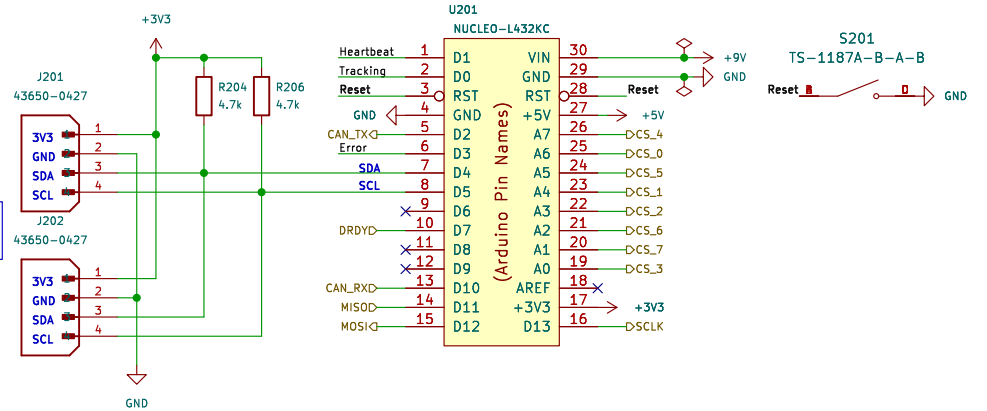


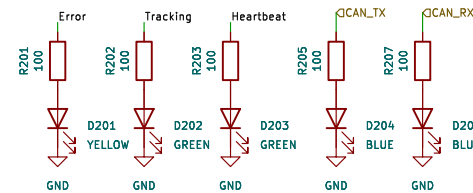
Controller

D2 and D10 are reserved for USB and CAN communication.
VIN can accept +7V-12V.

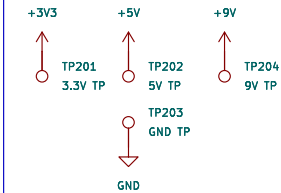
2 twisted pairs for
data and power
Wrapped together
and sheathed



LEDs



Testpoints



Gary Hallock
Matthew Yu
Jacob Giddens
LHR Solar

Sheet: /controller/
File: controller.kicad_sch

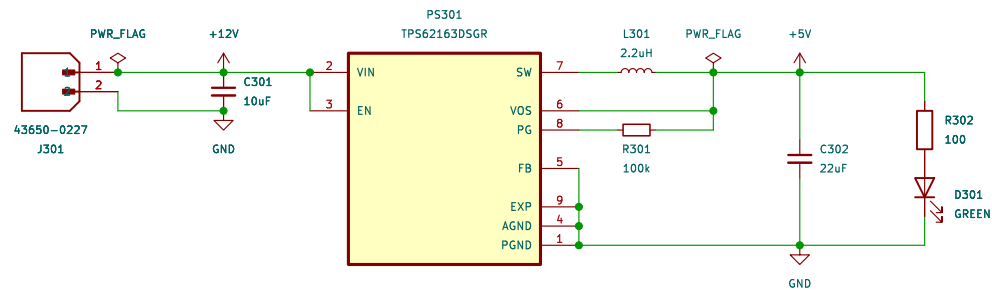
Title: Blackbody A

Size: A4 Date: 2023-07-16
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Power Regulation

12V to 5V. Nonisolated.



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Sheet: /power_reg/
File: power_reg.kicad_sch

Title: Blackbody A

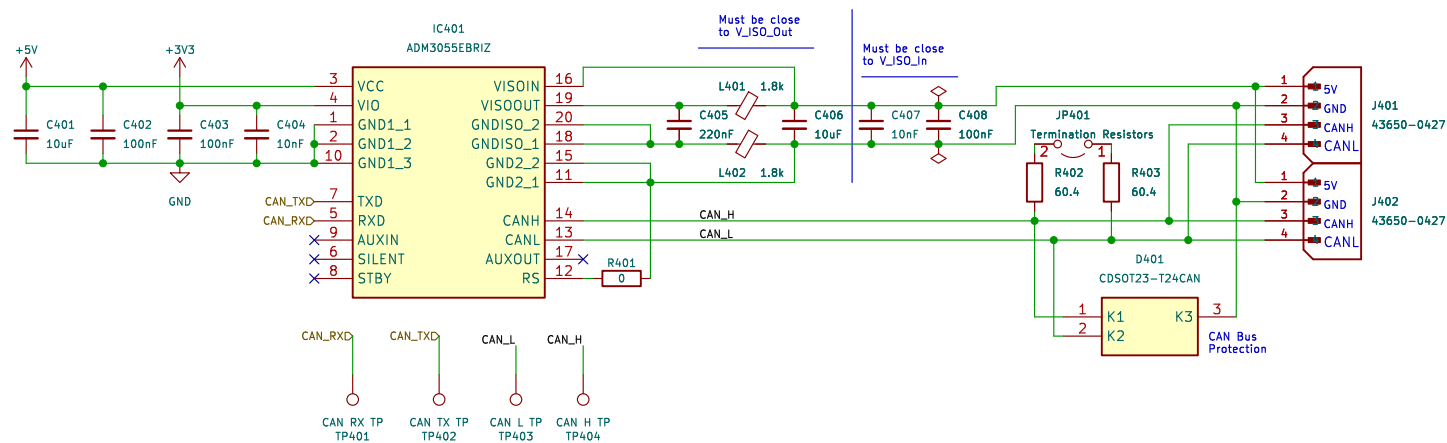
Size: A4 Date: 2023-07-16

KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1

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Id: 3/13

CAN



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Sheet: /comm_can/
File: comm_can.kicad_sch

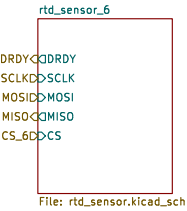
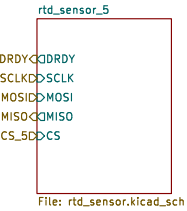
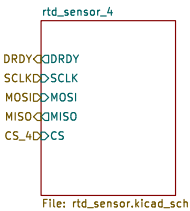
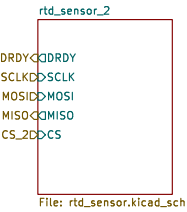
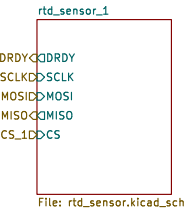
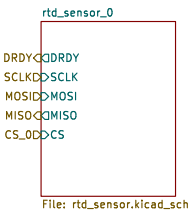
Title: Blackbody A

Size: A4	Date: 2023-07-16
KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1	

Rev: v0.2.0
Id: 4/13

RTD Sensors

For a maximum of 8, we tie SPI MOSI/MISO/SCLK/DRDY for all of them and use the CS pin for controlling which ones get to send across data on the bus.

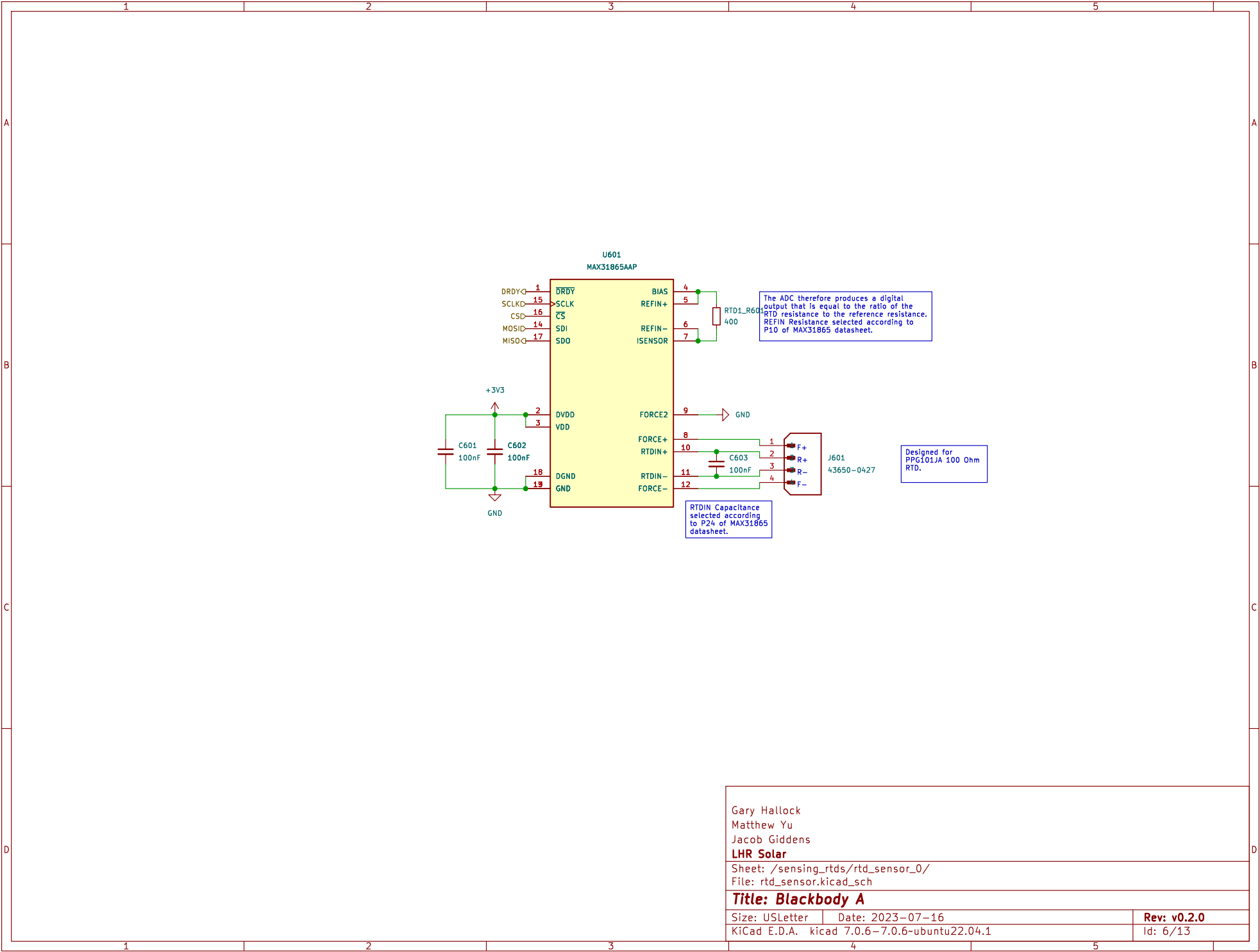


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Jacob Giddens
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Sheet: /sensing_rtds/
File: sensing_rtds.kicad_sch

Title: Blackbody A

Size: A4	Date: 2023-07-16	Rev: v0.2.0
KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1		Id: 5/13



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Sheet: /sensing_rtds/rtd_sensor_0/
File: rtd_sensor.kicad_sch

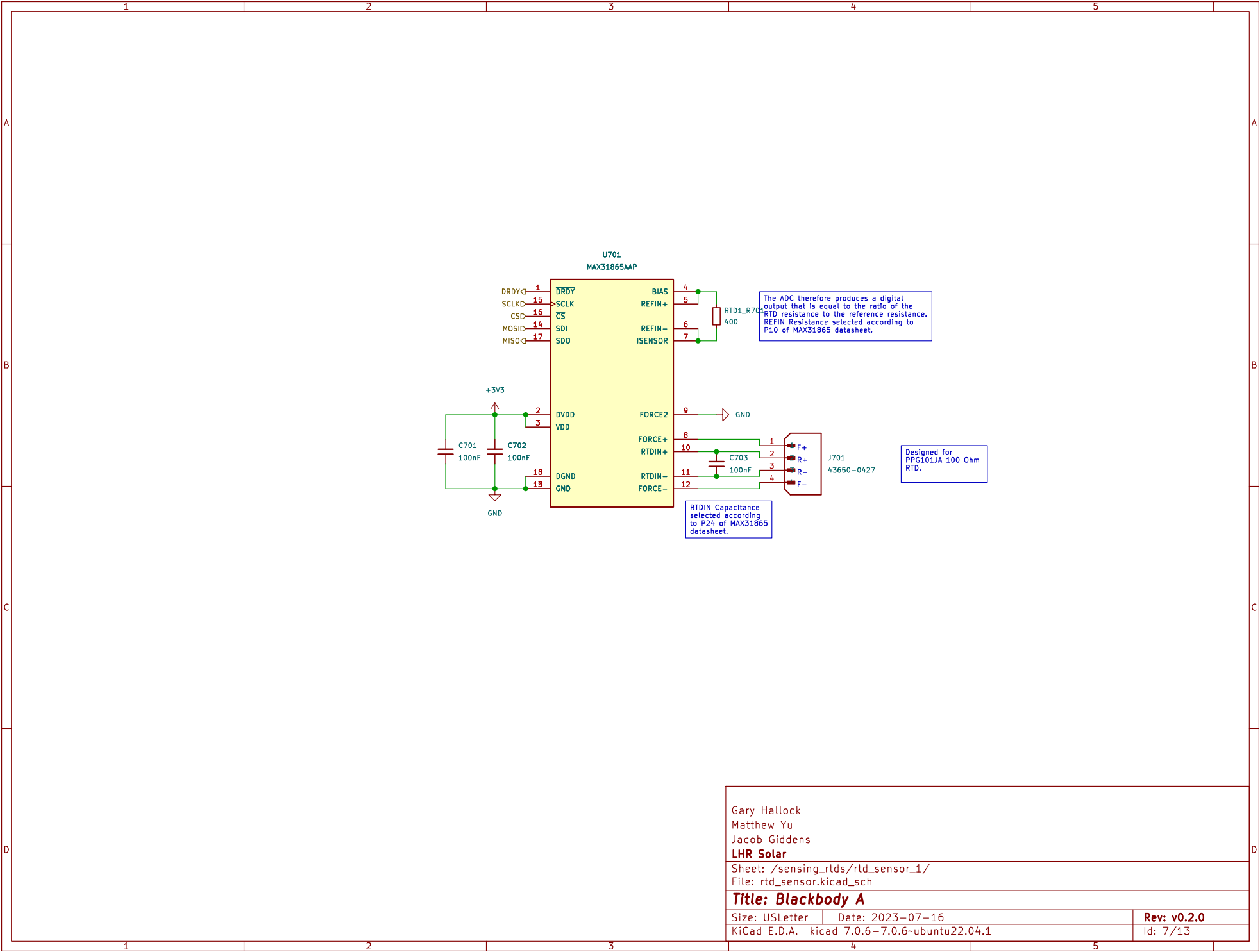
Title: Blackbody A

Size: USLetter Date: 2023-07-16

KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1

Rev: v0.2.0

Id: 6/13



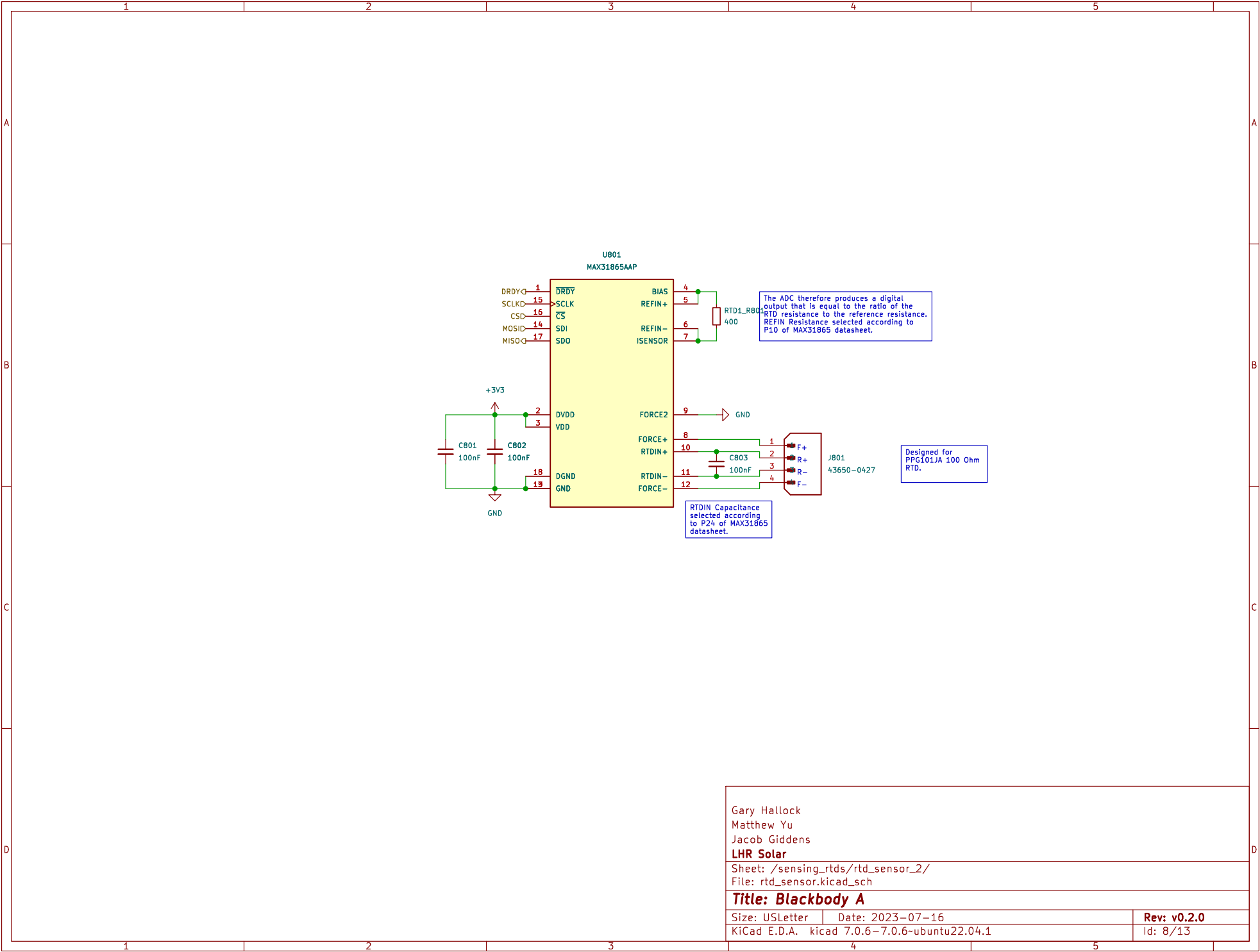
Gary Hallock
Matthew Yu
Jacob Giddens

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Sheet: /sensing_rtds/rtd_sensor_1/
File: rtd_sensor.kicad_sch

Title: Blackbody A

Size: USLetter	Date: 2023-07-16	Rev: v0.2.0
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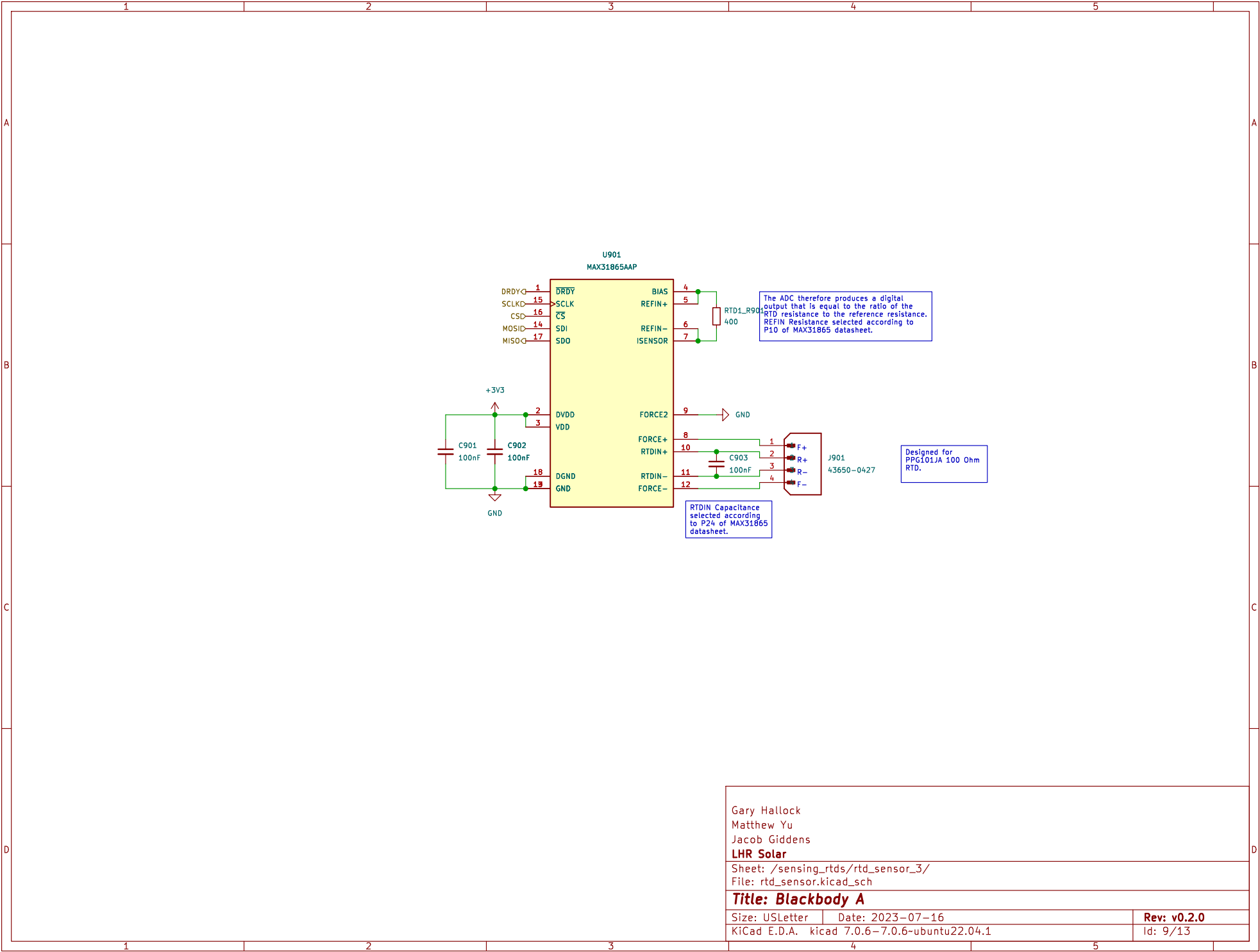
Gary Hallock
Matthew Yu
Jacob Giddens

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Sheet: /sensing_rtds/rtd_sensor_2/
File: rtd_sensor.kicad_sch

Title: Blackbody A

Size: USLetter	Date: 2023-07-16	Rev: v0.2.0
KiCad E.D.A.	kicad 7.0.6-7.0.6-ubuntu22.04.1	Id: 8/13



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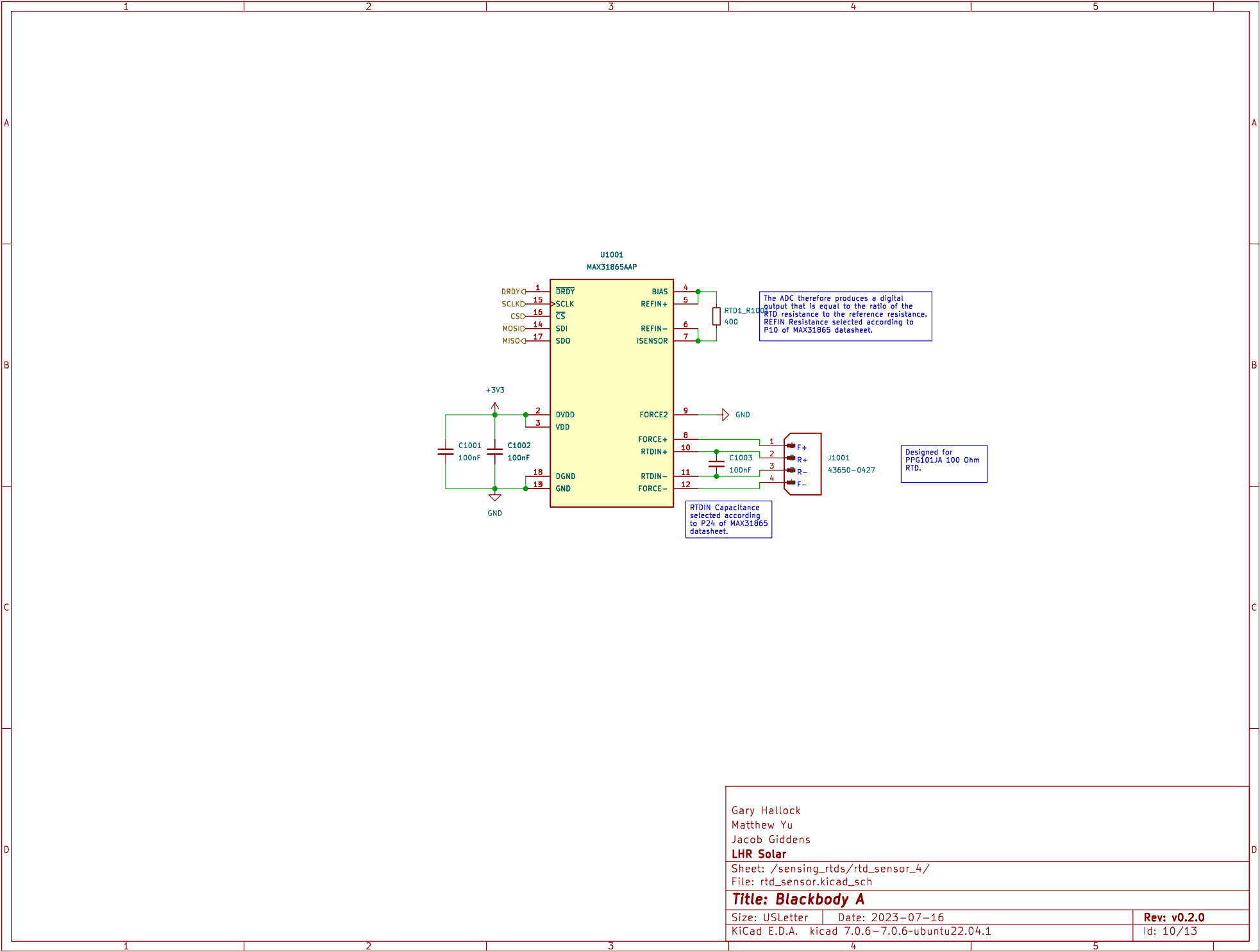
LHR Solar

Sheet: /sensing_rtds/rtd_sensor_3/
File: rtd_sensor.kicad_sch

Title: Blackbody A

Size: USLetter Date: 2023-07-16
KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1

Rev: v0.2.0
Id: 9/13



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Matthew Yu
Jacob Giddens

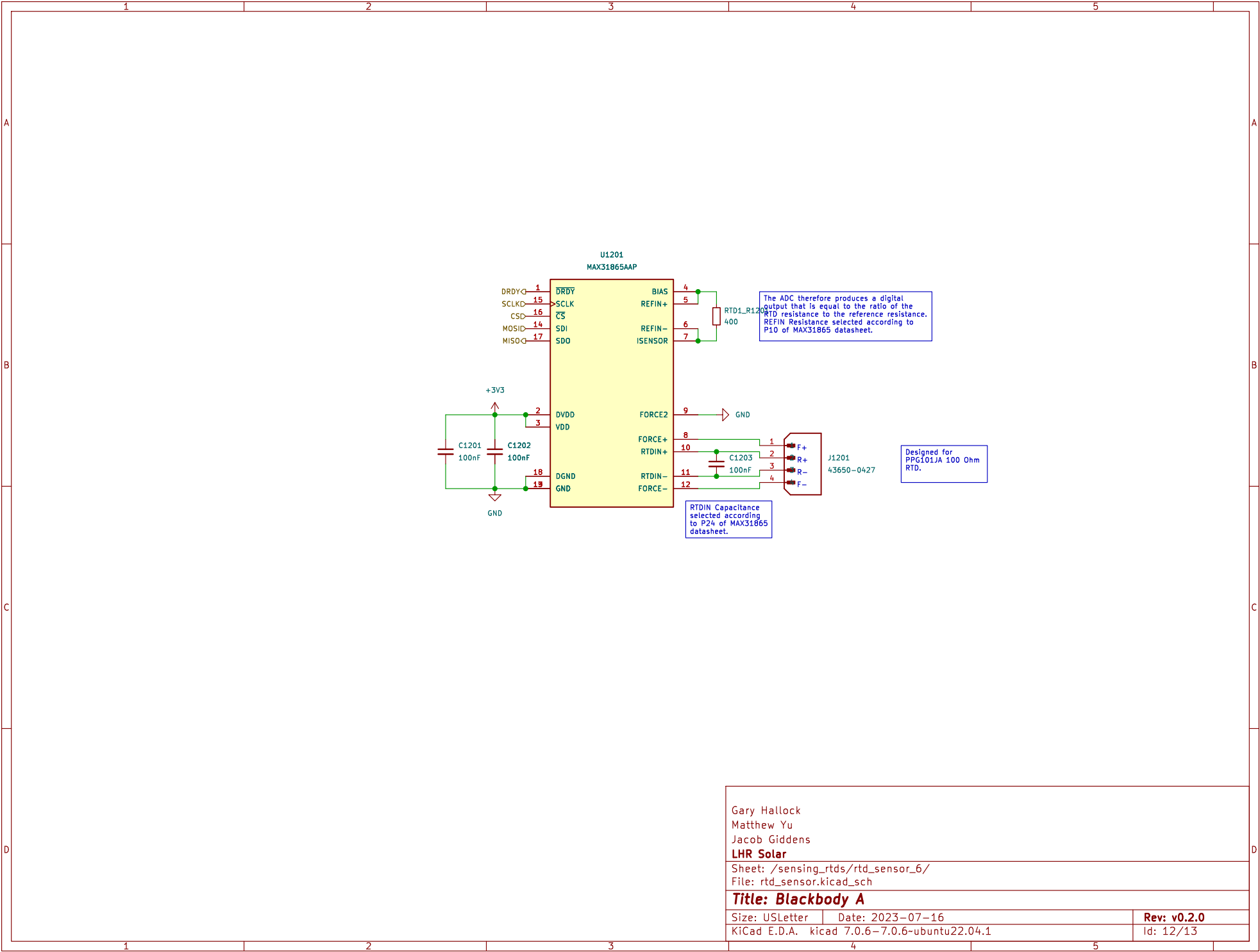
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Sheet: /sensing_rtds/rtd_sensor_4/
File: rtd_sensor.kicad_sch

Title: Blackbody A

Size: USLetter Date: 2023-07-16
KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1

Rev: v0.2.0
Id: 10/13



Gary Hallock
Matthew Yu
Jacob Giddens

LHR Solar

Sheet: /sensing_rtds/rtd_sensor_6/
File: rtd_sensor.kicad_sch

Title: Blackbody A

Size: USLetter Date: 2023-07-16

KiCad E.D.A. kicad 7.0.6-7.0.6-ubuntu22.04.1

Rev: v0.2.0

Id: 12/13

Id: 13/13