Fixture Dev Kit – Functional Computer

FixtureDevKit–Functional–Computer.sch

Fixture Dev Kit – INA

FixtureDevKit–INA.sch

Fixture Dev Kit – ADS

FixtureDevKit–ADS.sch

Fixture Dev Kit Dummy Loads

FixtureDevKit–Loads.sch

Fixture Dev Kit – DUT

Fixture–Dev–Kit_DUT.sch

Fixture Dev Kit – IO Expander

FixtureDevKit–IOExpander.sch

Fixture Dev Kit – Mosfets

FixtureDevKit–Mosfet.sch

Fixture Dev Kit Switches

FixtureDevKit_Switches.sch

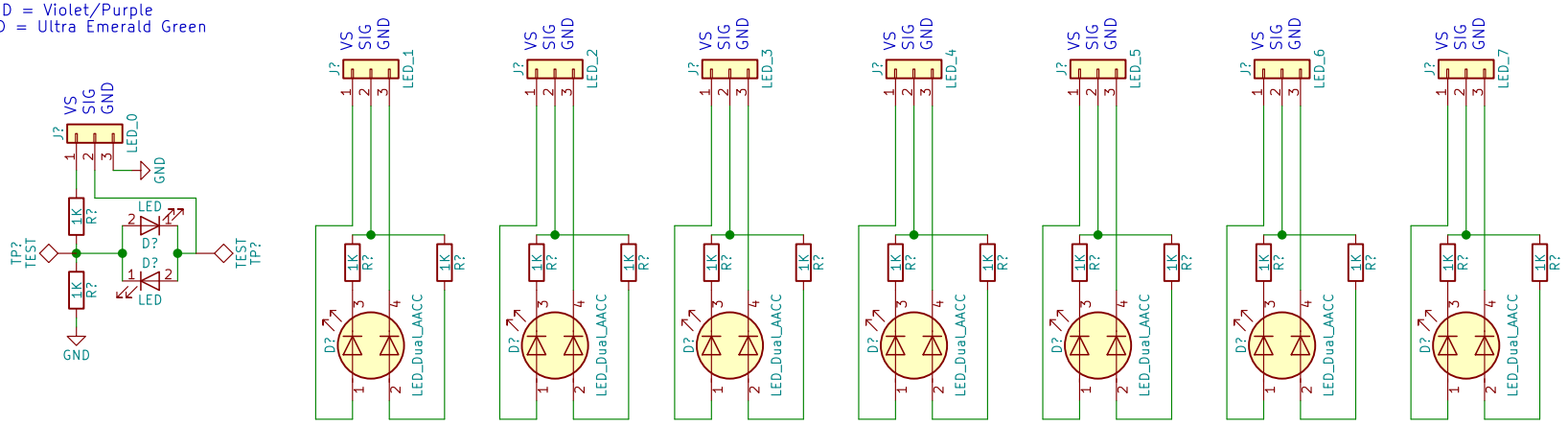
Sheet: /
File: Fixture–Dev–Kit.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 1/9

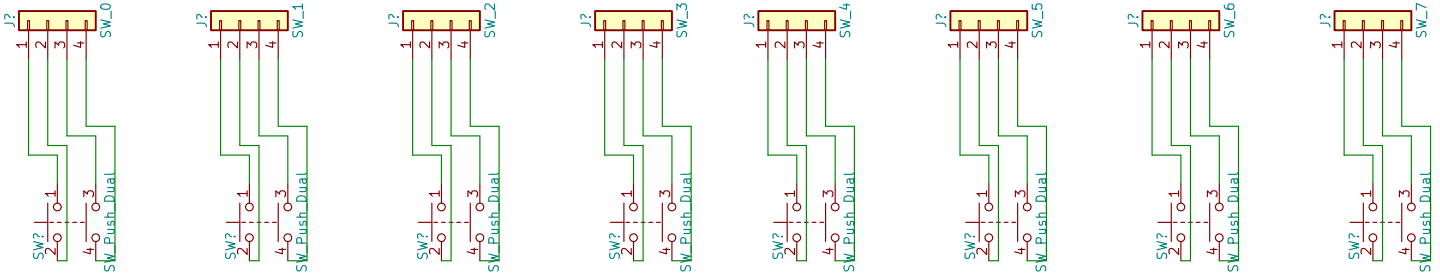
LED_Status_Indicators

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



BUTTONS :)

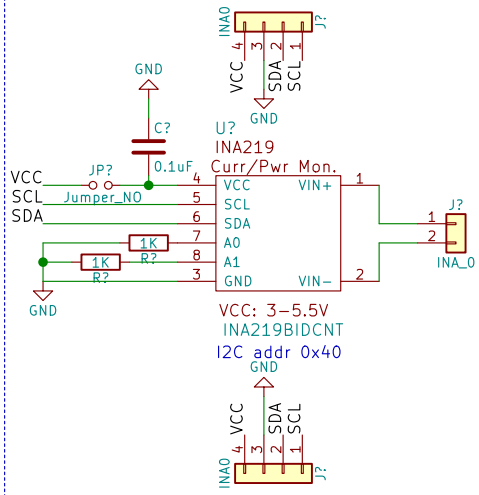
NOTES:



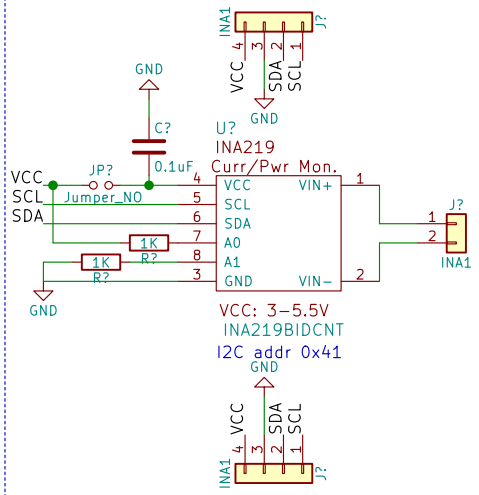
Sheet: /Fixture Dev Kit Switches/		
File: FixtureDevKit_Switches.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1		Id: 2/9

INA Volt+Current Read Circuit

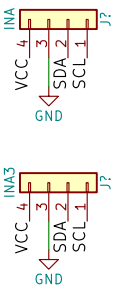
INA_0



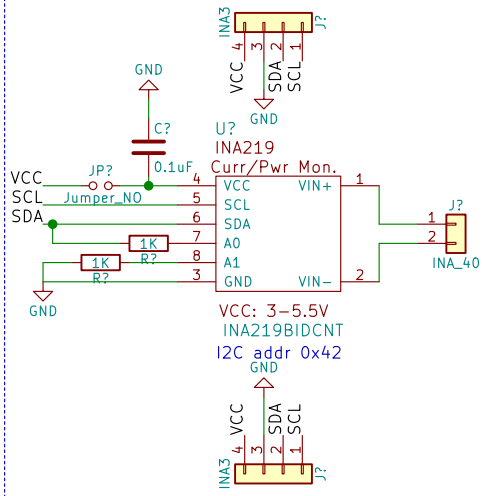
INA_1



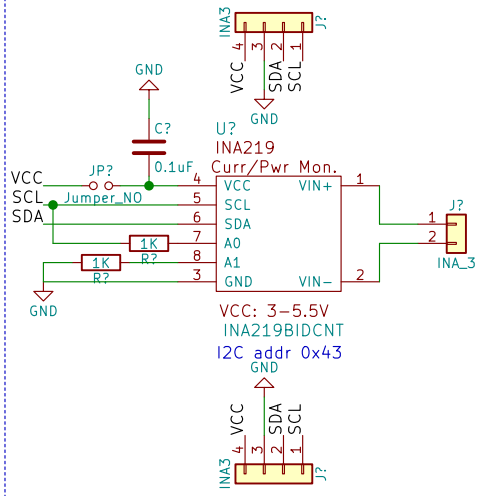
Main Circuit Headers



INA_2



INA_3

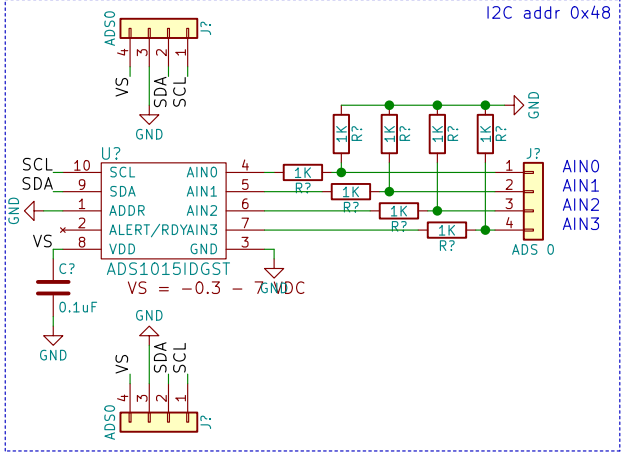


Sheet: /Fixture Dev Kit – INA/		
File: FixtureDevKit–INA.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 3/9

ADS Voltage Read Circuit

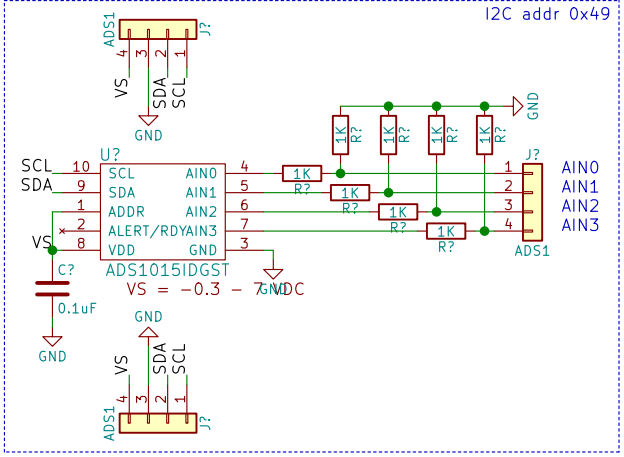
ADS_0

I2C addr 0x48

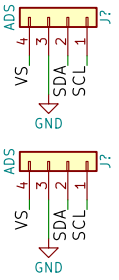


ADS_1

I2C addr 0x49

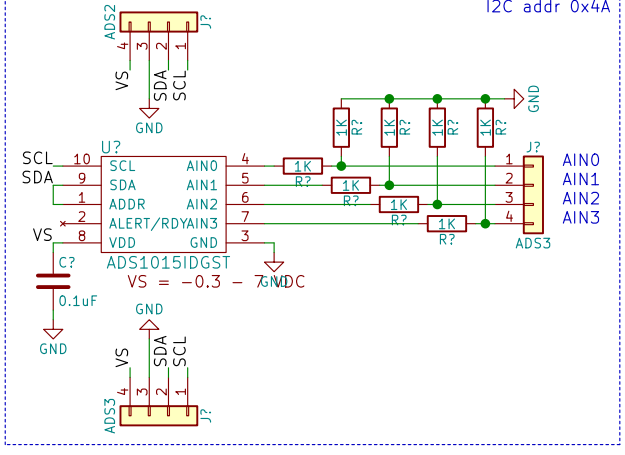


Main Circuit Headers



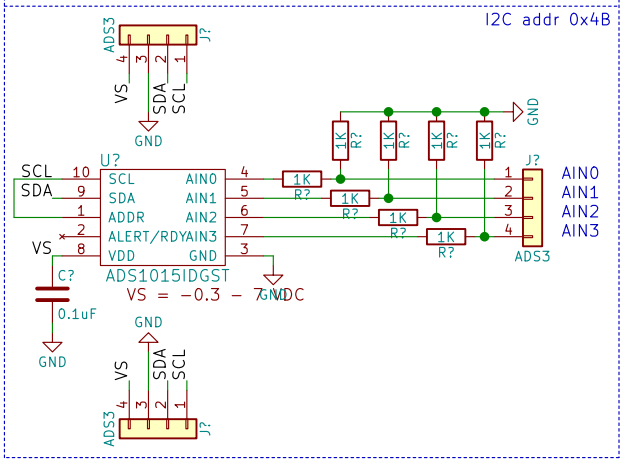
ADS_2

I2C addr 0x4A



ADS_3

I2C addr 0x4B



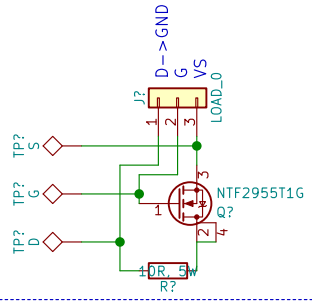
Sheet: /Fixture Dev Kit – ADS/
File: FixtureDevKit–ADS.sch

Title:

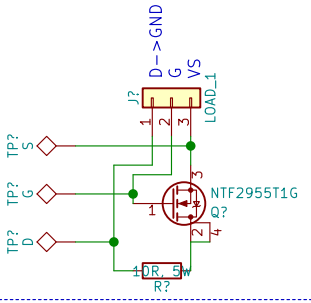
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 4/9

Dummy Load Circuit

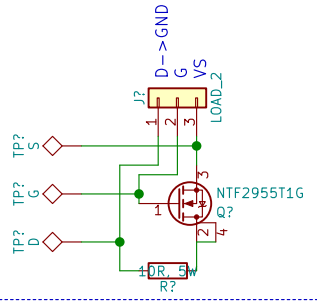
LOAD_0



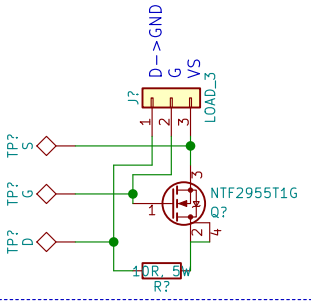
LOAD_1



LOAD_2



LOAD_3



Ohm's Law Cheat Sheet

V = C * R
P = V * i

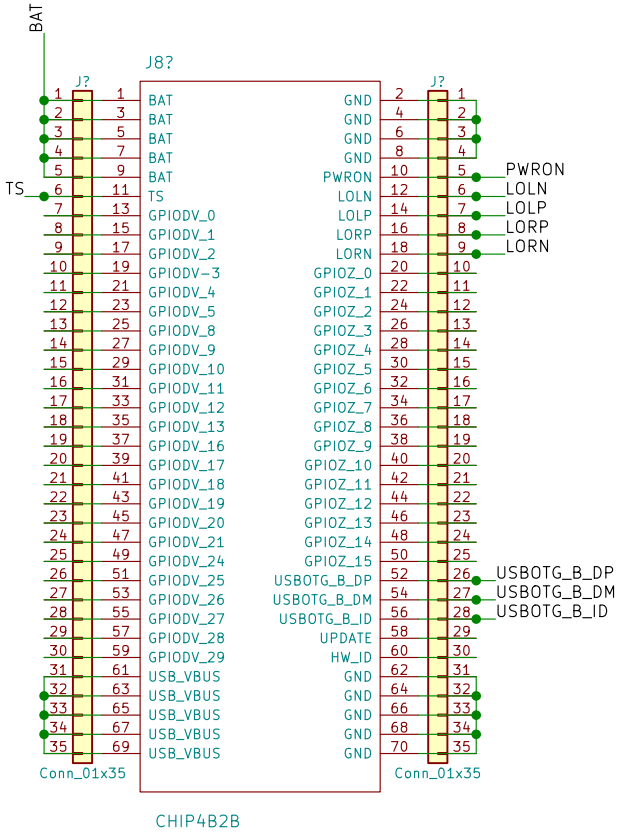
V	i	R	P
5	0.5	10	5

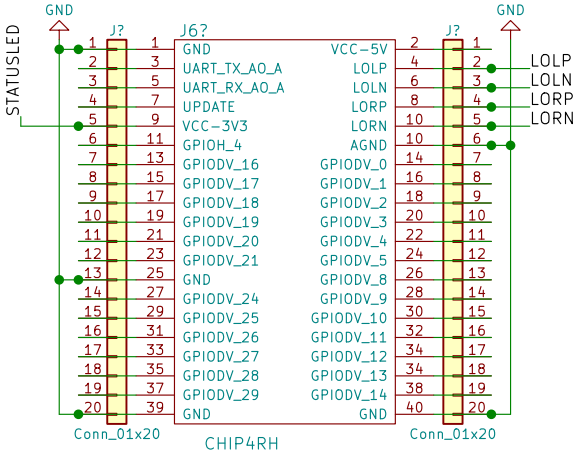
Sheet: /Fixture Dev Kit Dummy Loads/
File: FixtureDevKit-Loads.sch

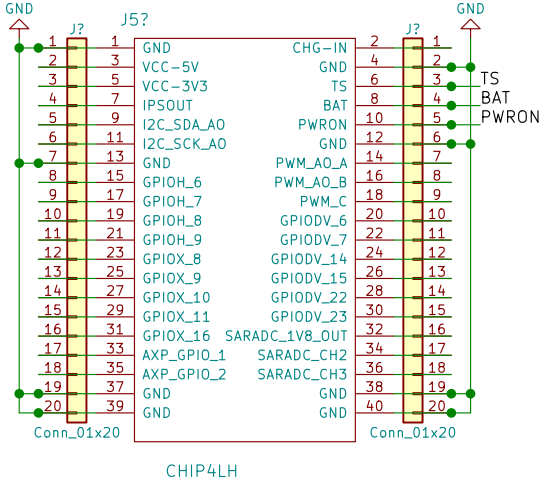
Title:

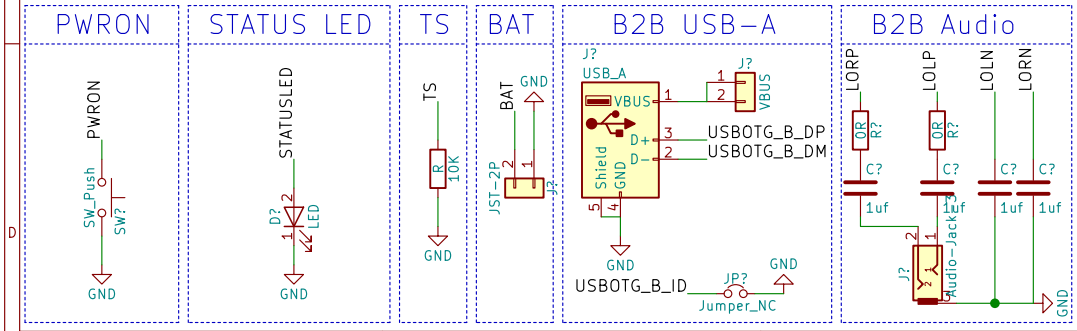
Size: A4 | Date: | **Rev:**
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1 | Id: 5/9

TODO:
- verify all pinouts
- test points





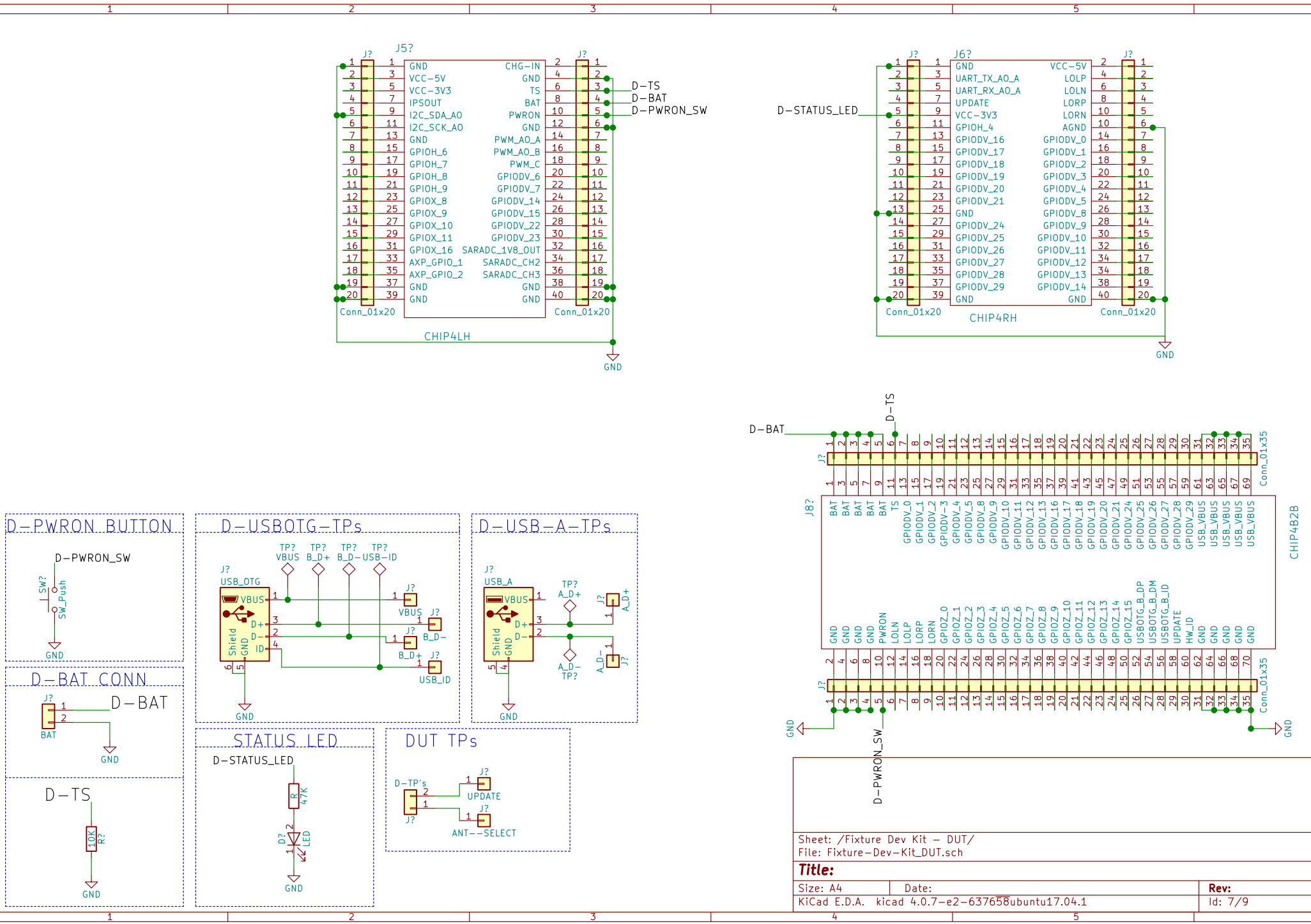




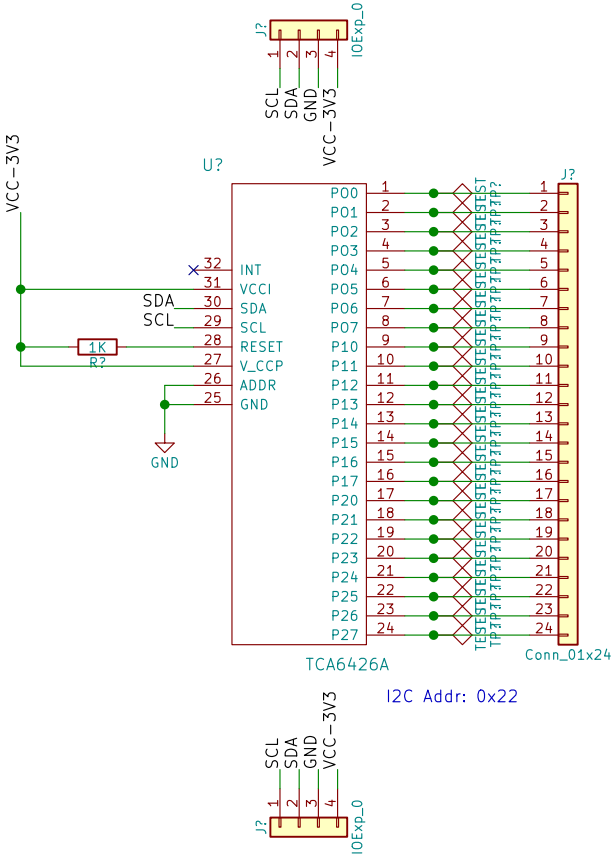
Sheet: /Fixture Dev Kit – Functional Computer/
File: FixtureDevKit–Functional–Computer.sch

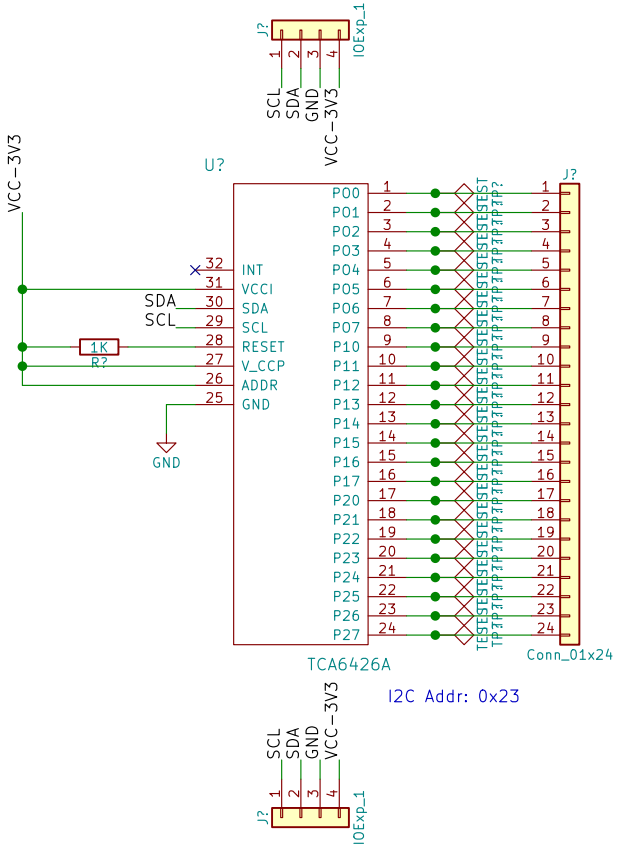
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 6/9


J5?
J?
GND
VCC-5V
VCC-3V3
IPSOUT
I2C_SDA_AO
I2C_SCK_AO
GND
GPIOH_6
GPIOH_7
GPIOH_8
GPIOH_9
GPIOX_8
GPIOX_9
GPIOX_10
GPIOX_11
GPIOX_16
AXP_GPIO_1
AXP_GPIO_2
GND
GND
CHG-IN
GND
TS
BAT
PWRON
GND
PWM_AO_A
PWM_AO_B
PWM_C
GPIODV_6
GPIODV_7
GPIODV_14
GPIODV_15
GPIODV_22
GPIODV_23
SARADC_1V8_OUT
SARADC_CH2
SARADC_CH3
GND
GND
Conn_01x20
CHIP4LH
D-TS
D-BAT
D-PWRON_SW
GND
J6?
GND
UART_TX_AO_A
UART_RX_AO_A
UPDATE
VCC-3V3
GPIOH_4
GPIODV_16
GPIODV_17
GPIODV_18
GPIODV_19
GPIODV_20
GPIODV_21
GND
GPIODV_24
GPIODV_25
GPIODV_26
GPIODV_27
GPIODV_28
GPIODV_29
GND
VCC-5V
LOLP
LOLN
LORP
LORN
AGND
GPIODV_0
GPIODV_1
GPIODV_2
GPIODV_3
GPIODV_4
GPIODV_5
GPIODV_8
GPIODV_9
GPIODV_10
GPIODV_11
GPIODV_12
GPIODV_13
GPIODV_14
GND
Conn_01x20
CHIP4RH
D-STATUS_LED
GND
D-PWRON BUTTON
D-PWRON_SW
SW?
SW_Push
GND
D-BAT CONN
J?
BAT
D-BAT
GND
D-TS
10K
R?
GND
D-USBOTG-TPs
TP?
VBUS
B_D+
B_D-
USB-ID
J?
USB_OTG
VBUS
D+
D-
ID
Shield
GND
VBUS
B_D-
B_D+
USB_ID
GND
D-USB-A-TPs
J?
USB_A
VBUS
D+
D-
Shield
GND
TP?
A_D+
A_D-
A_D+
A_D-
GND
STATUS LED
D-STATUS_LED
R
47K
D?
LED
GND
DUT TPs
D-TP's
J?
UPDATE
ANT--SELECT
J8?
Conn_01x35
CHIP4B2B
BAT
TS
GPIODV_0
GPIODV_1
GPIODV_2
GPIODV_3
GPIODV_4
GPIODV_5
GPIODV_8
GPIODV_9
GPIODV_10
GPIODV_11
GPIODV_12
GPIODV_13
GPIODV_16
GPIODV_17
GPIODV_18
GPIODV_19
GPIODV_20
GPIODV_21
GPIODV_24
GPIODV_25
GPIODV_26
GPIODV_27
GPIODV_28
GPIODV_29
USB_VBUS
GND
PWRON
LOLN
LOLP
LORP
LORN
GPIOZ_0
GPIOZ_1
GPIOZ_2
GPIOZ_3
GPIOZ_4
GPIOZ_5
GPIOZ_6
GPIOZ_7
GPIOZ_8
GPIOZ_9
GPIOZ_10
GPIOZ_11
GPIOZ_12
GPIOZ_13
GPIOZ_14
GPIOZ_15
USBOTG_B_DP
USBOTG_B_DM
USBOTG_B_ID
UPDATE
HW_ID
D-BAT
D-TS
D-PWRON_SW
Sheet: /Fixture Dev Kit - DUT/
File: Fixture-Dev-Kit_DUT.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu17.04.1
Id: 7/9

IO Expander



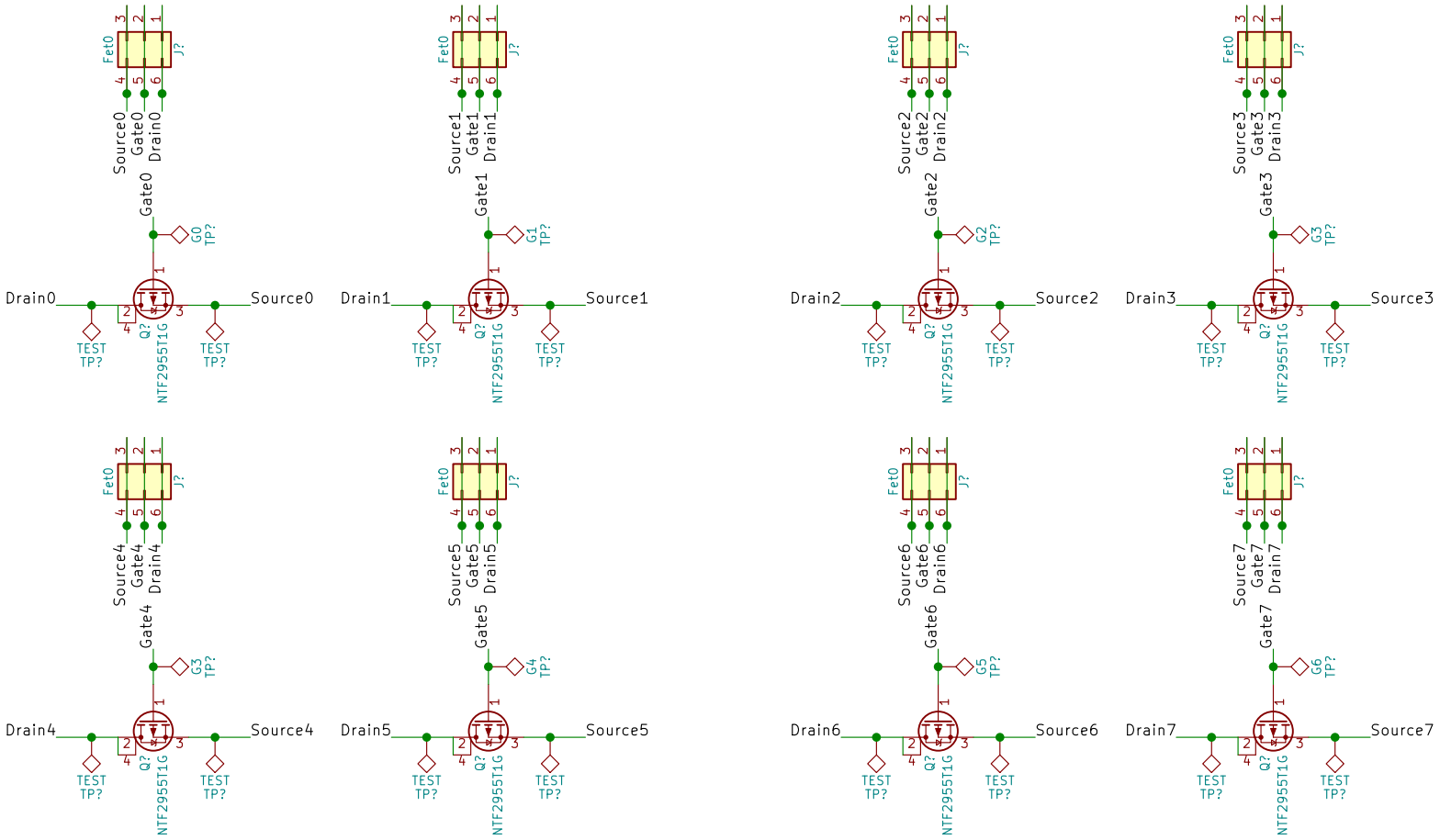


Sheet: /Fixture Dev Kit – IO Expander/
File: FixtureDevKit–IOExpander.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 8/9

Mosfet Circuits



Sheet: /Fixture Dev Kit – Mosfets/		
File: FixtureDevKit–Mosfet.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 4.0.7–e2–637658ubuntu17.04.1		Id: 9/9