

SDSU Rocket Project

Sheet: /

File: Extention Boards.sch

Title: HELIX Extension Board

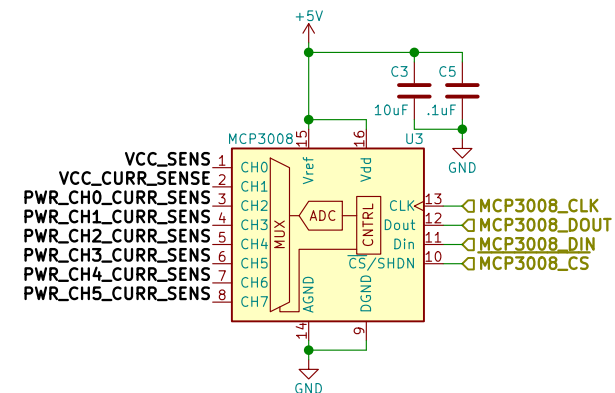
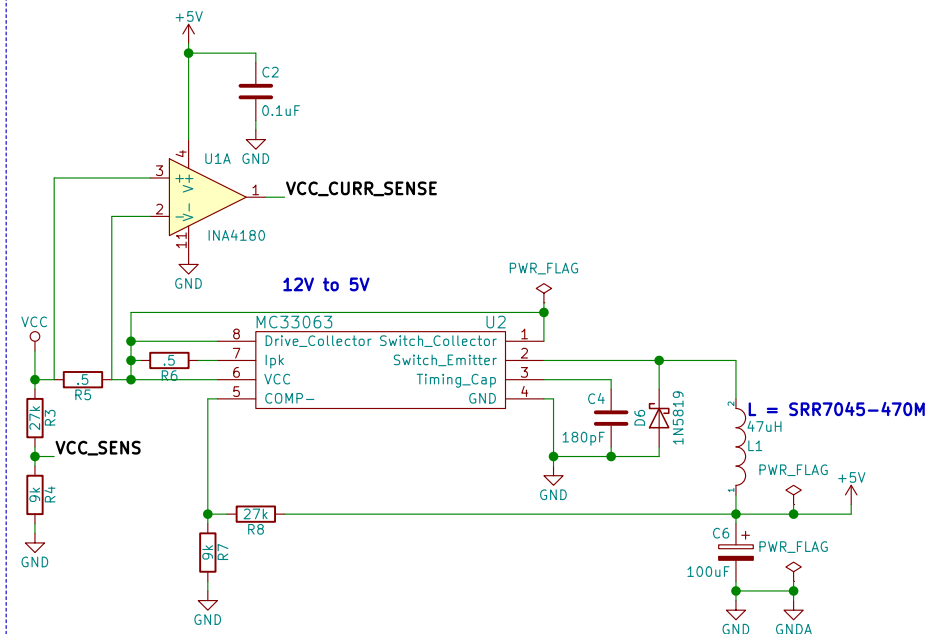
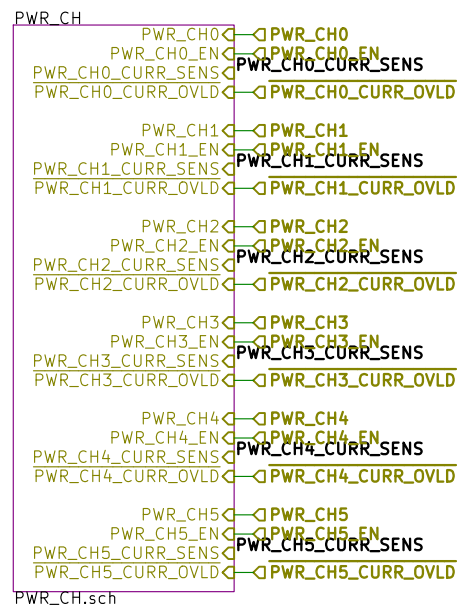
Size: A4

Date: 2019-07-11

Rev: A

KiCad E.D.A. kicad (5.1.0)-1

Id: 1/9



SDSU Rocket Project

Sheet: /Power/

File: Power.sch

Title: HELIX Extension Board

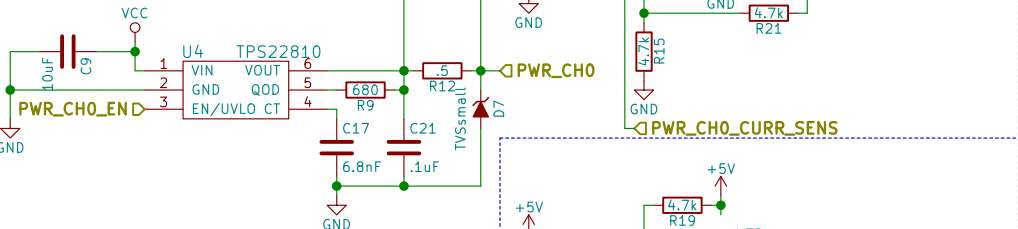
Size: A4 Date: 2019-07-11

KiCad E.D.A. kicad (5.1.0)-1

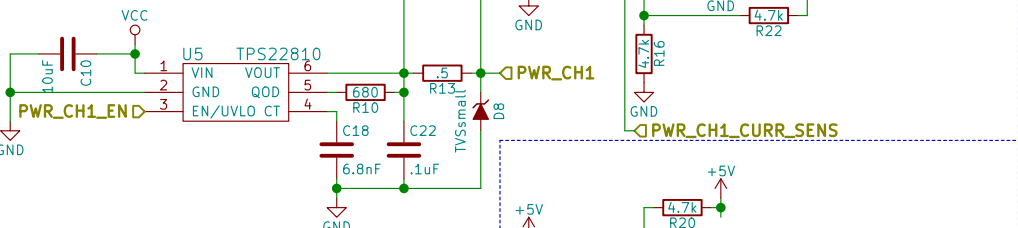
Rev: A

Id: 2/9

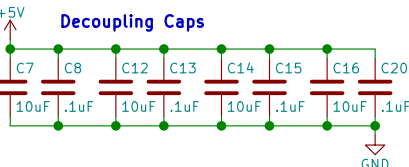
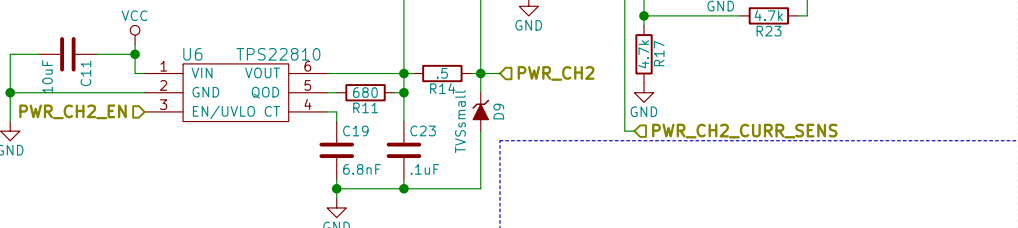
Power Channel 0 – Vcc
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



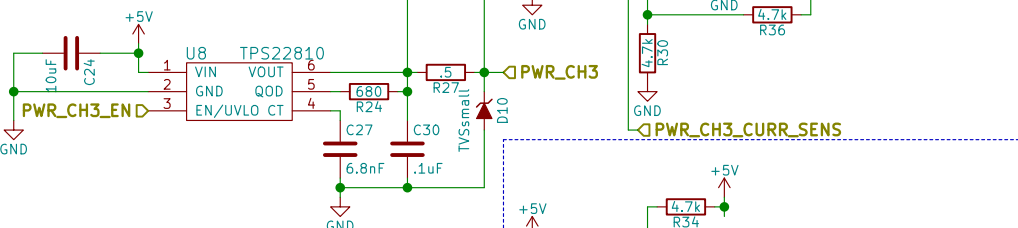
Power Channel 1 – Vcc
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



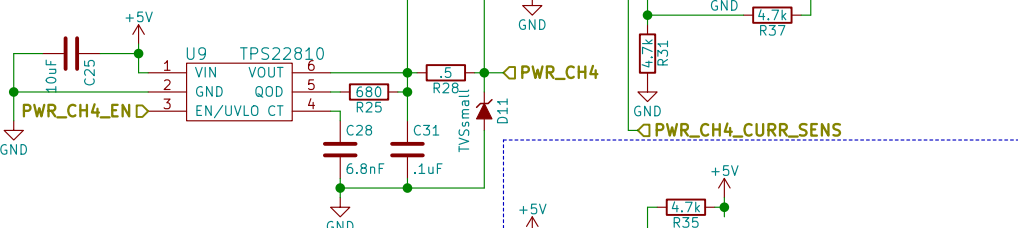
Power Channel 2 – Vcc
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



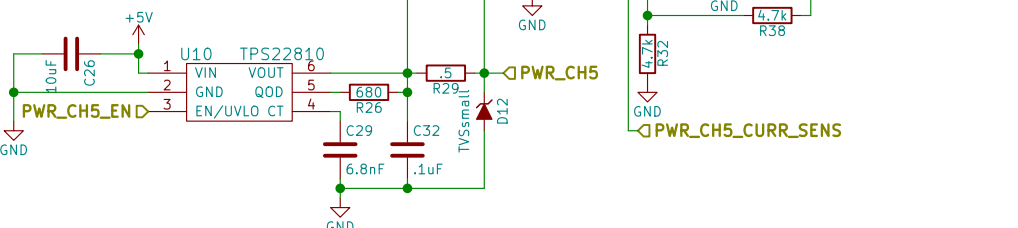
Power Channel 3 – +5V
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



Power Channel 4 – +5V
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



Power Channel 5 – +5V
 Current Sense: $.5 \times 100 = 50\text{V/A}$
 Current Sense Overload:
 $(5 \times (2.1 + (2.1 + 4.7)) + 100) + .5 = 30.9\text{mA}$



Sheet: /Power/PWR_CH/
 File: PWR_CH.sch

Title:

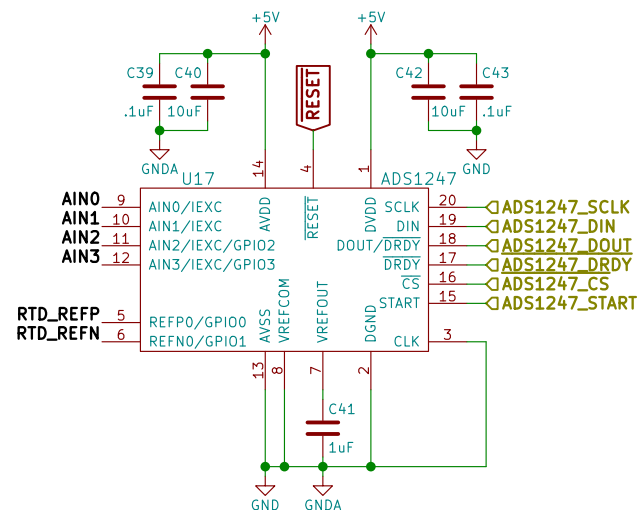
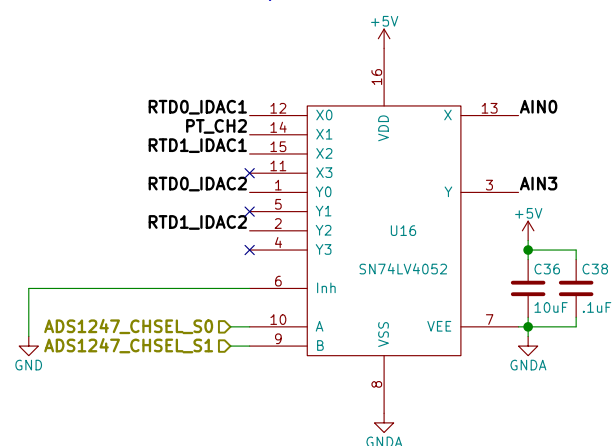
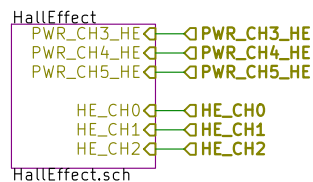
Size: A4

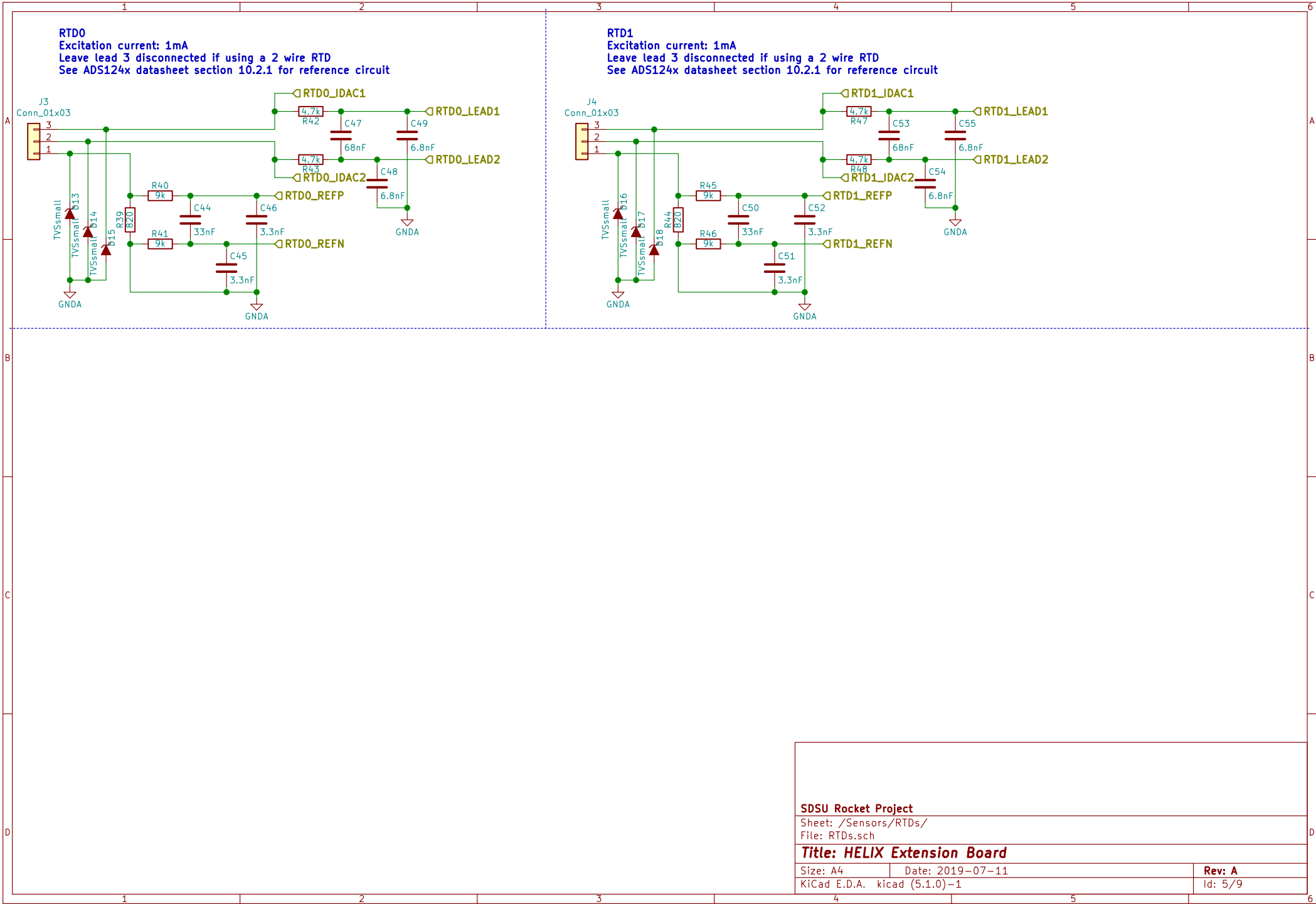
Date:

KiCad E.D.A. kicad (5.1.0)–1

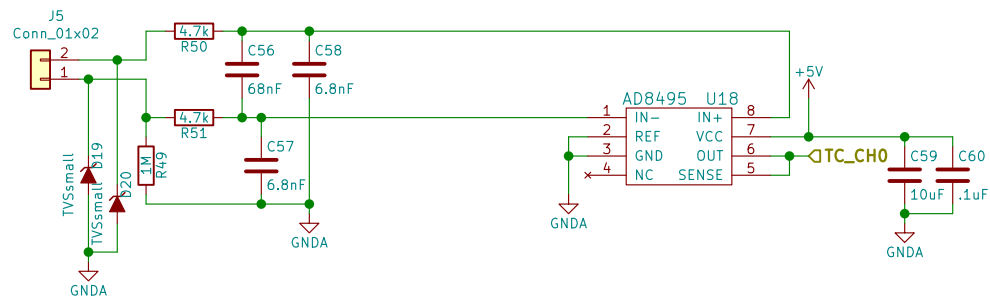
Rev:

Id: 3/9

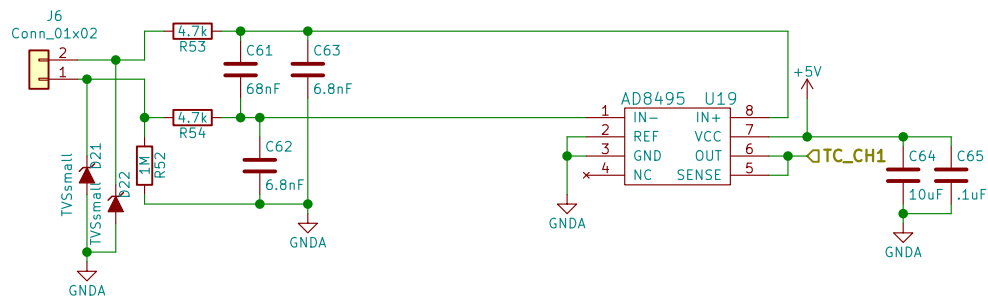




TC0
See AD8495 Application Information for example circuit



TC1
See AD8495 Application Information for example circuit



SDSU Rocket Project

Sheet: /Sensors/Thermocouples/
File: Thermocouples.sch

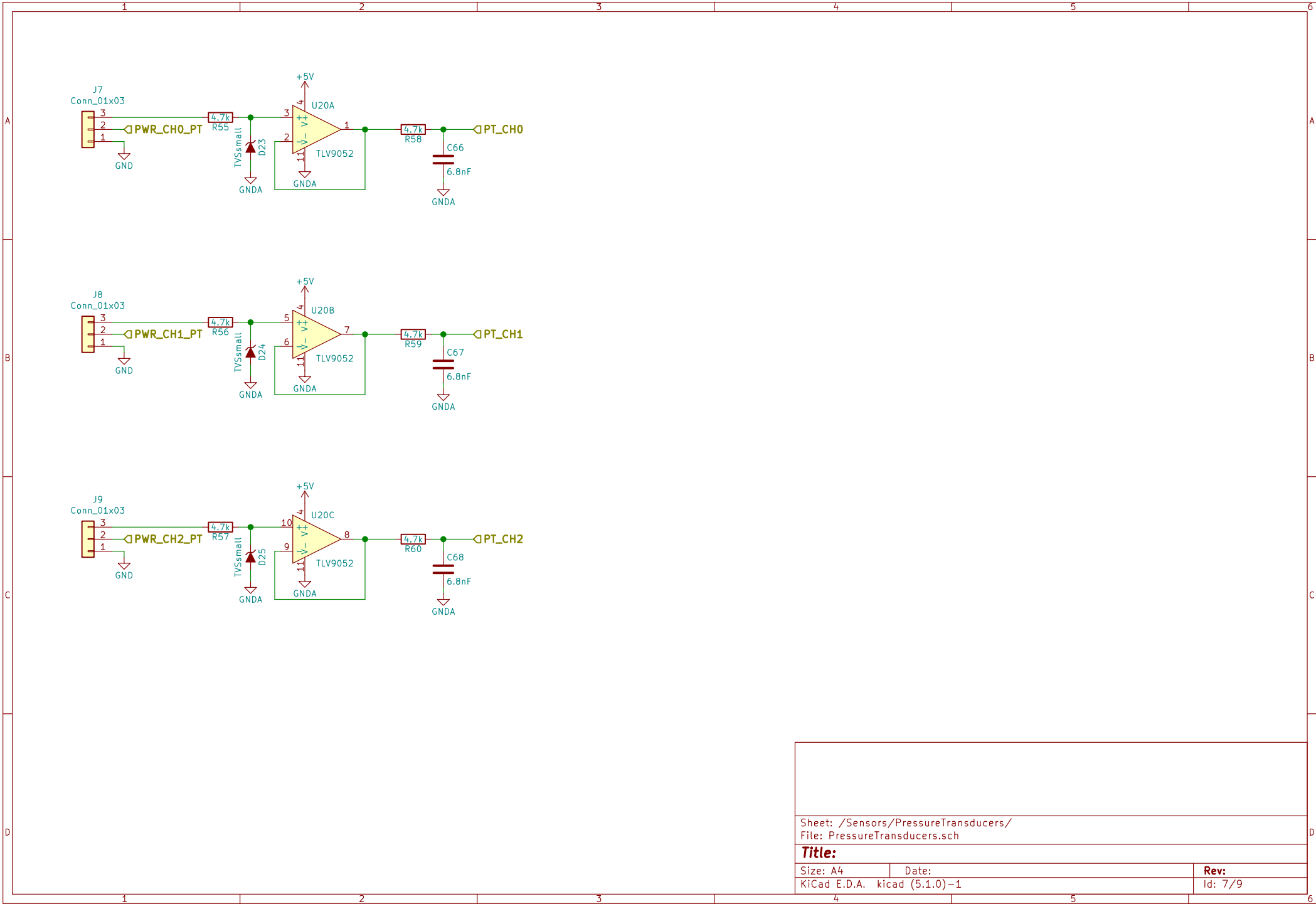
Title: HELIX Extension Board

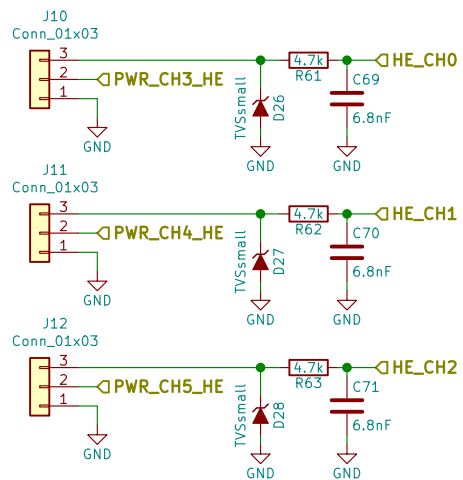
Size: A4 Date: 2019-07-11

KiCad E.D.A. kicad (5.1.0)-1

Rev: A

Id: 6/9





Sheet: /Sensors/HallEffect/
File: HallEffect.sch

Title:

Size: A4
KiCad E.D.A. kicad (5.1.0)-1

Date:

Rev:
Id: 8/9

