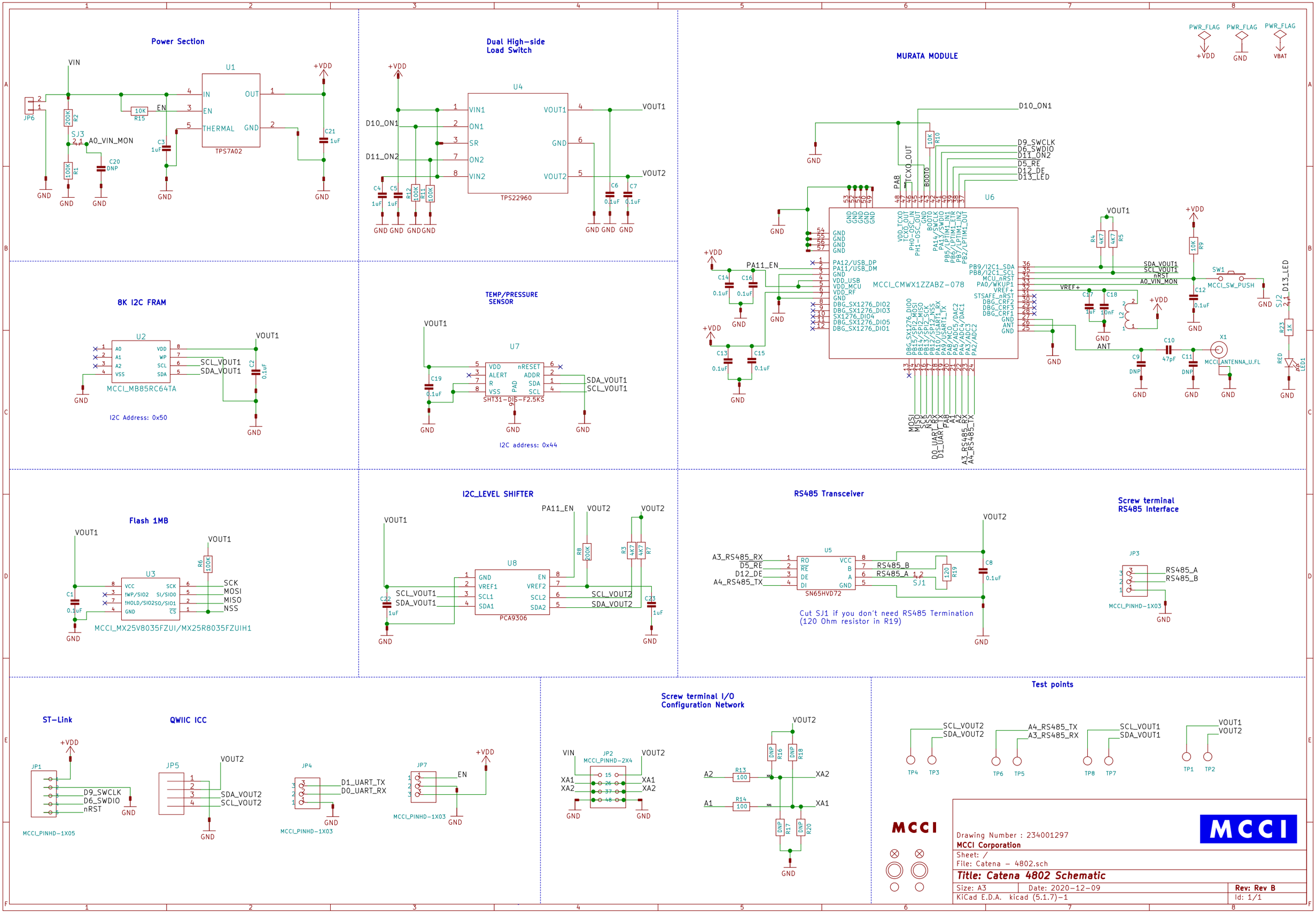
Power Section
VIN
U1
TPS7A02
IN
EN
THERMAL
OUT
GND
+VDD
JP6
R2 200K
R1 100K
SJ3
A0_VIN_MON
C20 DNP
R15 10K
C3 1uF
C21 1uF
Dual High-side Load Switch
U4
TPS22960
VIN1
ON1
SR
ON2
VIN2
VOUT1
GND
VOUT2
D10_ON1
D11_ON2
C4 1uF
C5 1uF
R12 100K
R11 100K
C6 0.1uF
C7 0.1uF
MURATA MODULE
PWR_FLAG
+VDD
GND
VBAT
D10_ON1
D9_SWCLK
D6_SWDIO
D11_ON2
D5_RE
D12_DE
D13_LED
R10 10K
PA8
TCXO_OUT
BOOT0
U6
MCCI_CMWX1ZZABZ-078
PA11_EN
C14 0.1uF
C16 0.1uF
C13 0.1uF
C15 0.1uF
PA12/USB_DP
PA11/USB_DM
VDD_USB
VDD_MCU
VDD_RF
DBG_SX1276_DIO2
DBG_SX1276_DIO3
SX1276_DIO4
DBG_SX1276_DIO5
DBG_SX1276_DIO1
PB9/I2C1_SDA
PB8/I2C1_SCL
MCU_nRST
PA0/WKUP1
VREF+
STSAFE_nRST
DBG_CRF2
DBG_CRF3
DBG_CRF1
ANT
R4 4K7
R5 4K7
SDA_VOUT1
SCL_VOUT1
nRST
A0_VIN_MON
VREF+
C17 1uF
C18 10nF
L2
R9 10K
SW1
MCCI_SW_PUSH
C12 0.1uF
SJ2
D13_LED
R23 1K
LED1
RED
C10 47pF
C9 DNP
C11 DNP
X1
MCCI_ANTENNA_U.FL
MOSI
MISO
SCK
NSS
D0_UART_RX
D1_UART_TX
A3_RS485_RX
A4_RS485_TX
8K I2C FRAM
U2
MCCI_MB85RC64TA
A0
A1
A2
VSS
VDD
WP
SCL
SDA
VOUT1
SCL_VOUT1
SDA_VOUT1
C2 0.1uF
I2C Address: 0x50
TEMP/PRESSURE SENSOR
U7
SHT31-DIS-F2.5KS
VDD
ALERT
R
VSS
nRESET
ADDR
SDA
SCL
PAD
C19 0.1uF
SDA_VOUT1
SCL_VOUT1
I2C address: 0x44
Flash 1MB
VOUT1
U3
MCCI_MX25V8035FZUI/MX25R8035FZUIH1
VCC
!WP/SIO2
!HOLD/SIO2
GND
SCK
SI/SIO0
SO/SIO1
!CS
R6 100K
C1 0.1uF
SCK
MOSI
MISO
NSS
I2C_LEVEL SHIFTER
PA11_EN
VOUT2
U8
PCA9306
GND
VREF1
SCL1
SDA1
EN
VREF2
SCL2
SDA2
R8 200K
R3 4K7
R7 4K7
SCL_VOUT1
SDA_VOUT1
SCL_VOUT2
SDA_VOUT2
C22 1uF
C23 1uF
RS485 Transceiver
U5
SN65HVD72
RO
RE
DE
DI
VCC
B
A
GND
A3_RS485_RX
D5_RE
D12_DE
A4_RS485_TX
RS485_B
RS485_A
SJ1
R19 120
C8 0.1uF
Cut SJ1 if you don't need RS485 Termination
(120 Ohm resistor in R19)
Screw terminal RS485 Interface
JP3
MCCI_PINHD-1X03
RS485_A
RS485_B
ST-Link
JP1
MCCI_PINHD-1X05
D9_SWCLK
D6_SWDIO
nRST
QWIIC ICC
JP5
SDA_VOUT2
SCL_VOUT2
JP4
MCCI_PINHD-1X03
D1_UART_TX
D0_UART_RX
JP7
EN
Screw terminal I/O Configuration Network
JP2
MCCI_PINHD-2X4
VIN
XA1
XA2
R13 100
R14 100
A2
A1
DNP R16
DNP R18
DNP R17
DNP R20
Test points
TP4
TP3
TP6
TP5
TP8
TP7
TP1
TP2
MCCI
Drawing Number : 234001297
MCCI Corporation
Sheet: /
File: Catena - 4802.sch
Title: Catena 4802 Schematic
Size: A3
Date: 2020-12-09
Rev: Rev B
KiCad E.D.A. kicad (5.1.7)-1
Id: 1/1