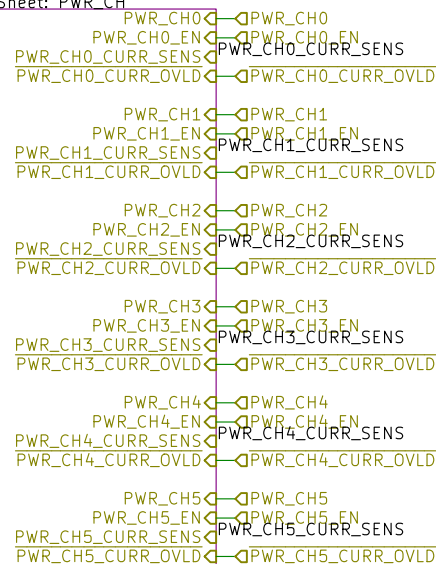
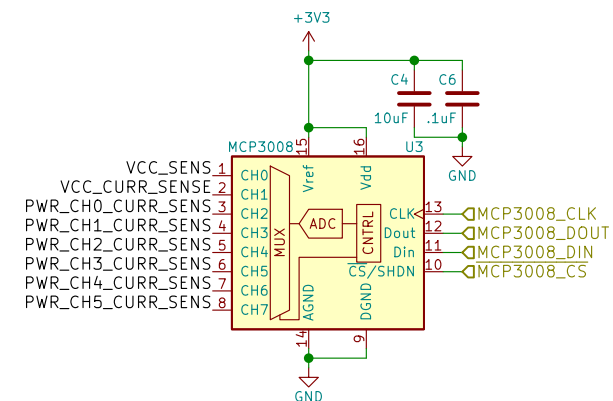
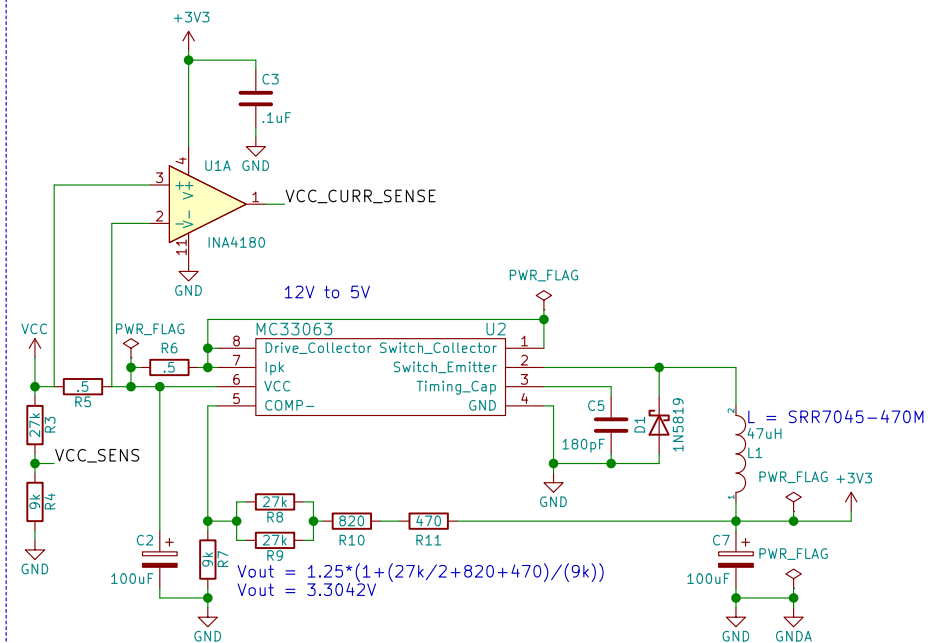


Sheet: PWR_CH



File: PWR_CH.sch



Schematic Design: David Knight

Layout Design: Chris Johnson

SDSU Rocket Project

Sheet: /Power/

File: Power.sch

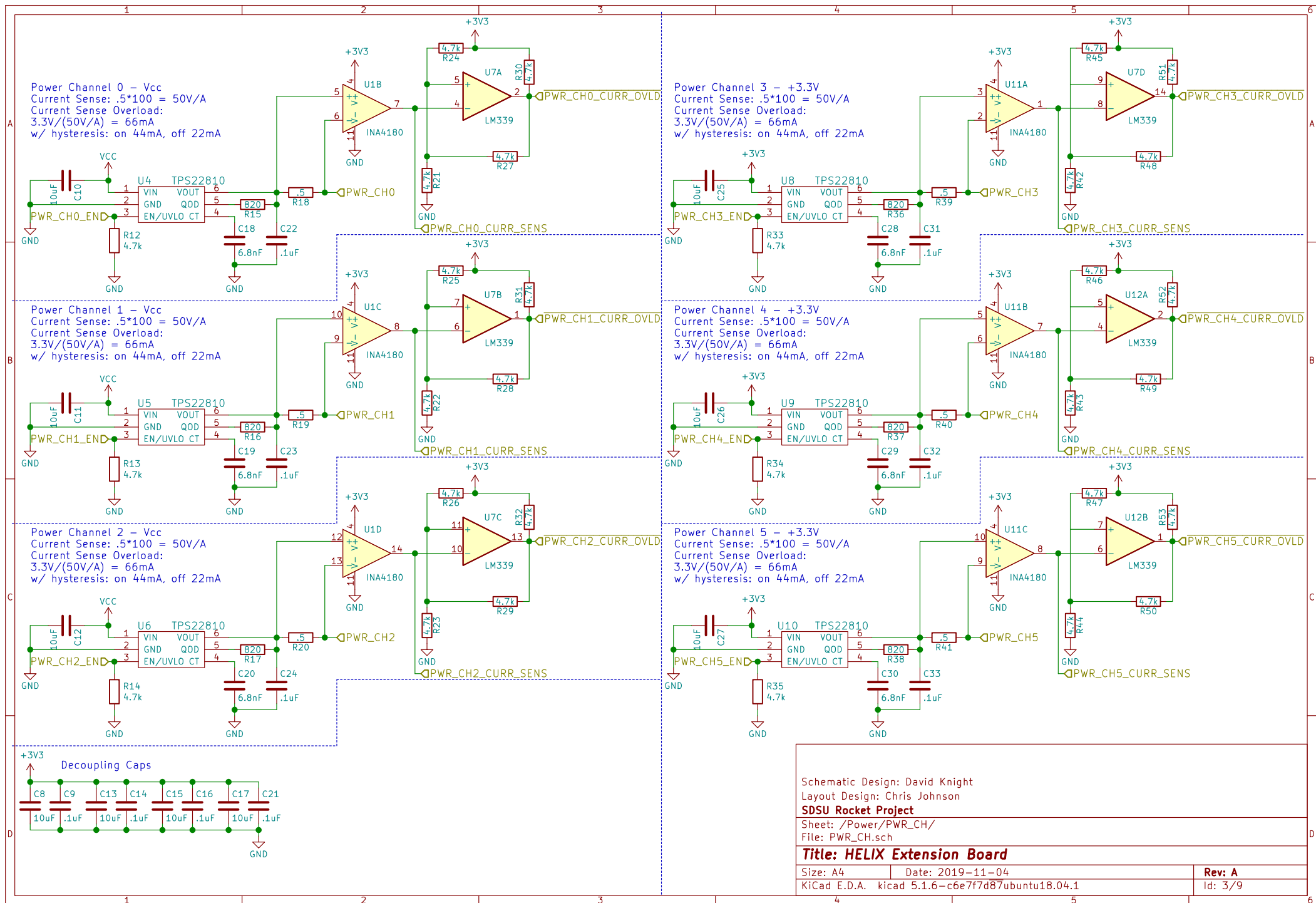
Title: HELIX Extension Board

Size: A4 Date: 2019-11-04

KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: A

Id: 2/9



Schematic Design: David Knight

Layout Design: Chris Johnson

SDSU Rocket Project

Sheet: /Power/PWR_CH/

File: PWR_CH.sch

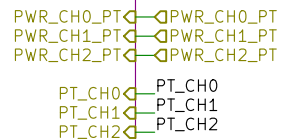
Title: HELIX Extension Board

Size: A4 Date: 2019-11-04

KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: A

Id: 3/9



TC_CH0 TC_CH0
TC_CH1 TC_CH1

RTD0_LEAD1<	RTD0_LEAD1
RTD0_LEAD2<	RTD0_LEAD2
RTD0_IDAC1<	RTD0_IDAC1
RTD0_IDAC2<	RTD0_IDAC2
RTD0_REFP<	RTD0_REFP
RTD0_REFN<	RTD0_REFN
RTD1_LEAD1<	RTD1_LEAD1
RTD1_LEAD2<	RTD1_LEAD2
RTD1_IDAC1<	RTD1_IDAC1
RTD1_IDAC2<	RTD1_IDAC2
RTD1_REFP<	RTD1_REFP
RTD1_REFN<	RTD1_REFN

Diagram illustrating the PWR-HE system components and connections:

- PWR Channels:** PWR_CH3_HE, PWR_CH4_HE, PWR_CH5_HE
- HE Channels:** HE_CH0, HE_CH1, HE_CH2
- Connections:** The PWR channels are connected to the HE channels via a central vertical line.

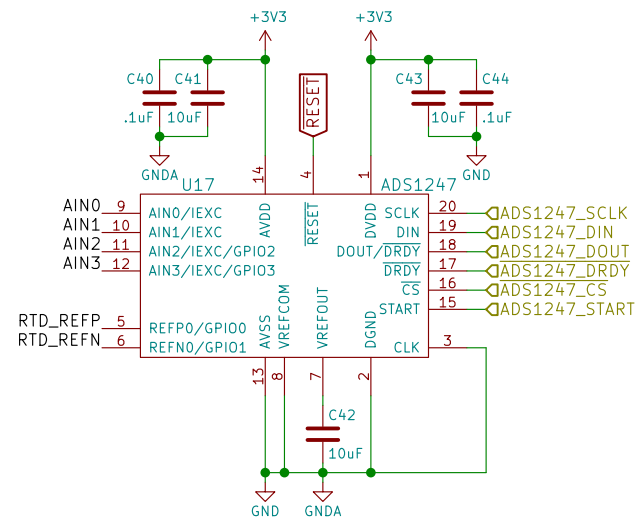
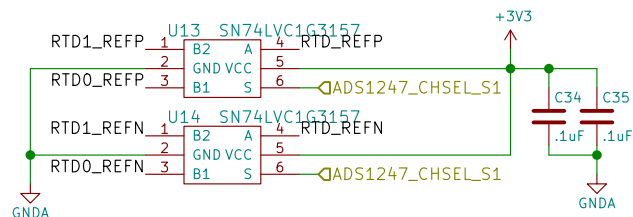
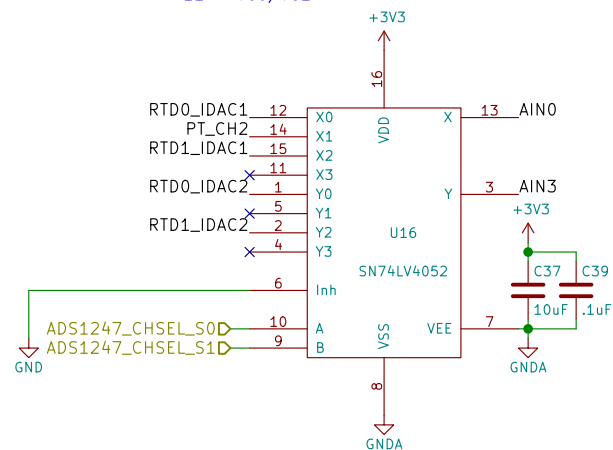
RTD0_LEAD1 12 X0
PT_CH0 14 X1
RTD1_LEAD1 15 X2
TC_CH0 11 X3
RTD0_LEAD2 1 Y0
PT_CH1 5 Y1
RTD1_LEAD2 2 Y2
TC_CH1 4 Y3

ADS1247_CHSEL_S0D 10
ADS1247_CHSEL_S1D 9

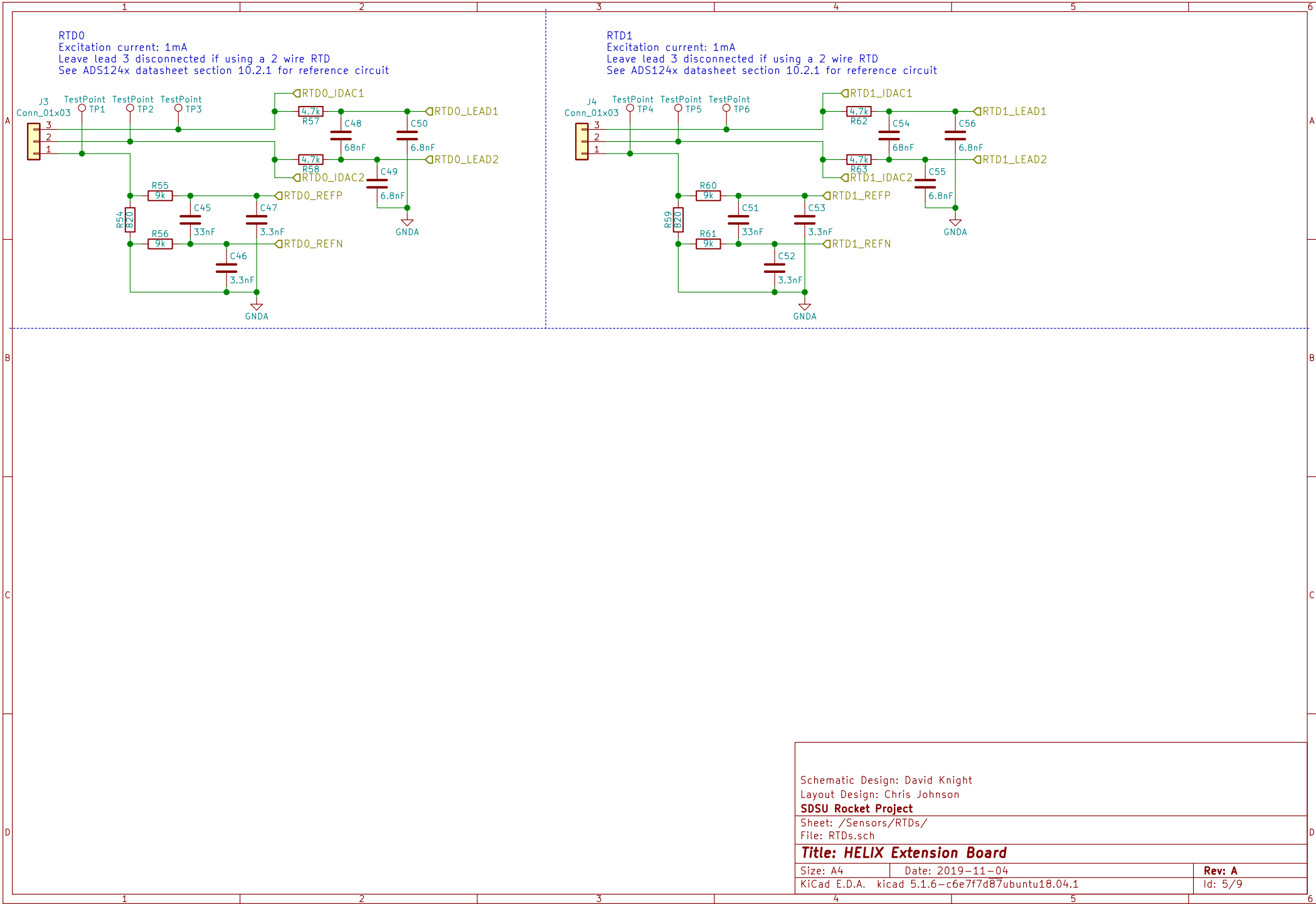
Sx - Sensor
00 - RTD0
01 - PT0/PT1
10 - RTD1
11 - TC0/TC1

+3V3
16
VDD
X
13 AIN1
Y
3 AIN2
+3V3
C36
C38
10uF
10uF
7 GND
GND A
8
VSS
VEE
GND A

U15
SN74LV4052



Id: 4/9



Schematic Design: David Knight
Layout Design: Chris Johnson

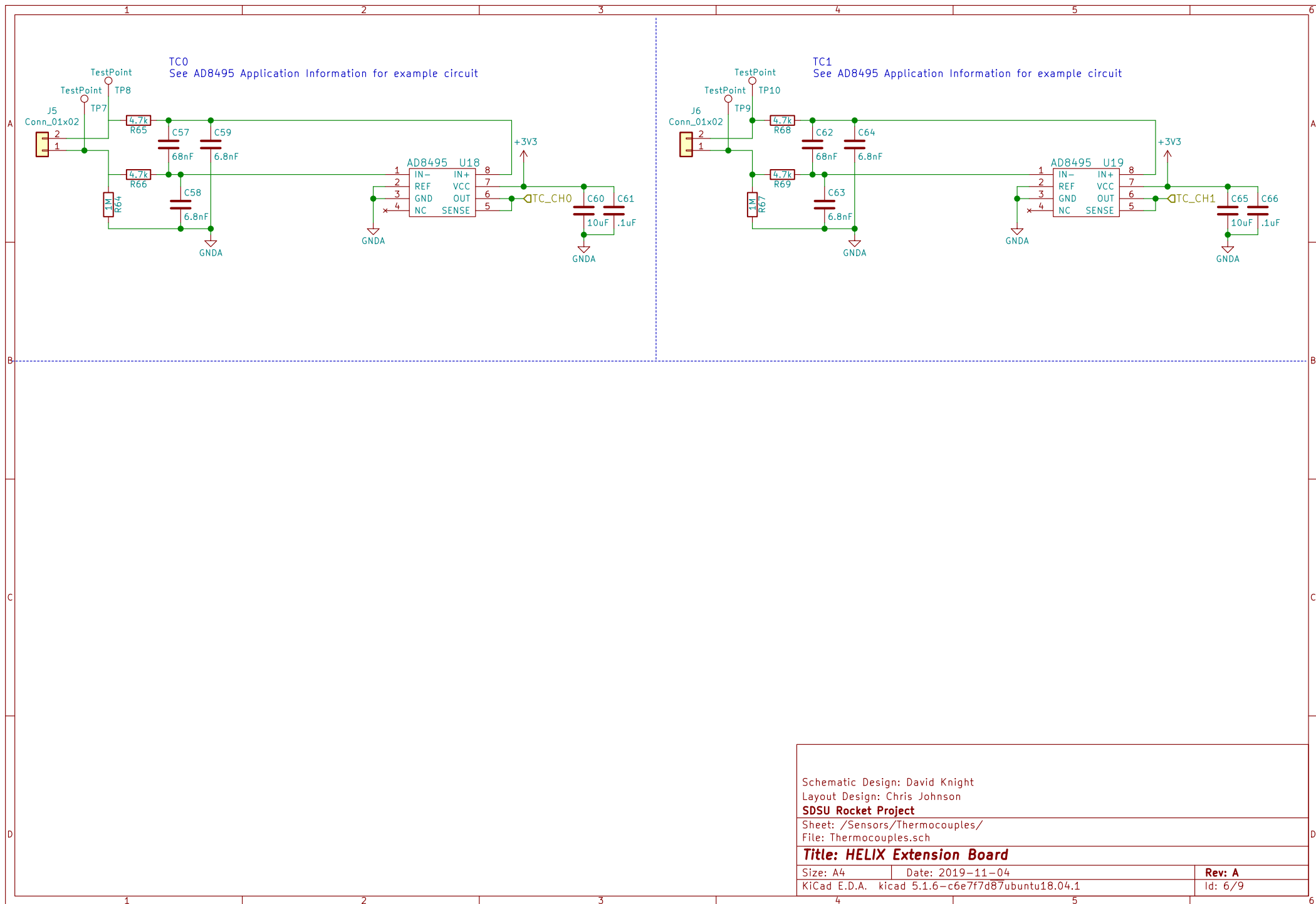
SDSU Rocket Project

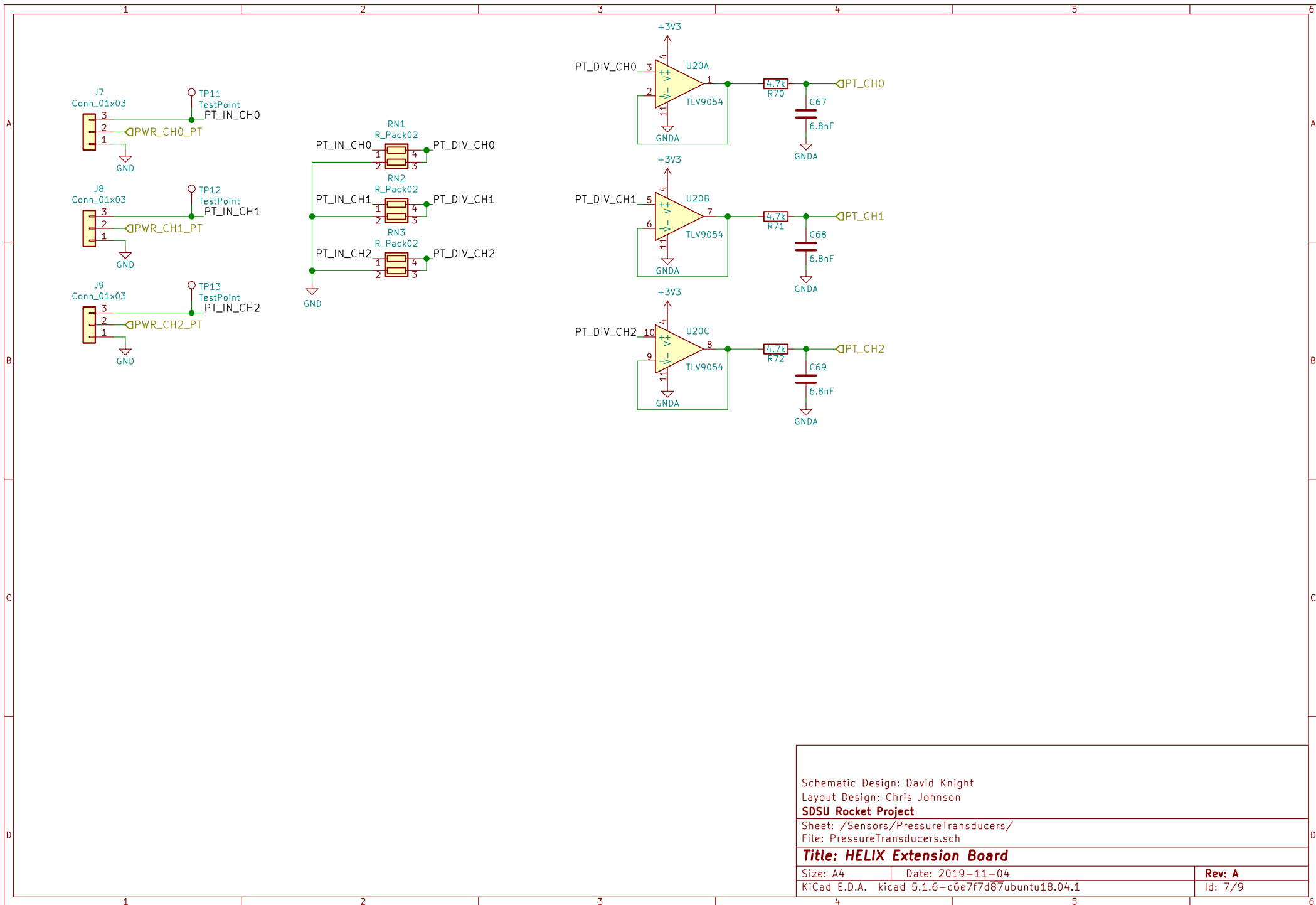
Sheet: /Sensors/RTDs/
File: RTDs.sch

Title: HELIX Extension Board

Size: A4 Date: 2019-11-04
KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: A
Id: 5/9





Schematic Design: David Knight

Layout Design: Chris Johnson

SDSU Rocket Project

Sheet: /Sensors/PressureTransducers/

File: PressureTransducers.sch

Title: HELIX Extension Board

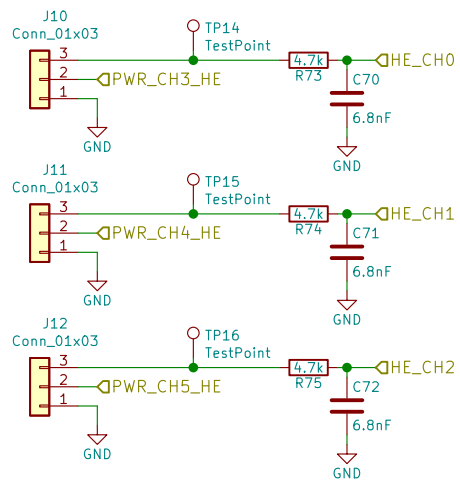
Size: A4

Date: 2019-11-04

Rev: A

KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Id: 7/9



Schematic Design: David Knight

Layout Design: Chris Johnson

SDSU Rocket Project

Sheet: /Sensors/HallEffect/

File: HallEffect.sch

Title: HELIX Extension Board

Size: A4

Date: 2019-11-04

Rev: A

KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Id: 8/9

