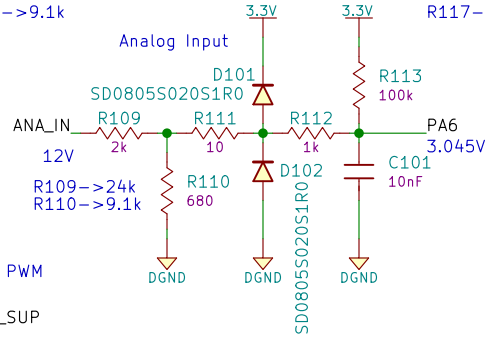
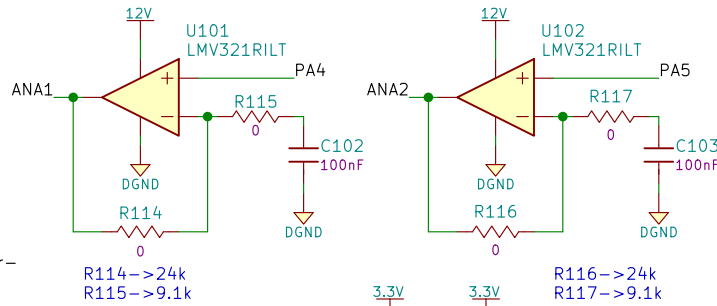
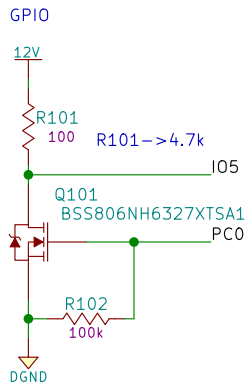
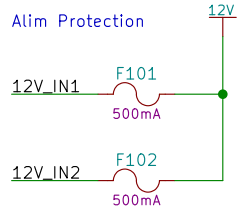
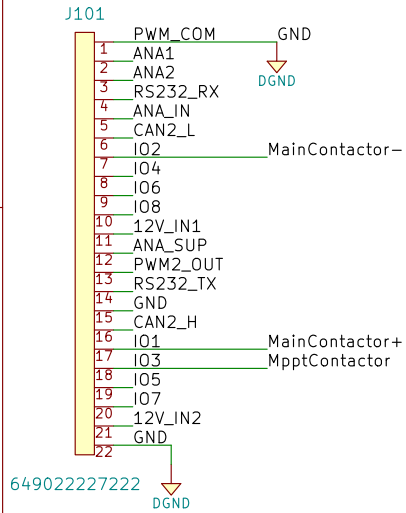


Note1: BMS functions should be on separate sheet
Note2: Precharge sheet should be remove

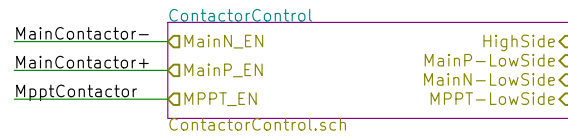
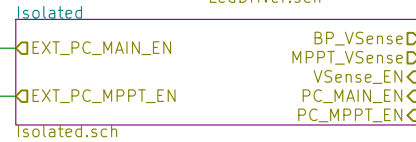
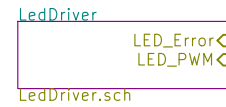
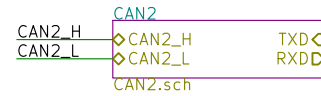
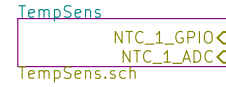
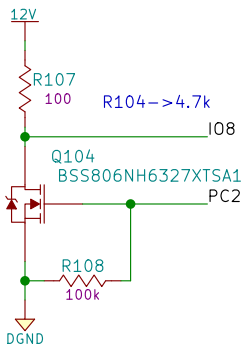
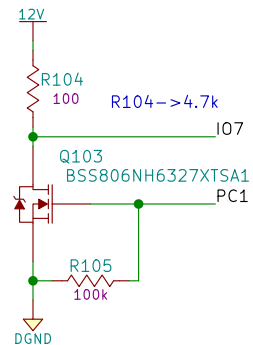
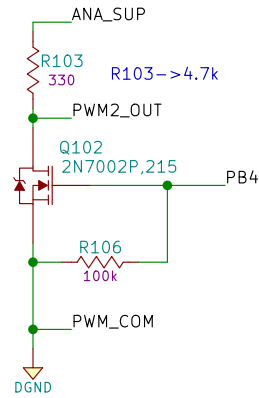
Digital-to-Analog Converter

Power Supply

Power Supply.sch



External PWM



Eclipse Solar Car

Designed by : Julien G. Bourassa

Verified by :

Sheet: /

File: Master_Board.sch

Title: BMS_MasterBoard-Root

Size: USLetter

Date: 2017-06-25

KiCad E.D.A. kicad 4.0.6

Rev: V1

Id: 1/11



HSE AND LSE need to be routed as close as possible to the mcu.
See : AN2867

LSE

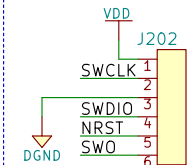
HSE

RESET

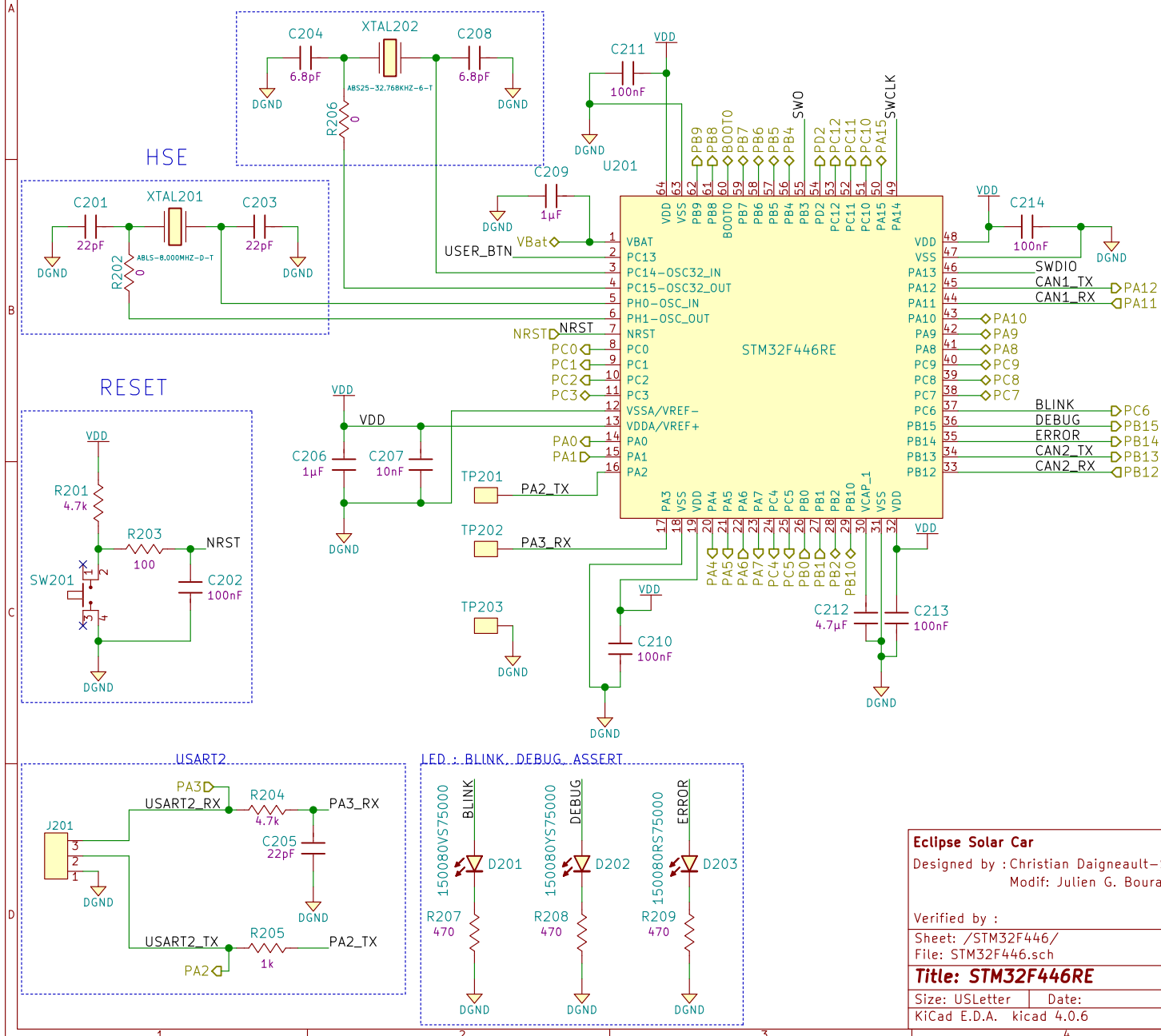
USART2

LED : BLINK...DEBUG_ASSERT

SWD_Connector



USER BUTTON



Eclipse Solar Car

Designed by : Christian Daigneault-St-Arnaud
Modif: Julien G. Bourassa

Verified by :

Sheet: /STM32F446/
File: STM32F446.sch

Title: STM32F446RE

Size: USLetter

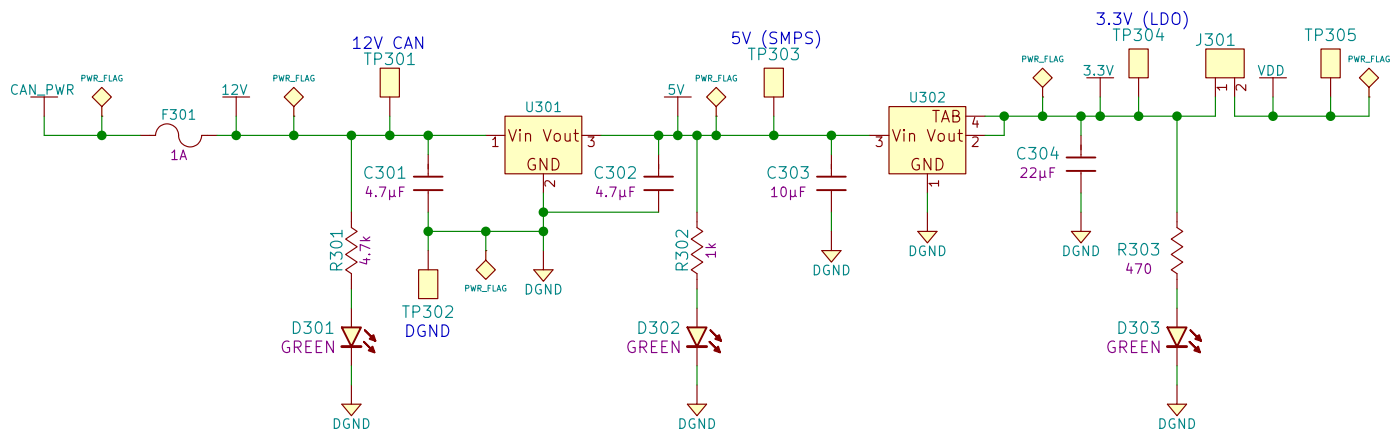
Date:

KiCad E.D.A. kicad 4.0.6

Rev: V1

Id: 2/11





Eclipse Solar Car

Designed by : Christian Daigneault-St-Arnaud

Verified by :

Sheet: /Power Supply/

File: Power Supply.sch

Title: Power Supply

Size: USLetter

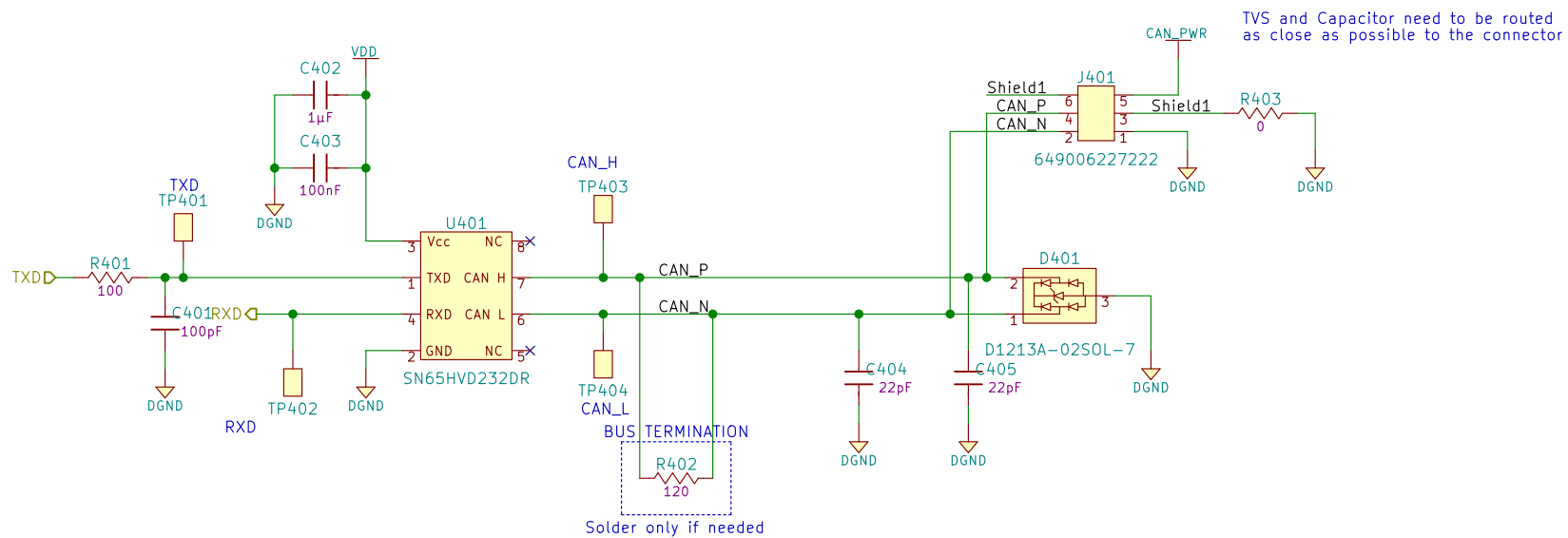
Date:

KiCad E.D.A. kicad 4.0.6

Rev: V1

Id: 3/11





Eclipse Solar Car

Designed by : Christian Daigneault-St-Arnaud
Modif: Julien G. Bourassa

Verified by :

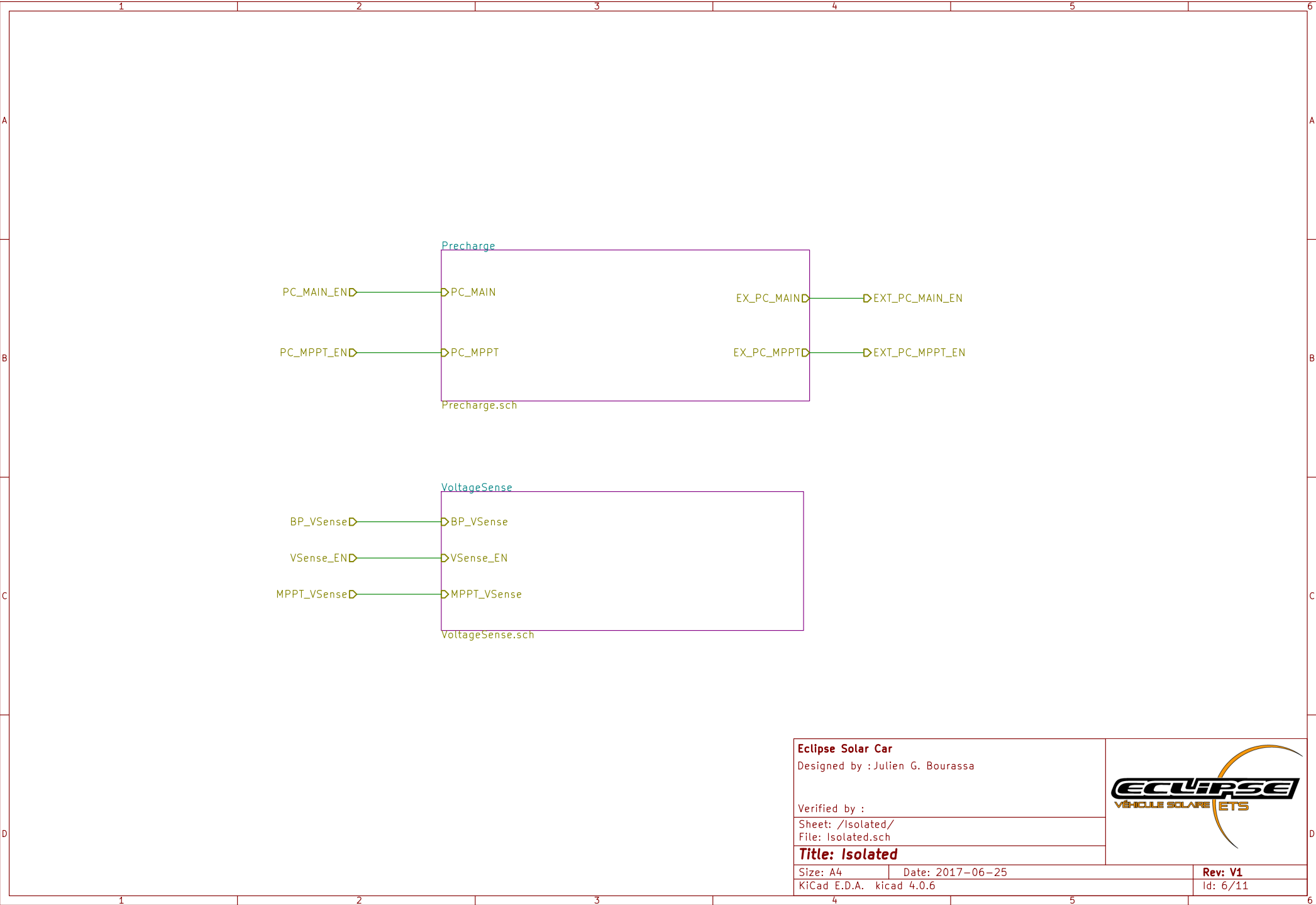
Sheet: /CAN1/
File: CAN1.sch

Title: CAN1

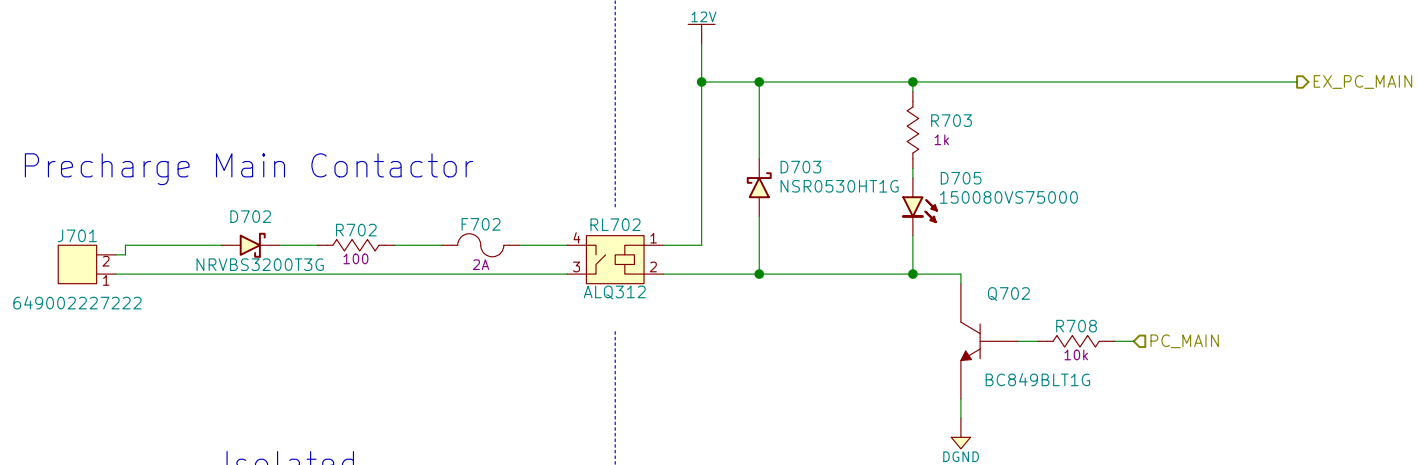
Size: USLetter Date: 2017-06-25
KiCad E.D.A. kicad 4.0.6



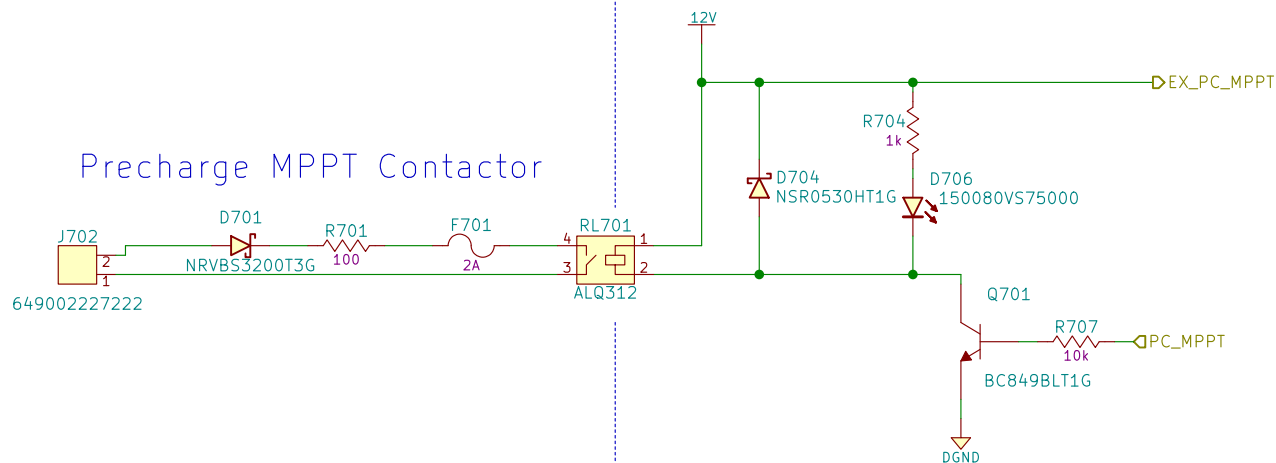
Rev: V1
Id: 4/11



Precharge Main Contactor



Precharge MPPT Contactor



*Note: Precharge resistor can be used with heatsink ATS-PCB1064 for 50W.

Eclipse Solar Car

Designed by : Julien G. Bourassa

Verified by :

Sheet: /Isolated/Precharge/

File: Precharge.sch

Title: Precharge

Size: A4

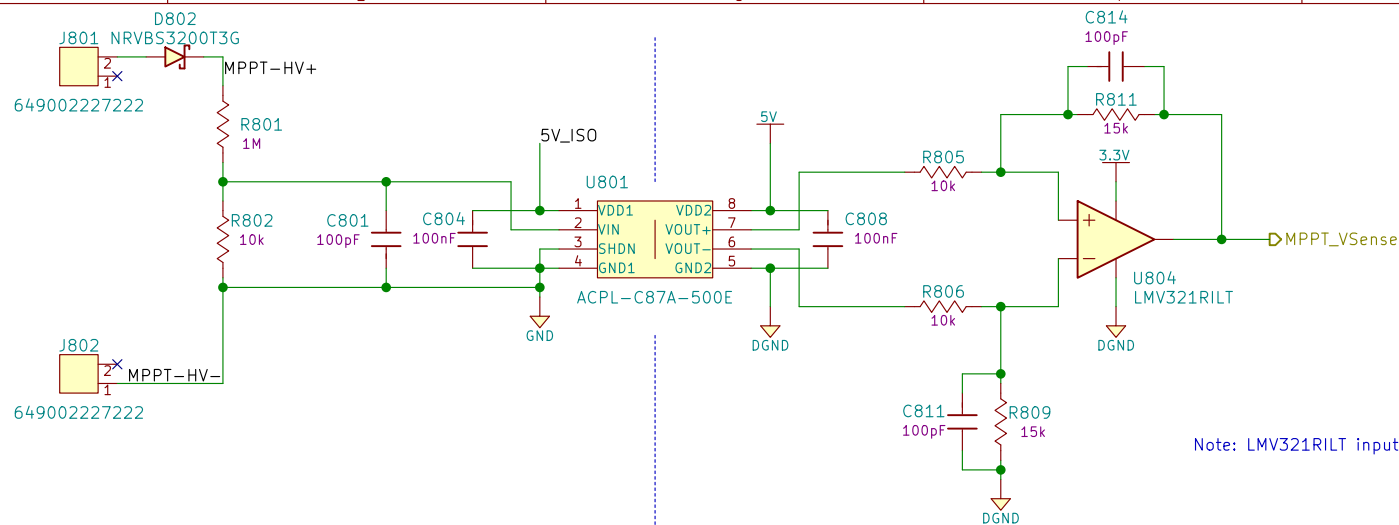
Date: 2017-06-25

KiCad E.D.A. kicad 4.0.6

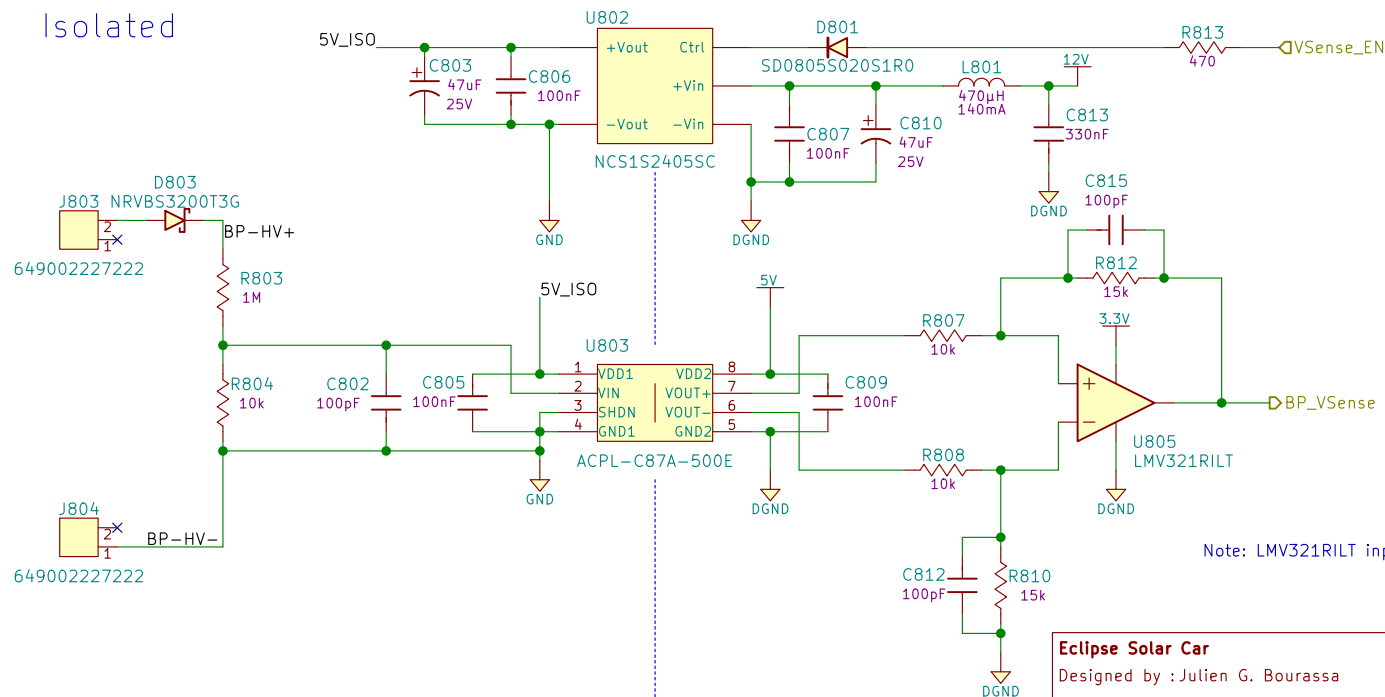
Rev: V1

Id: 7/11





Isolated



Eclipse Solar Car

Designed by : Julien G. Bourassa

Verified by :

Sheet: /Isolated/VoltageSense/

File: VoltageSense.sch

Title: Voltage Sense

Size: A4 Date: 2017-06-25

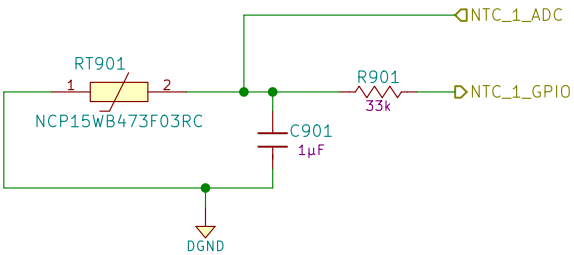
KiCad E.D.A. kicad 4.0.6

Rev: V1

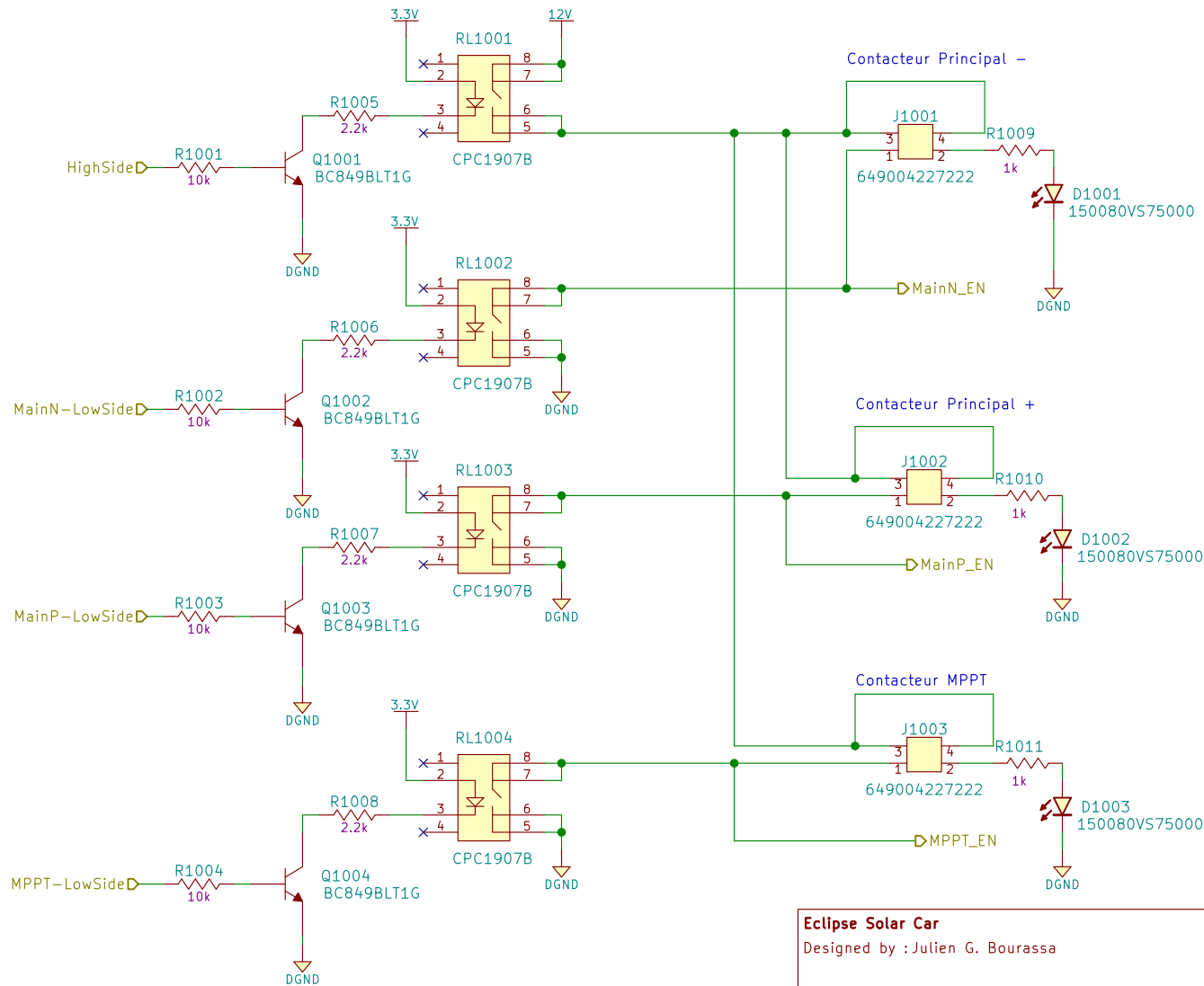
Id: 8/11



Temperature Sensor



Note: Short female connector's pin 2 & 4 for interlock status.



Eclipse Solar Car

Designed by : Julien G. Bourassa

Verified by :

Sheet: /ContactorControl/

File: ContactorControl.sch

Title: Contactor Control

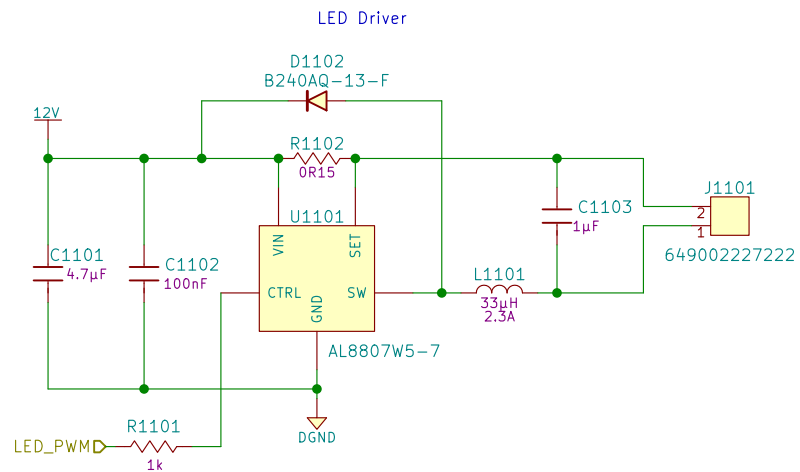
Size: A4 Date: 2017-06-25

KiCad E.D.A. kicad 4.0.6

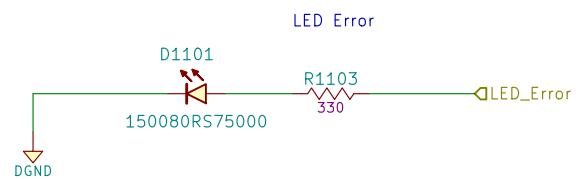


Rev: V1

Id: 10/11



Note: Add pull down (100k) to CTRL pin



Eclipse Solar Car

Designed by : Julien G. Bourassa

Verified by :

Sheet: /LedDriver/

File: LedDriver.sch

Title: LED Driver

Size: A4 Date: 2017-06-25

KiCad E.D.A. kicad 4.0.6



Rev: V1

Id: 11/11