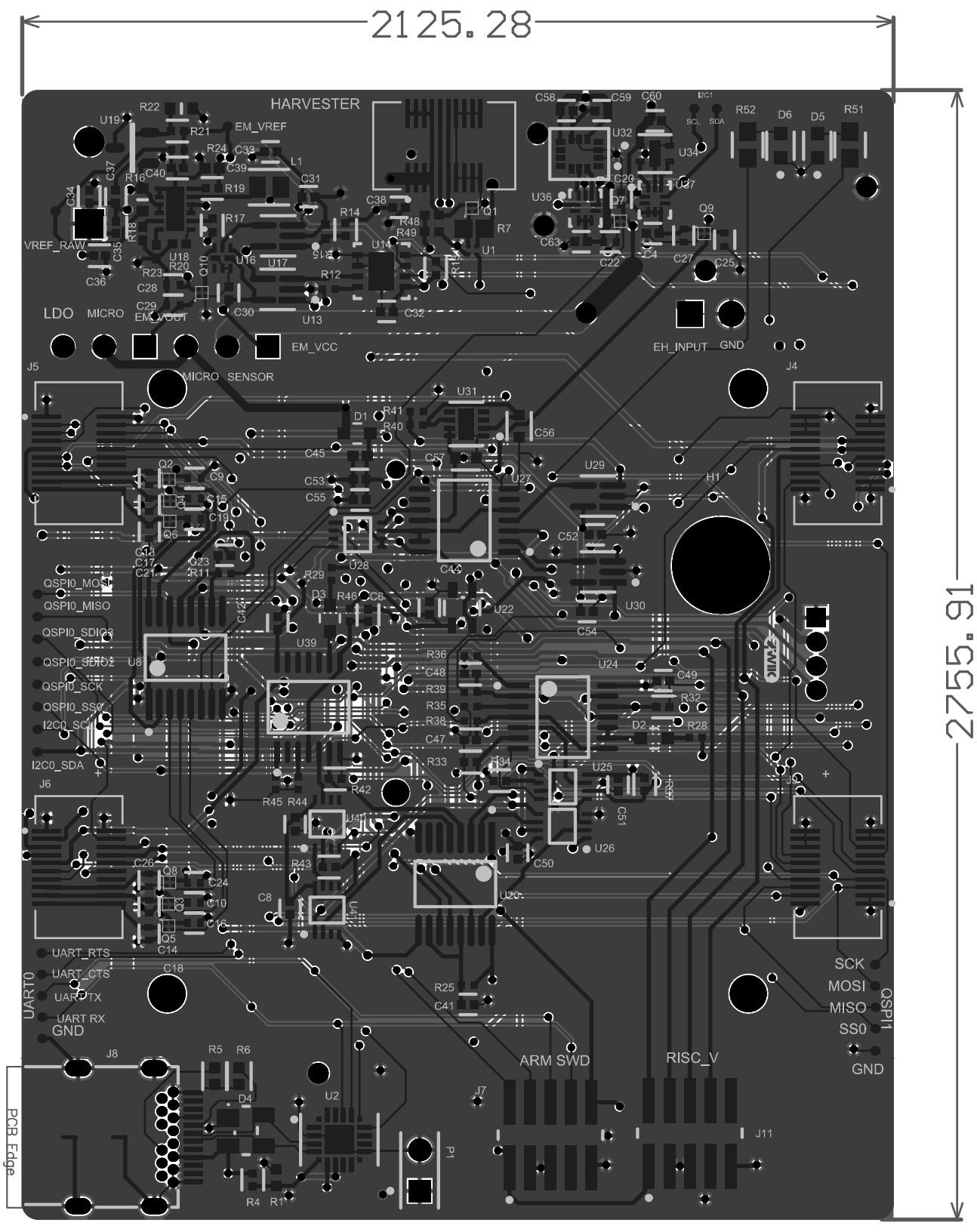
2125.28
2755.91
HARVESTER
EM_VREF
VREF_RAW
LDO
MICRO
EM_VOUT
EM_VCC
MICRO SENSOR
EH_INPUT
GND
QSPI0_MOSI
QSPI0_MISO
QSPI0_SDIO3
QSPI0_SDIO2
QSPI0_SCK
QSPI0_SS0
I2C0_SCL
I2C0_SDA
UART_RTS
UART_CTS
UARTTX
UART RX
GND
UART0
ARM SWD
RISC_V
SCK
MOSI
MISO
SS0
GND
QSPI1
PCB Edge

Board Stack Report