



AC Input
AC_Input.sch

AC Current Sensor
AC_Current_Sensor.sch

AC Output
AC_Output.sch

POS12 Power Supply
POS12_Power_Supply.sch

POS3P3 Power Supply
POS3P3_Power_Supply.sch

Microcontroller
Microcontroller.sch

Microcontroller Programming
Microcontroller_Programming.sch

Sensor Signal Conditioning
Sensor_Signal_Conditioning.sch

USB UART Bridge
USB_UART_Bridge.sch

USB UART Isolation
USB_UART_Isolation.sch

OLED Display
OLED_Display.sch

Mechanical
Mechanical.sch

Zero Cross Detect
Zero_Cross_Detect.sch

Output Switch
Output_Switch.sch

Status LEDs
Status_LEDs.sch

Sheet: /
File: AC_Power_Meter.sch

Title:

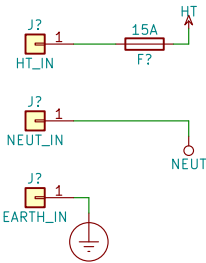
Size: A Date: 2018-10-01
KiCad E.D.A. kicad (5.0.0)

Rev: A
Id: 1/16

AC Input Connections

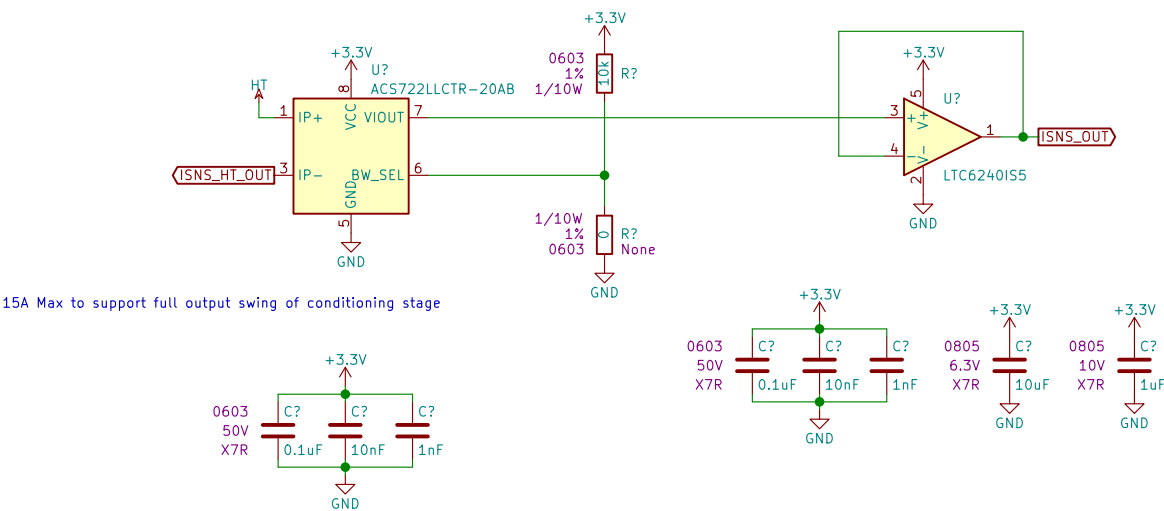


From Panel AC Input Socket ->

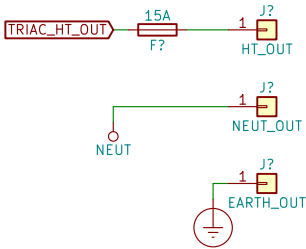


Sheet: /AC Input/ File: AC_Input.sch		
Title:		
Size: A	Date: 2018-10-01	Rev: A
KiCad E.D.A. kicad (5.0.0)		Id: 2/16

AC Current Sensor, Signal Buffer



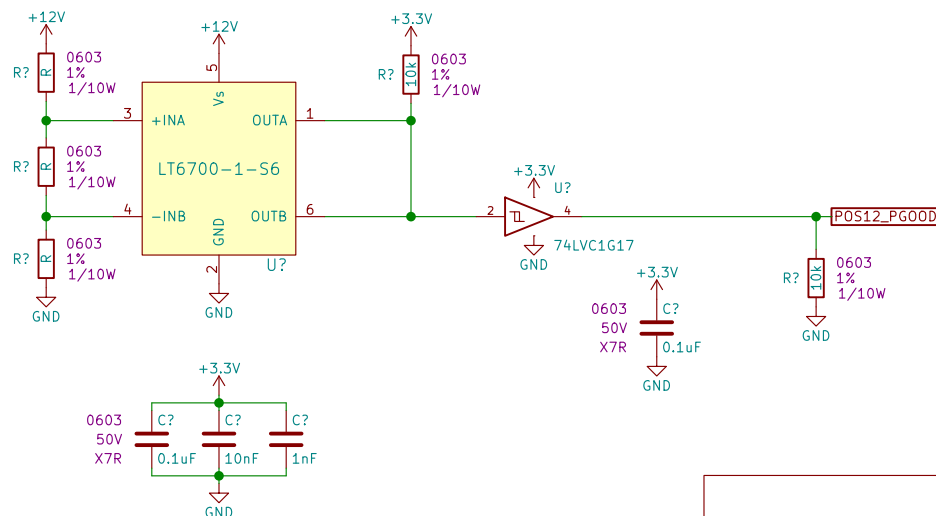
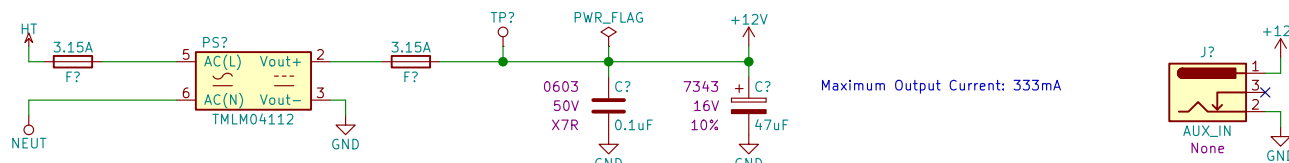
AC Output Connections



-> To Panel AC Output Socket

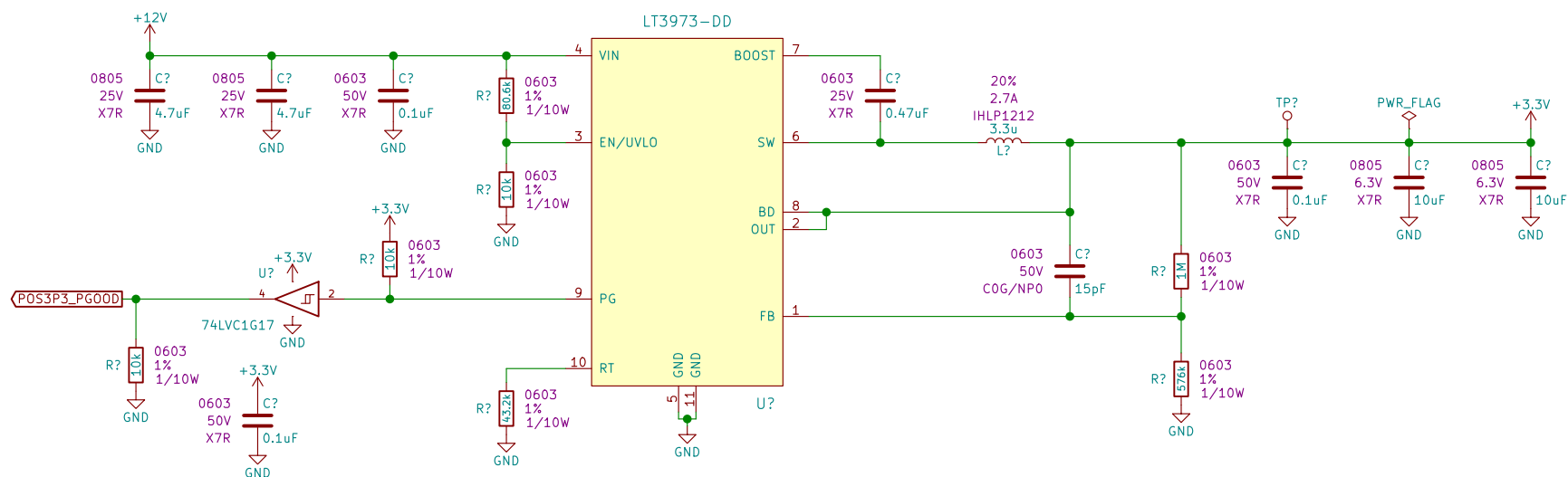
Sheet: /AC Output/ File: AC_Output.sch		
Title:		
Size: A	Date: 2018-10-01	Rev: A
KiCad E.D.A. kicad (5.0.0)		Id: 4/16

+12V 4W Isolated AC/DC Converter, +12V PGOOD Window Comparator



Sheet: /POS12 Power Supply/		
File: POS12_Power_Supply.sch		
Title:		
Size: A	Date: 2018-10-01	Rev: A
KiCad E.D.A. kicad (5.0.0)		Id: 5/16

+3.3V, 750mA, 2MHz Buck Converter



Sheet: /POS3P3 Power Supply/		
File: POS3P3_Power_Supply.sch		
Title:		
Size: A	Date: 2018-10-01	Rev: A
KiCad E.D.A. kicad (5.0.0)		Id: 6/16

A

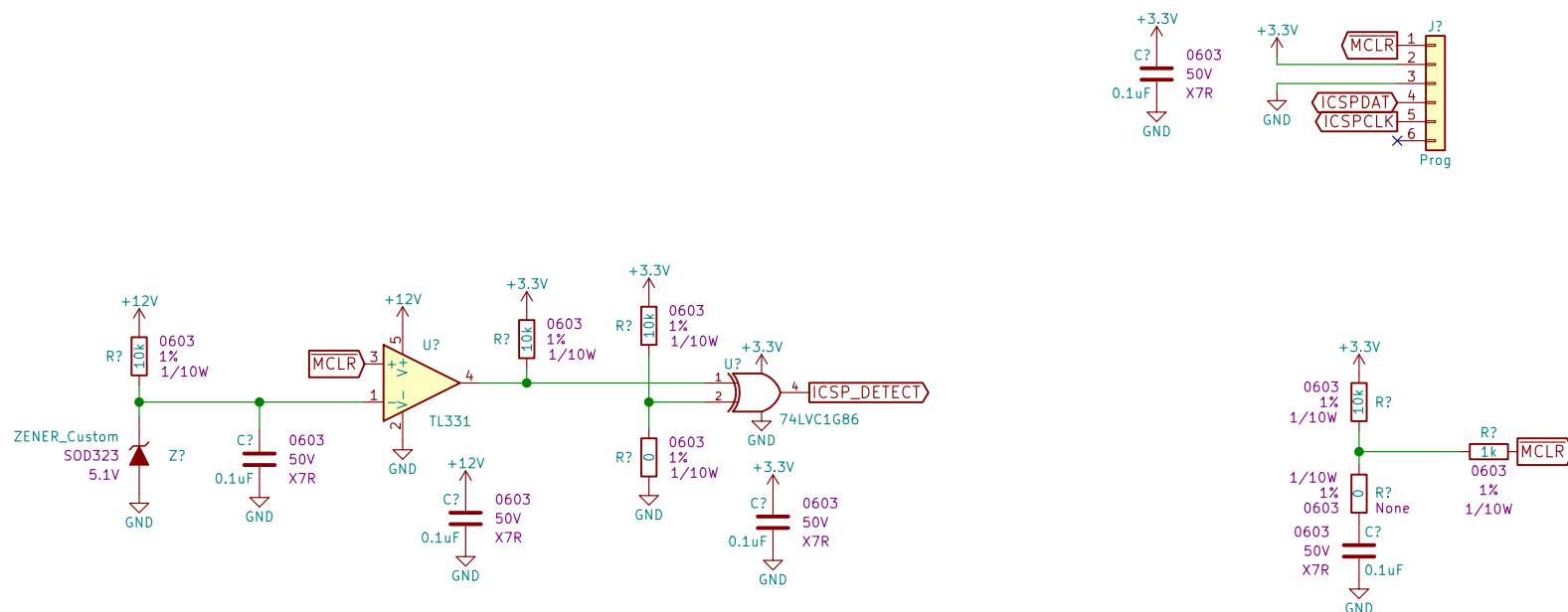


1

2

Rev: A
Id: 7/16

Programming Header, MCLR Reset Filter, ICSP Detection



Sheet: /Microcontroller Programming/
File: Microcontroller_Programming.sch

Title:

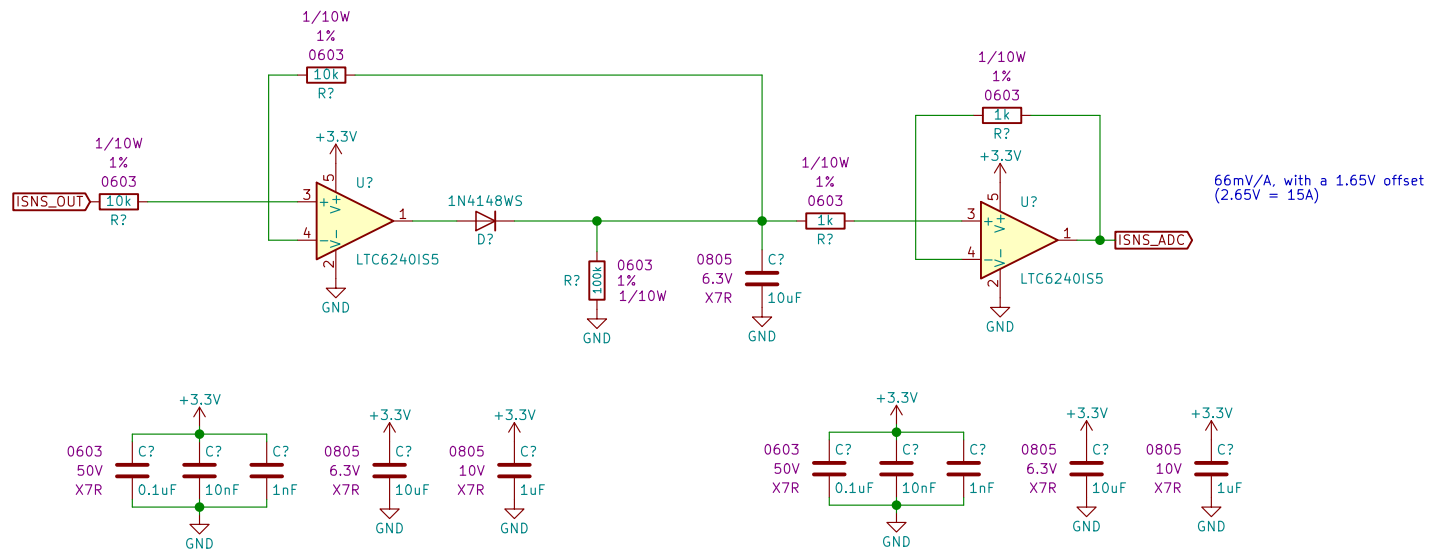
Size: A	Date:
KiCad E.D.A. kicad (5.0.0)	

Date:

Rev:

Id: 8/16

Current Sensing Peak Detector, ADC Buffer



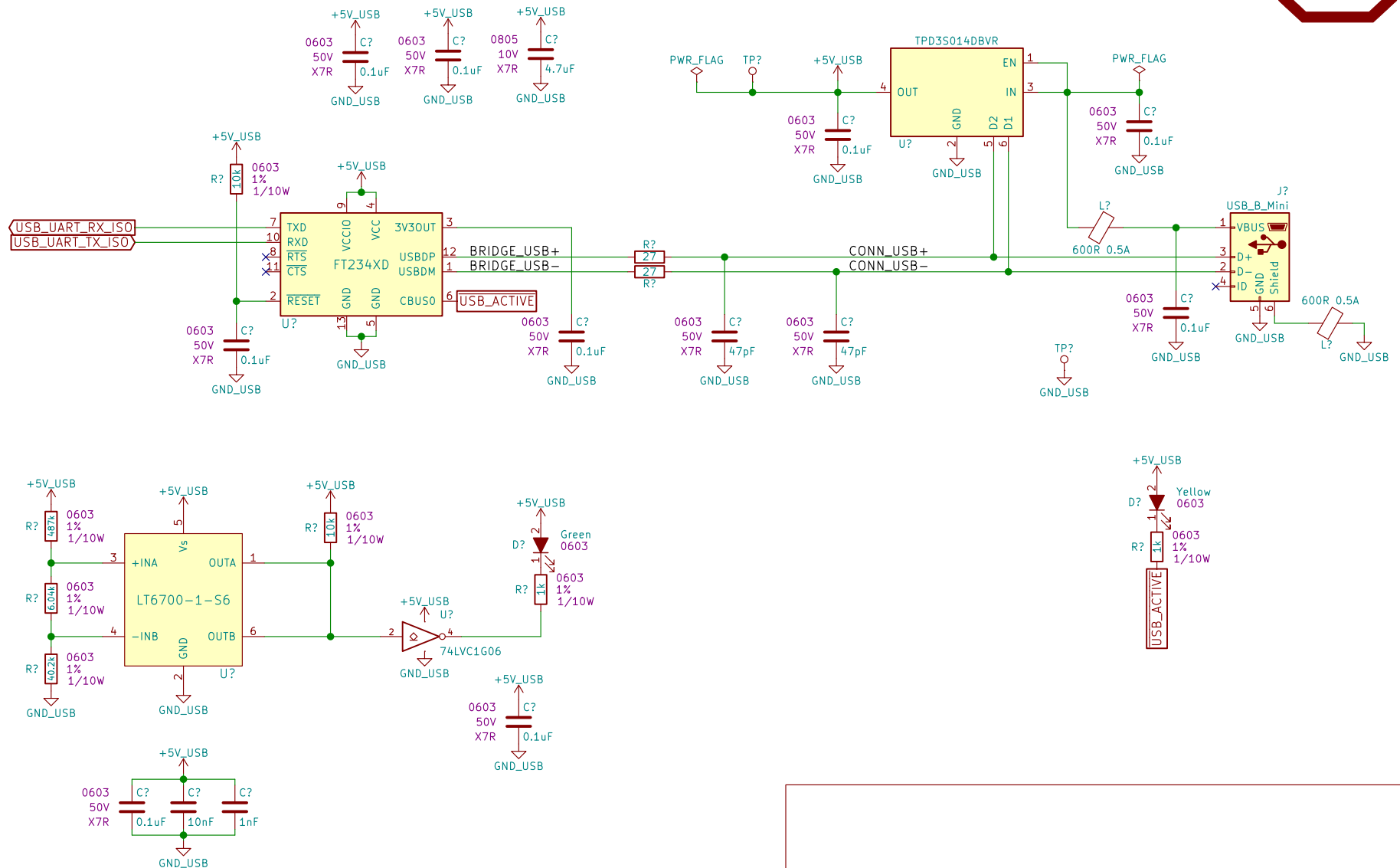
Sheet: /Sensor Signal Conditioning/
File: Sensor_Signal_Conditioning.sch

Title:

Size: A	Date: 2018-10-01
KiCad E.D.A. kicad (5.0.0)	

Rev: A
Id: 9/16

UART to USB Bridge, +5V USB Window Comparator



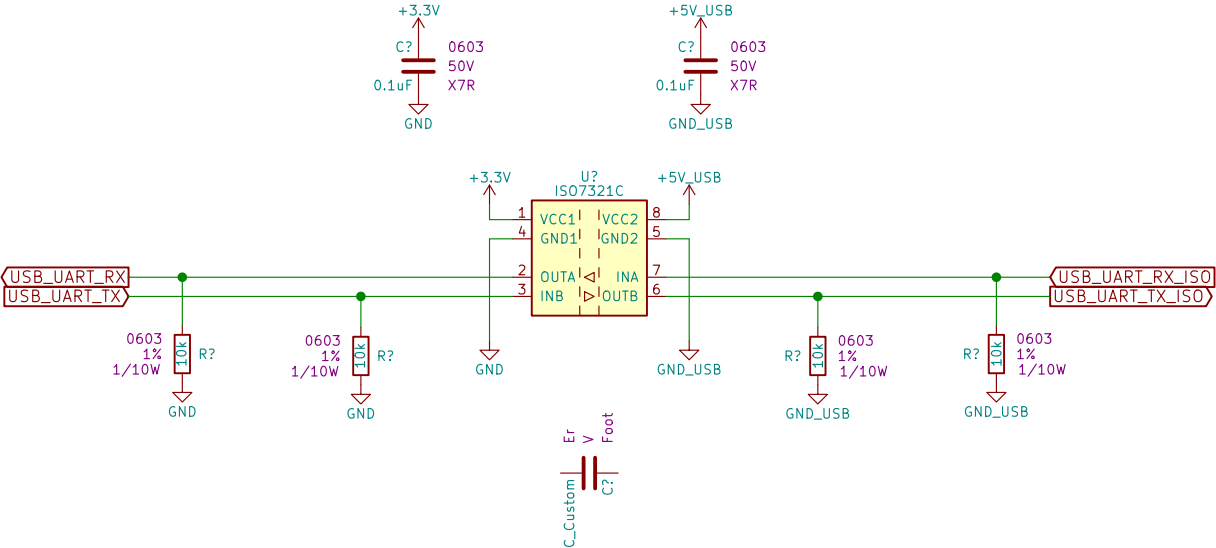
Sheet: /USB UART Bridge/
File: USB_UART_Bridge.sch

Title:

Size: A Date:
KiCad E.D.A. kicad (5.0.0)

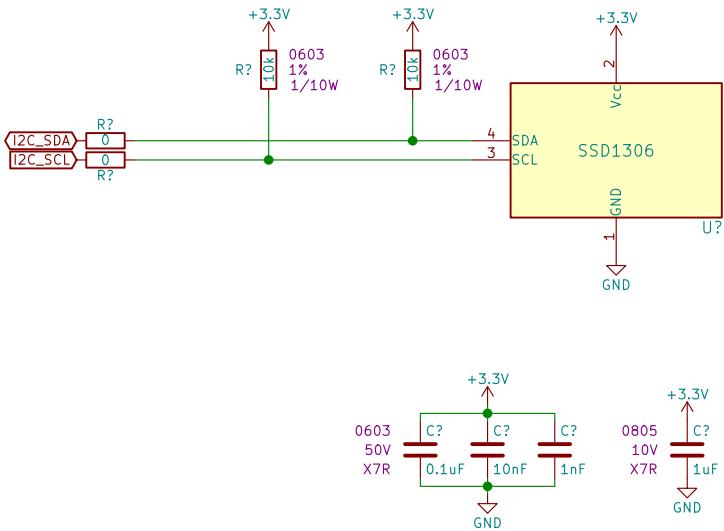
Rev:
Id: 10/16

USB UART Isolation



Sheet: /USB UART Isolation/ File: USB_UART_Isolation.sch		
Title:		
Size: A	Date:	Rev:
KiCad E.D.A. kicad (5.0.0)		Id: 11/16

OLED Display

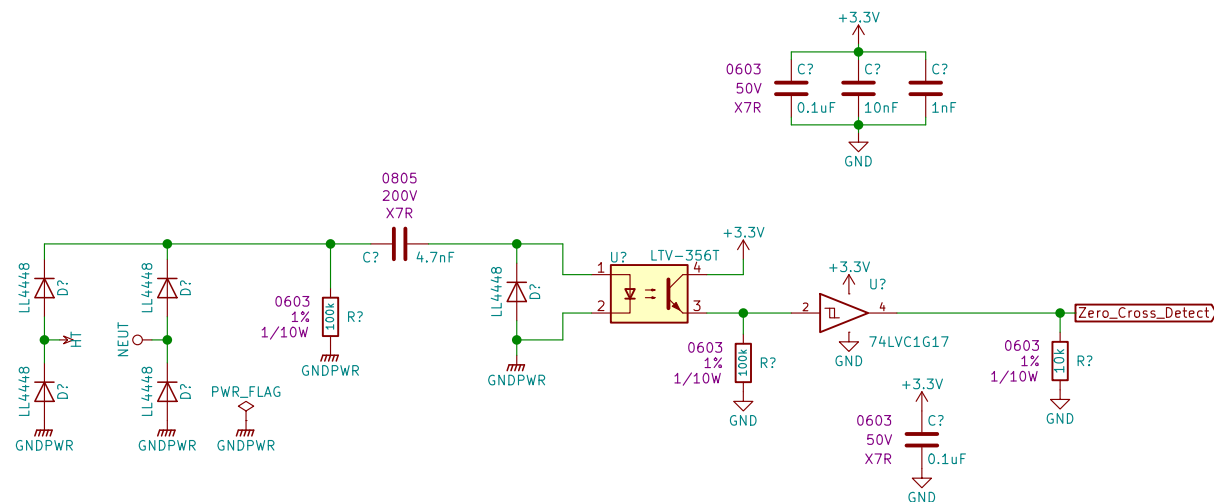


Mounting Holes and Mechanical Components



Sheet: /Mechanical/ File: Mechanical.sch		
Title:		
Size: A	Date: 2018-10-01	Rev: A
KiCad E.D.A. kicad (5.0.0)		Id: 13/16

Input AC Zero-Cross Detection



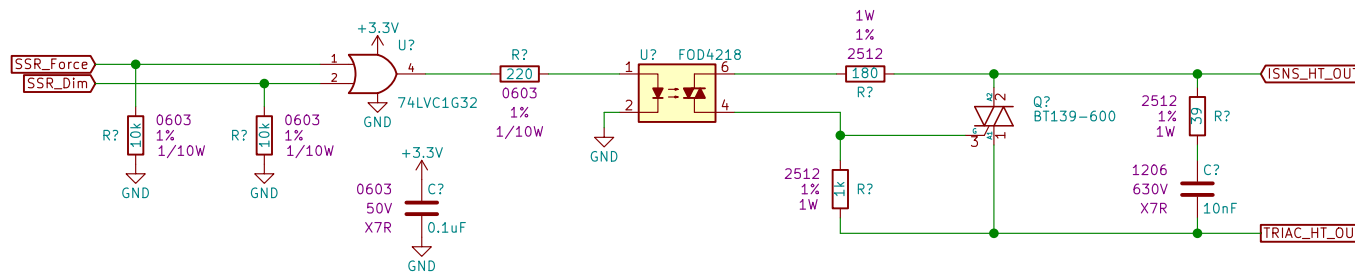
Sheet: /Zero Cross Detect/
File: Zero_Cross_Detect.sch

Title:

Size: A	Date:
KiCad E.D.A. kicad (5.0.0)	

Rev:
Id: 14/16

Output AC Solid State Switch, Random Phase



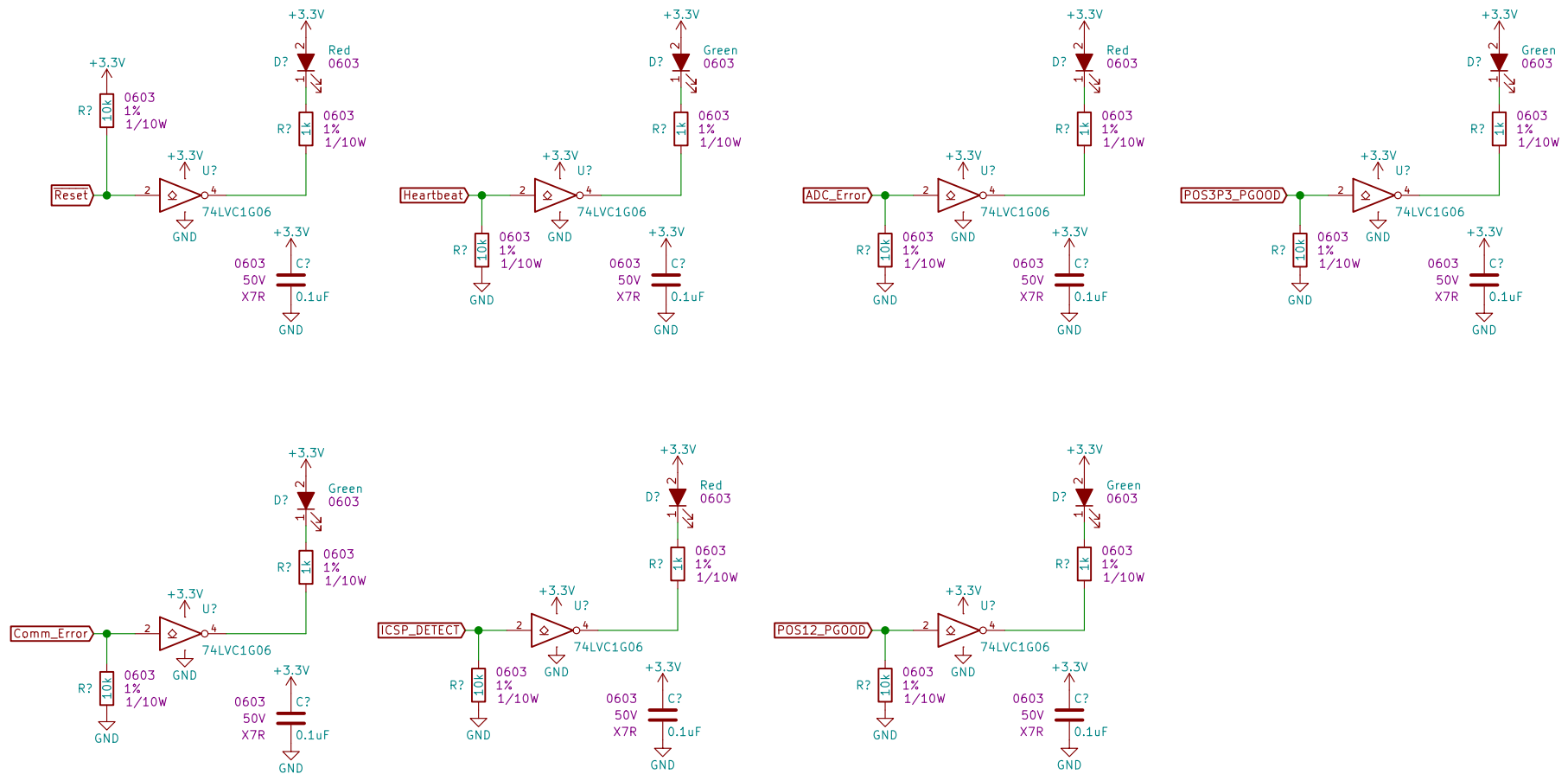
Sheet: /Output Switch/
File: Output_Switch.sch

Title:

Size: A Date:
KiCad E.D.A. kicad (5.0.0)

Rev:
Id: 15/16

Status LEDs



Sheet: /Status LEDs/
File: Status_LEDs.sch

Title:

Size: A
KiCad E.D.A. kicad (5.0.0)

Date:

Rev:

Id: 16/16