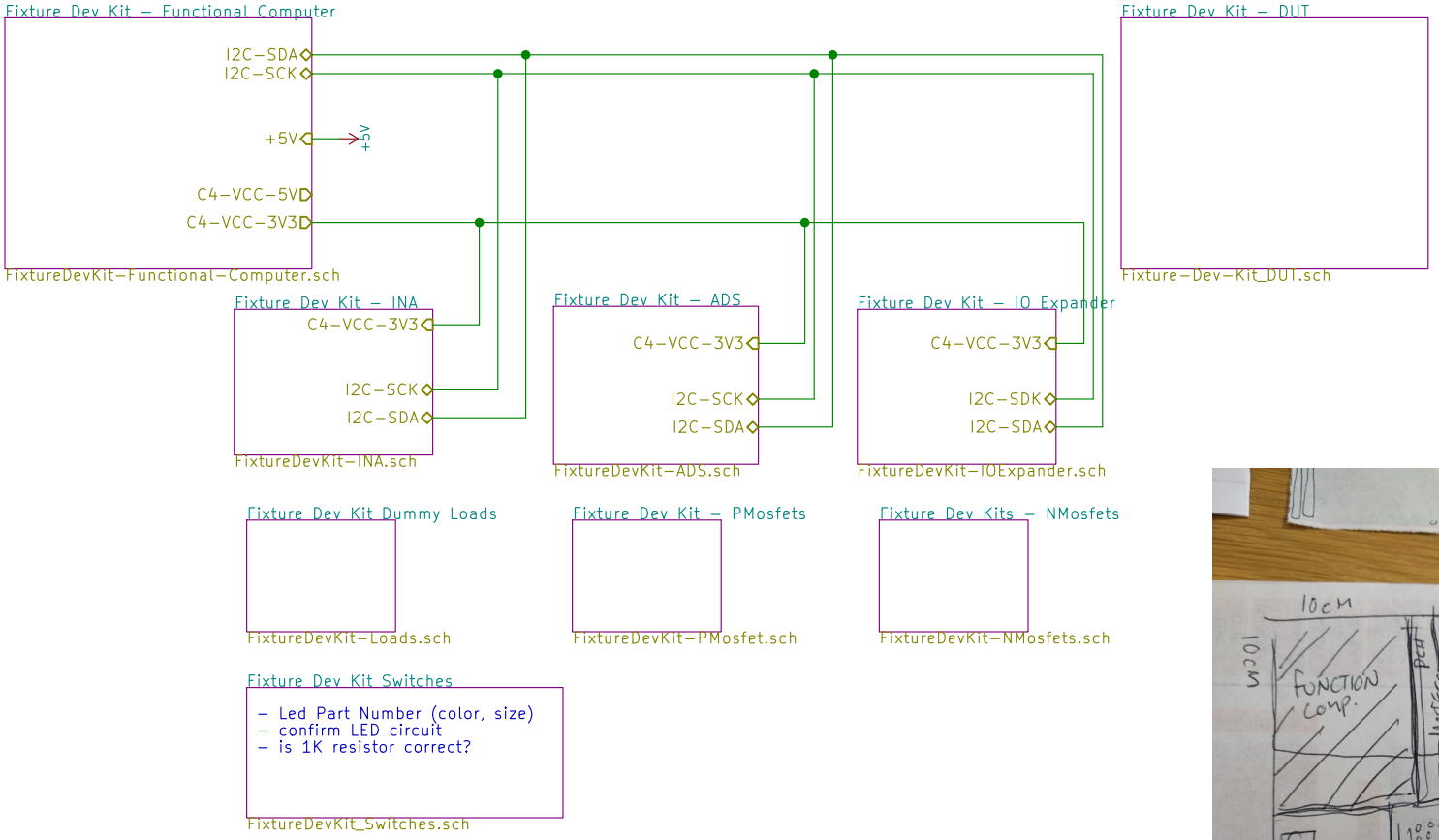
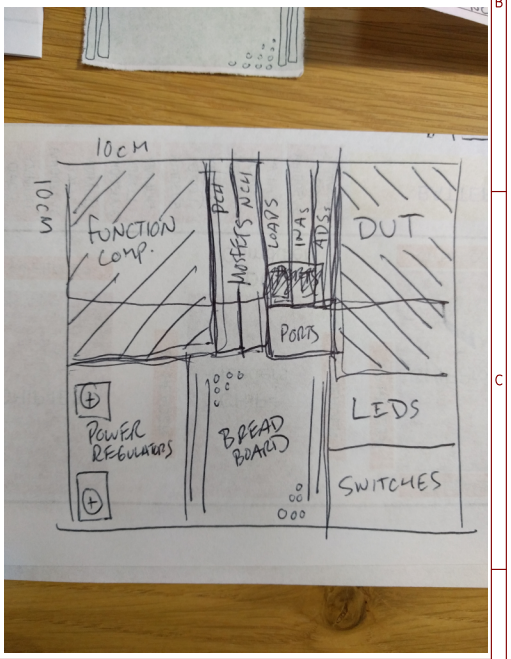
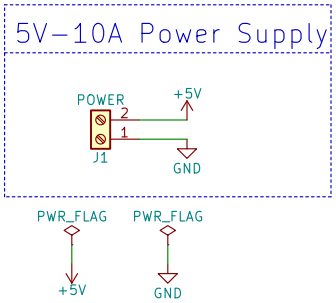






Havin' a Blast!
Next Thing Co

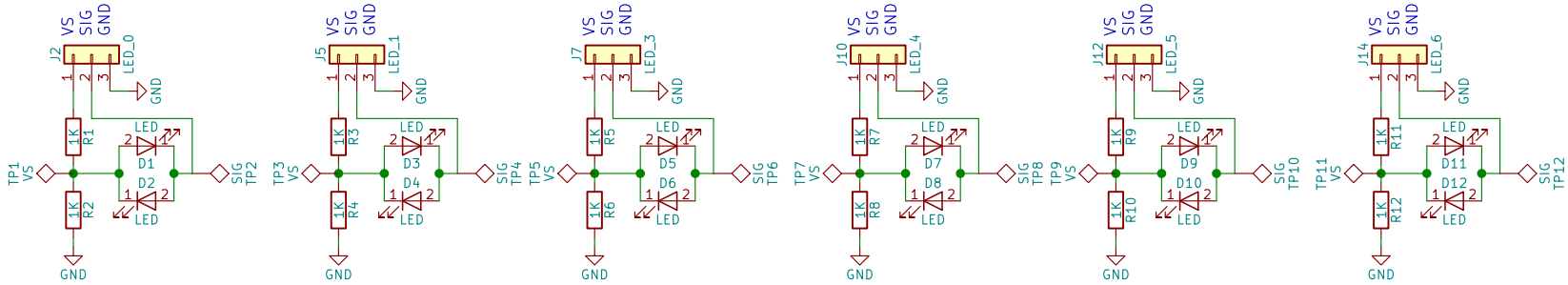
Sheet: /
File: Fixture–Dev–Kit.sch

Title: CHIP4 Fixture Dev Kit

Size: USLetter	Date: 2017–10–25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 1/10

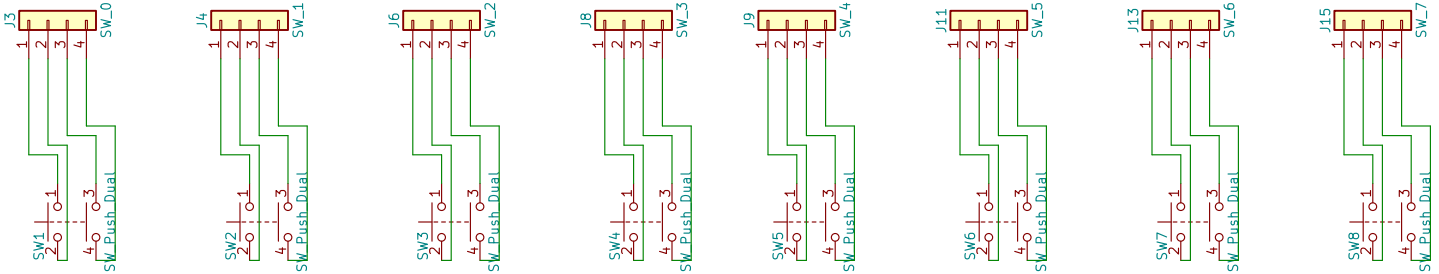
LED_Status_Indicators

NOTES:
HIGH side LED = Violet/Purple
LOW side LED = Ultra Emerald Green



BUTTONS :)

NOTES:



Havin' a Blast!
Next Thing Co

Sheet: /Fixture Dev Kit Switches/
File: FixtureDevKit_Switches.sch

Title: Buttons and LEDs

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 2/10

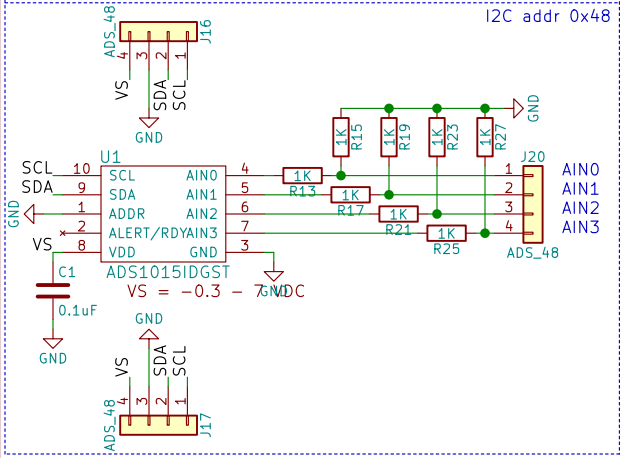
ADS Voltage Read Circuit

Sheet Connections

I2C-SDA — SDA
I2C-SCK — SCL
C4-VCC-3V3 — VS

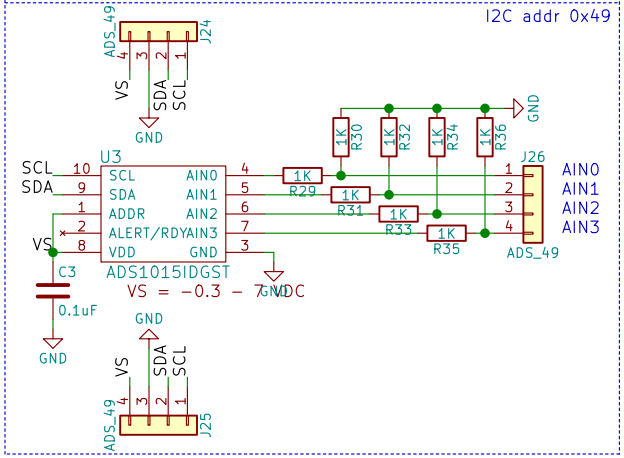
ADS_48

I2C addr 0x48



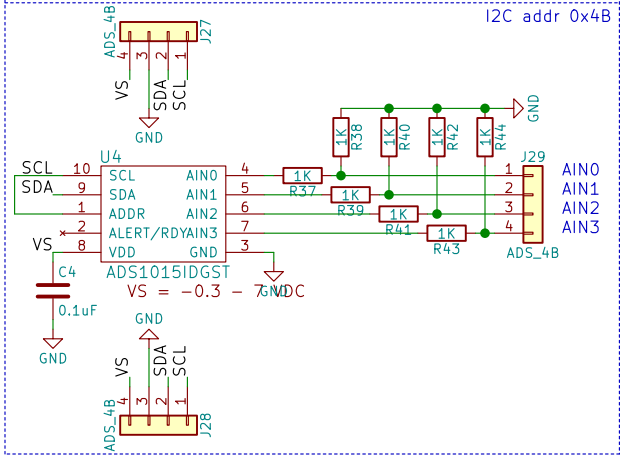
ADS_49

I2C addr 0x49



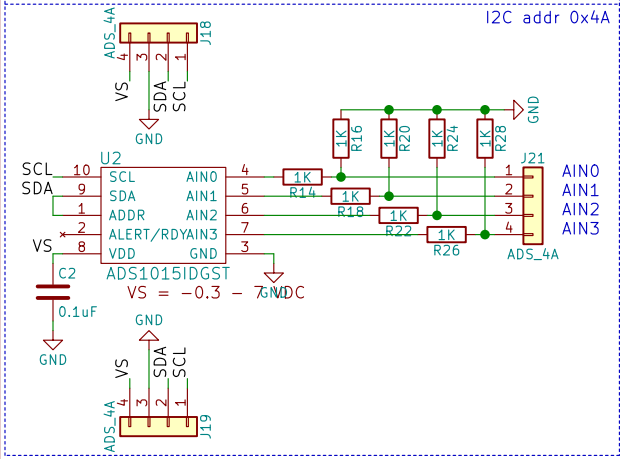
ADS_4B

I2C addr 0x4B

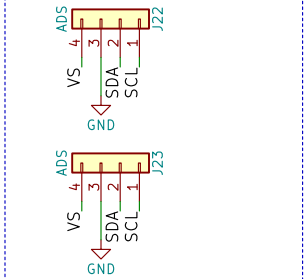


ADS_4A

I2C addr 0x4A



Main Circuit Headers



Havin' a Blast!
Next Thing Co

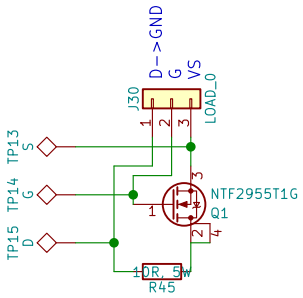
Sheet: /Fixture Dev Kit - ADS/
File: FixtureDevKit-ADS.sch

Title: ADS Circuits

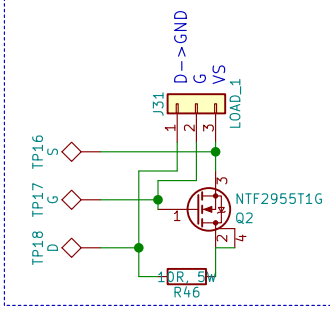
Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 3/10

Dummy Load Circuit

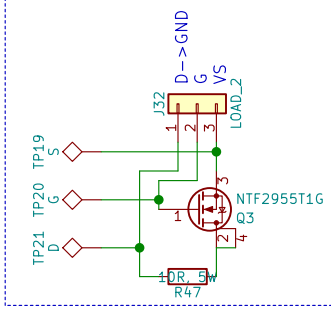
LOAD_0



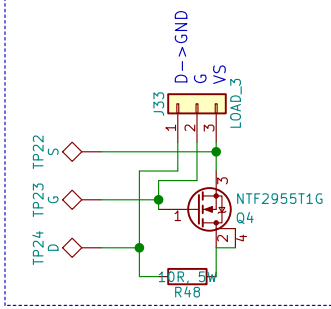
LOAD_1



LOAD_2



LOAD_3



Ohm's Law Cheat Sheet

V = C * R
P = V * i

V	i	R	P
5	0.5	10	5

Havin' a Blast!
Next Thing Co

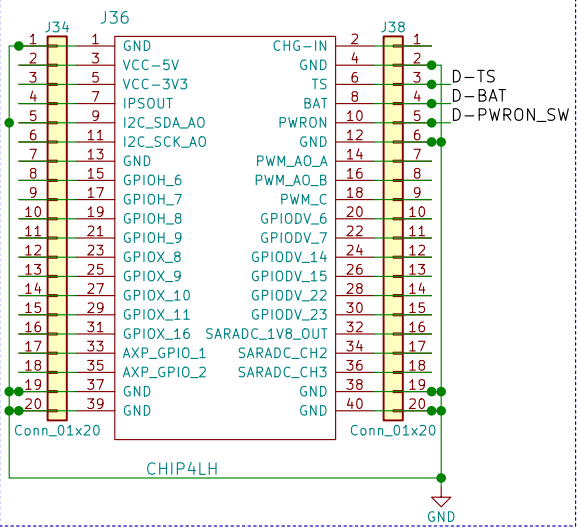
Sheet: /Fixture Dev Kit Dummy Loads/
File: FixtureDevKit-Loads.sch

Title: Dummy Loads

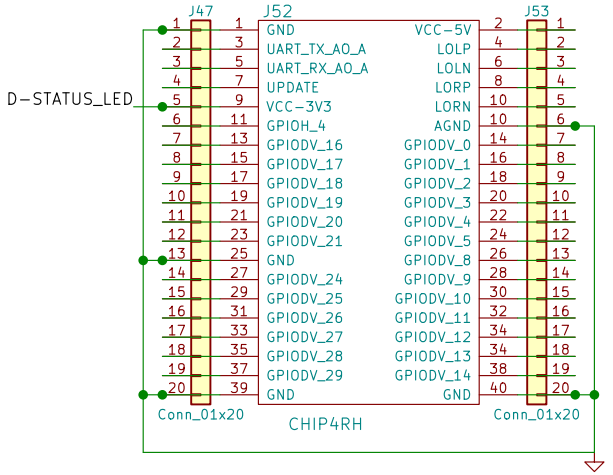
Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 4/10

DUT

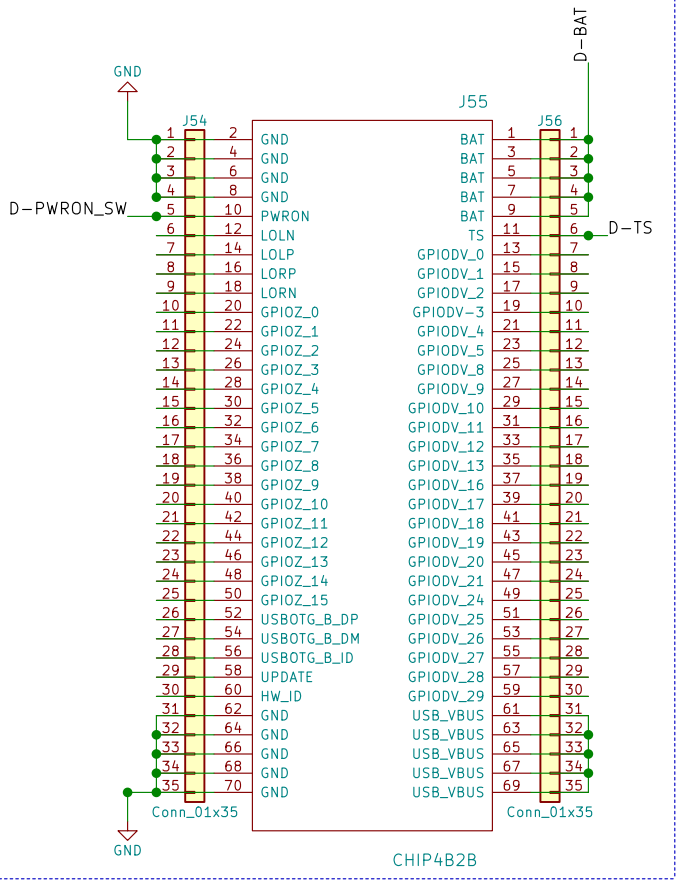
DUT – Left Header



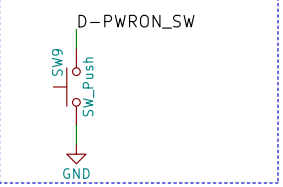
DUT – Right Header



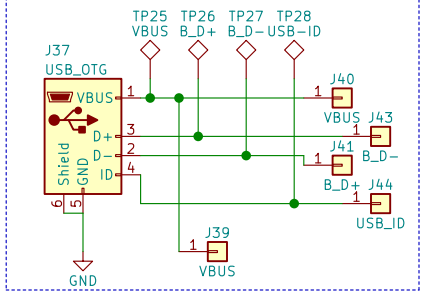
DUT – B2B Conn



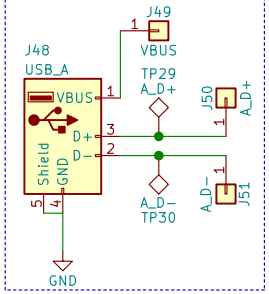
D–PWRON BUTTON



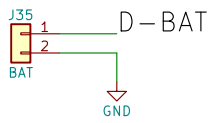
D–USBOTG–TPs



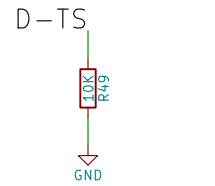
D–USB–A–TPs



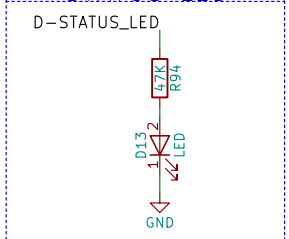
D–BAT CONN



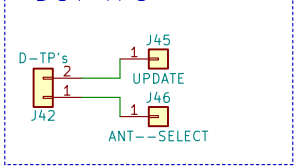
D–TS



STATUS LED



DUT TPs



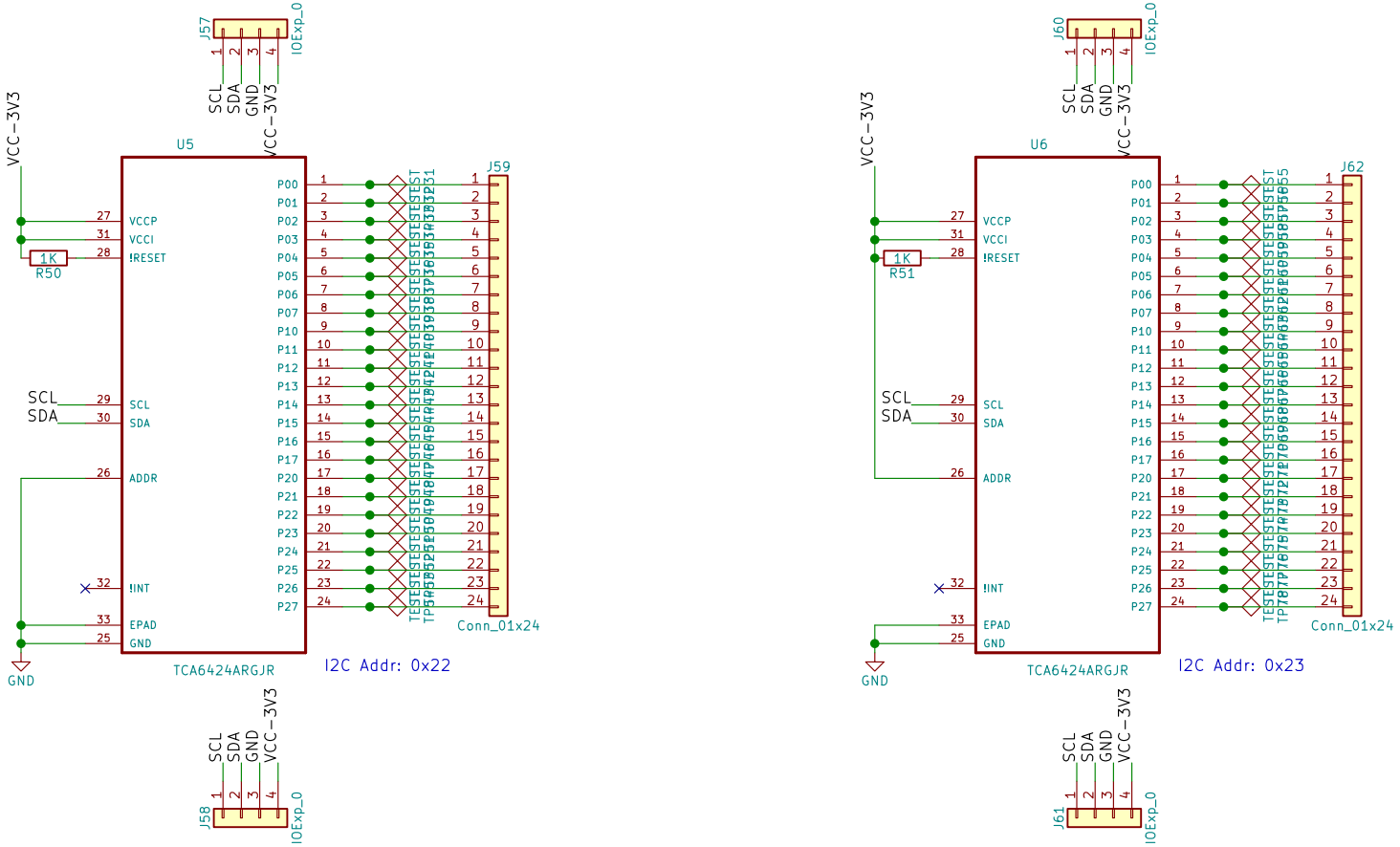
Havin' a Blast!
Next Thing Co

Sheet: /Fixture Dev Kit – DUT/		
File: Fixture–Dev–Kit_DUT.sch		
Title: DUT		
Size: USLetter	Date: 2017–10–25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 5/10

IO Expander

Sheet Connections

I2C-SDA	SDA
I2C-SDK	SCL
C4-VCC-3V3	VCC-3V3



Havin' a Blast!

Next Thing Co

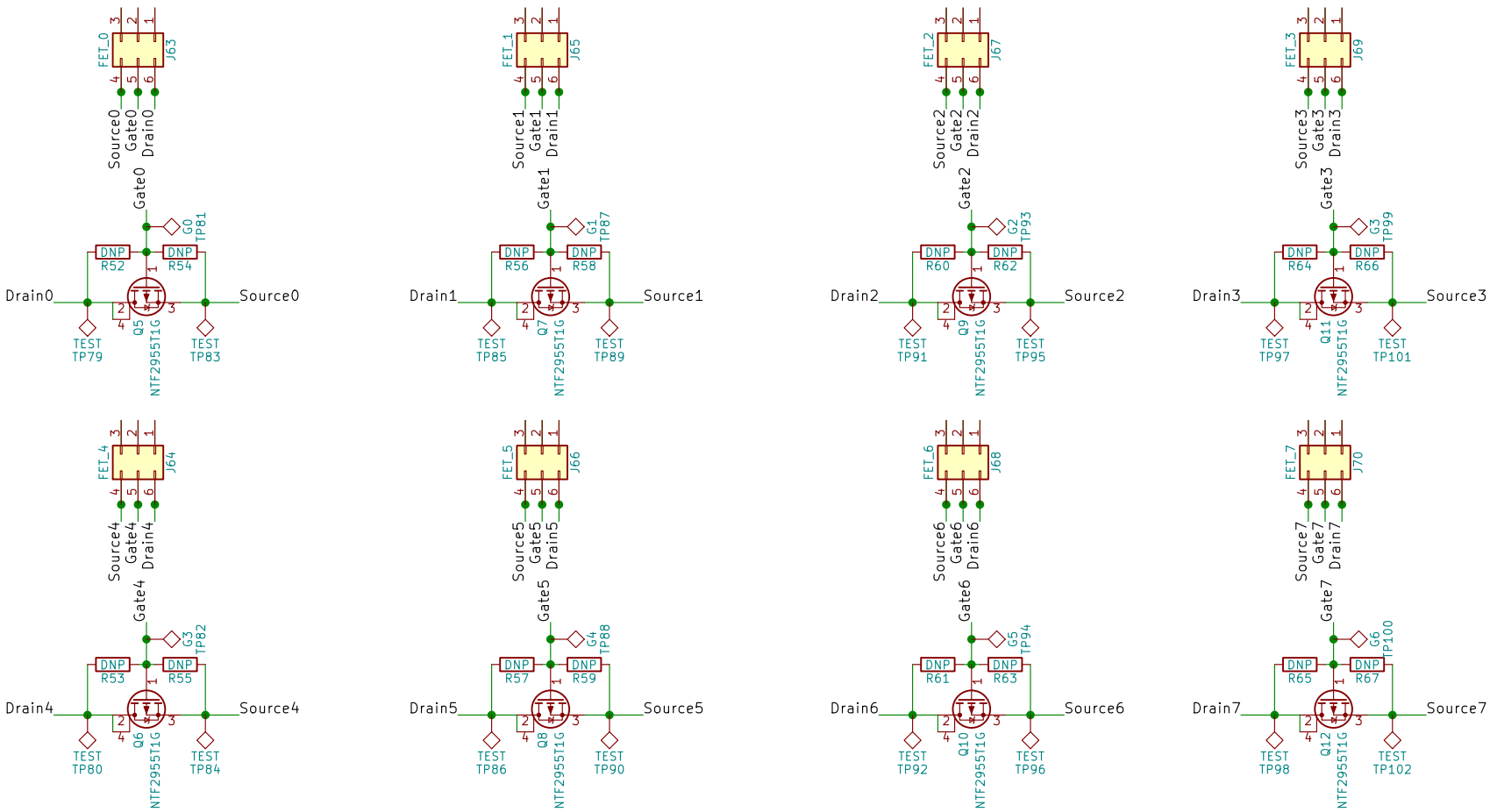
Sheet: /Fixture Dev Kit - IO Expander/

File: FixtureDevKit-IOExpander.sch

Title: IO Expanders

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 6/10

P-Channel Mosfet Circuits



Havin' a Blast!

Next Thing Co

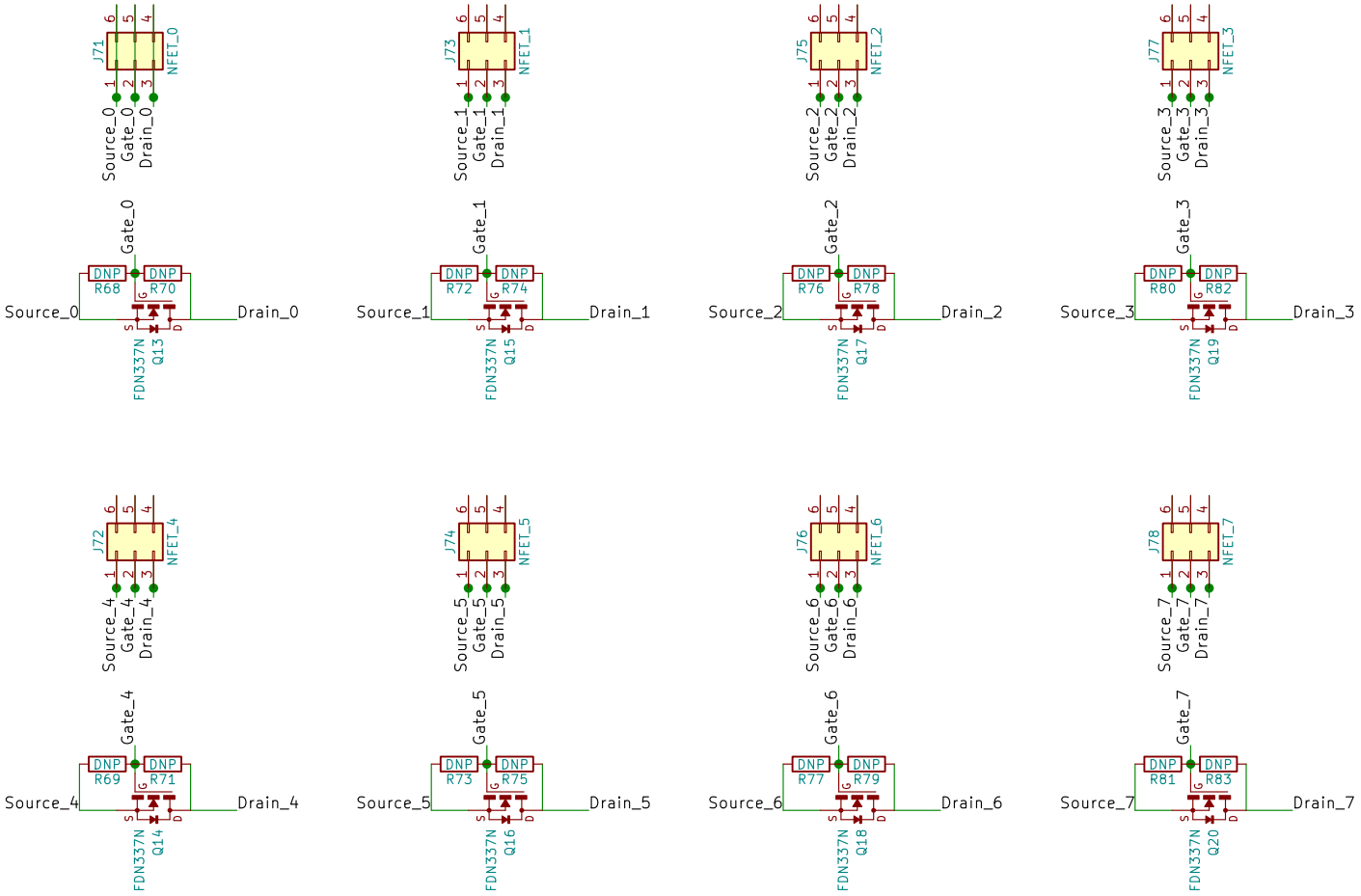
Sheet: /Fixture Dev Kit - PMosfets/

File: FixtureDevKit-PMosfet.sch

Title: P-Channel MOSFETS

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 7/10

N-Channel Mosfets



Havin' a Blast!

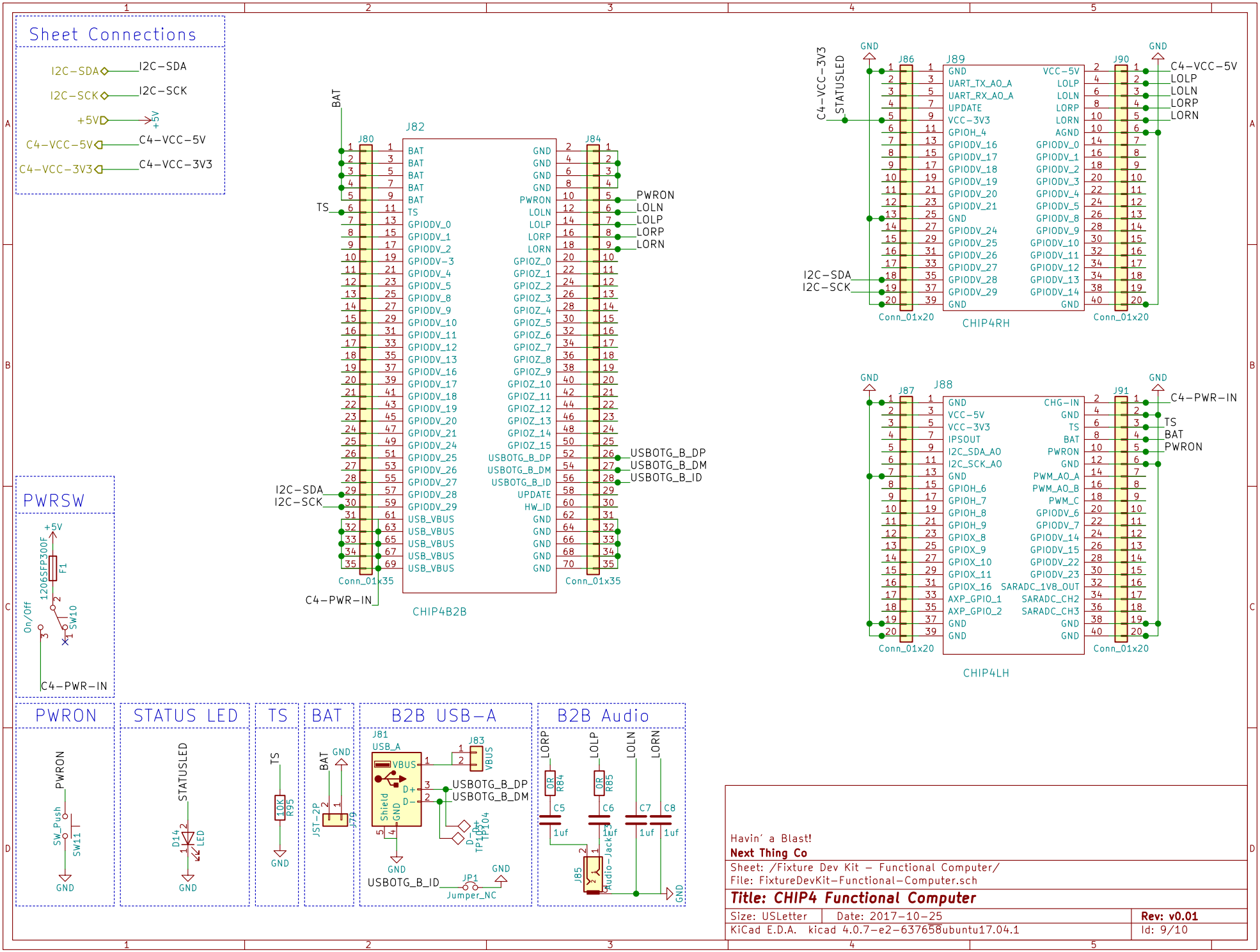
Next Thing Co

Sheet: /Fixture Dev Kits - NMosfets/

File: FixtureDevKit-NMosfets.sch

Title: N-Chanel MOSFETS

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 8/10



Havin' a Blast!
Next Thing Co

Sheet: /Fixture Dev Kit – Functional Computer/
File: FixtureDevKit-Functional-Computer.sch

Title: CHIP4 Functional Computer

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 9/10

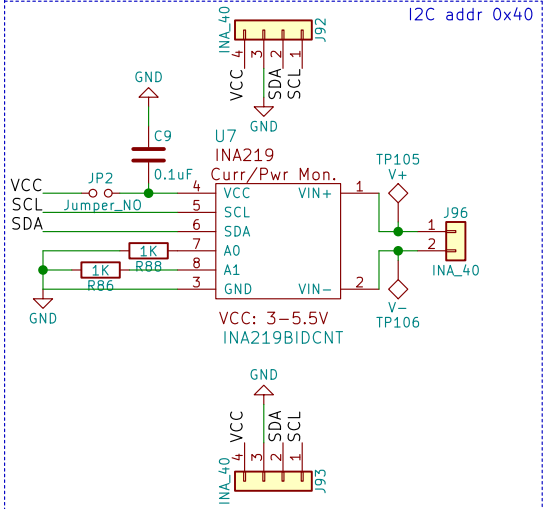
INA Volt+Current Read Circuit

Sheet Connections

I2C-SDA — SDA
I2C-SCK — SCL
C4-VCC-3V3 — VCC

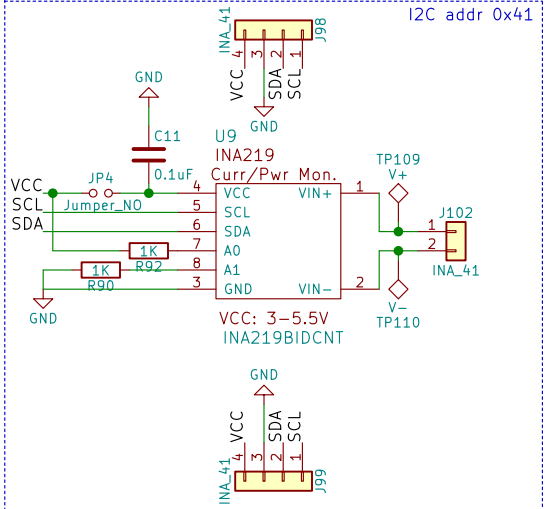
INA_40

I2C addr 0x40

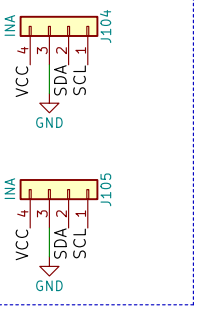


INA_41

I2C addr 0x41

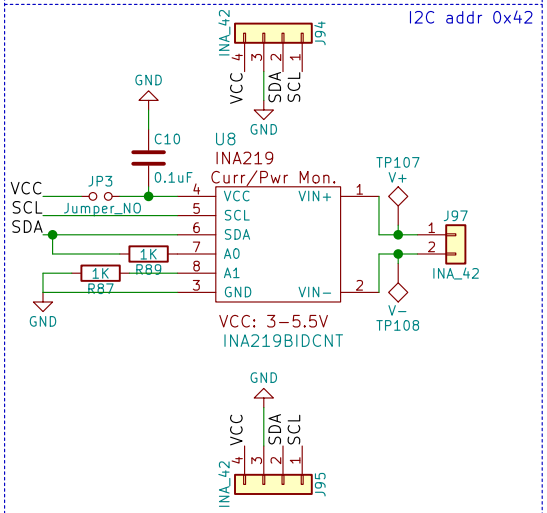


Main Circuit Headers



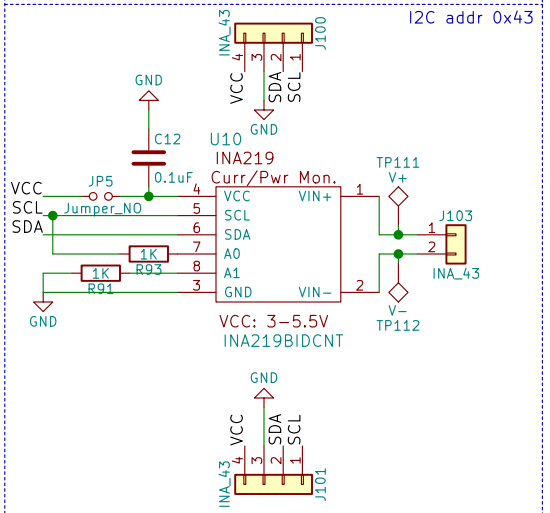
INA_42

I2C addr 0x42



INA_43

I2C addr 0x43



Havin' a Blast!
Next Thing Co

Sheet: /Fixture Dev Kit - INA/
File: FixtureDevKit-INA.sch

Title: INA Circuits

Size: USLetter	Date: 2017-10-25	**Rev: v0.01**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 10/10