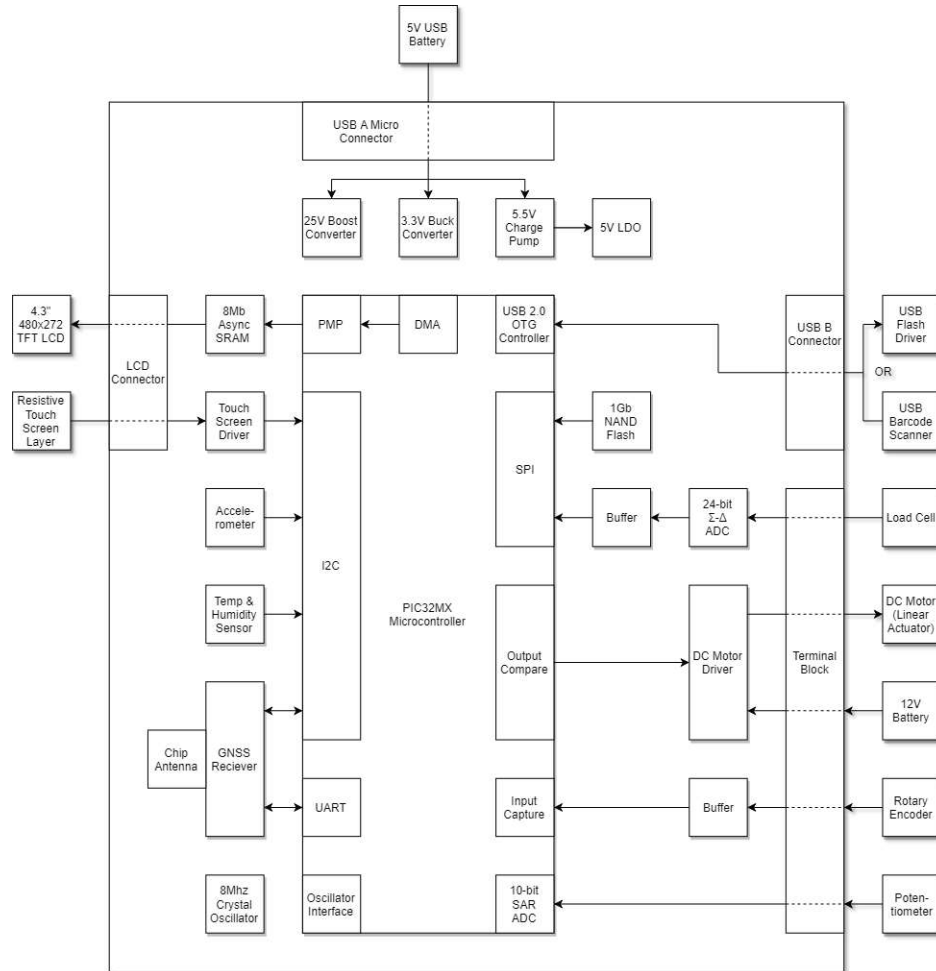


System Block Diagram



List of Schematic Sheets

Sheet: Microcontroller



File: croptop_mcu.sch

Sheet: Display



File: croptop_lcd.sch

Sheet: Onboard Peripherals



File: croptop_onboard.sch

Sheet: IO Peripherals



File: croptop_io.sch

Sheet: Power Supply



File: croptop_psu.sch

Kennedy Caisley, Ryan Donahue

University of Idaho

Sheet: /

File: croptop.sch

Title: CropTop

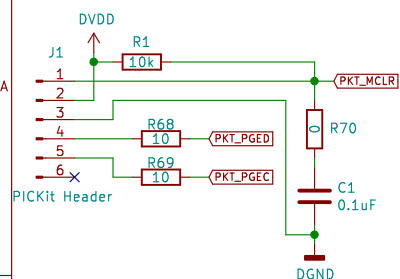
Size: USLetter Date: 2018-11-20

KiCad E.D.A. kicad (5.0.1)-3

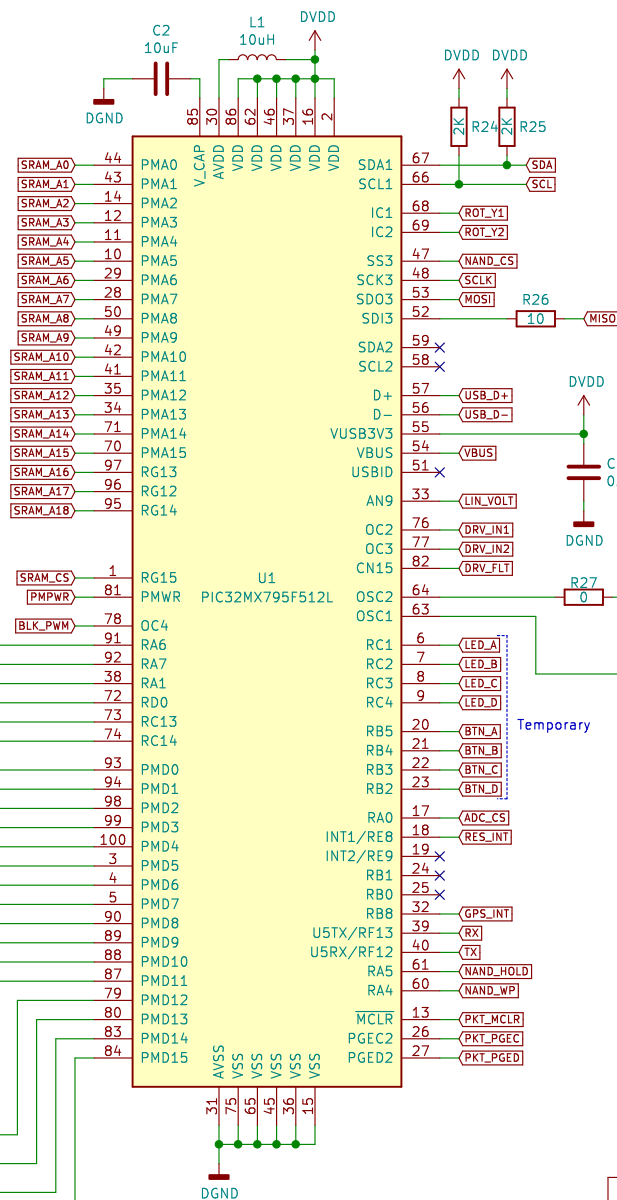
Rev: Revision 8

Id: 1/6

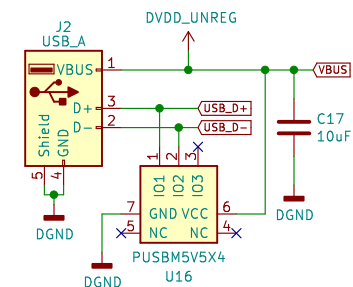
PICKit3 Header



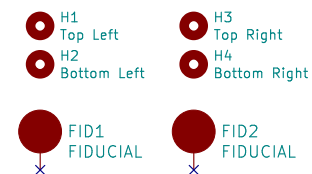
PIC32 Microcontroller



Peripheral USB Port



Mounting Holes & Fiducials



Kennedy Caisley, Ryan Donahue

University of Idaho

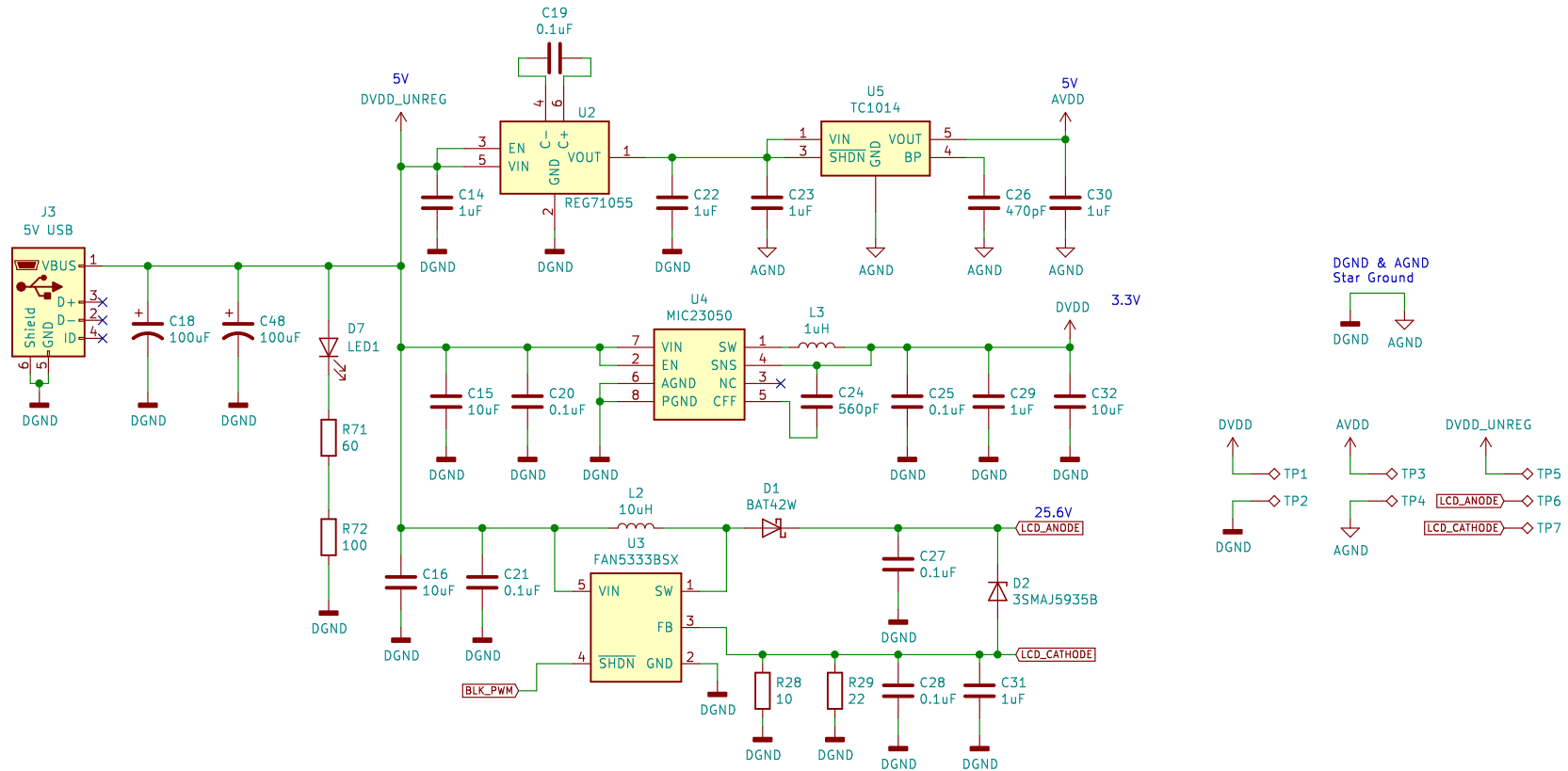
Sheet: /Microcontroller/
File: croptop_mcu.sch

Title: CropTop

Size: USLetter Date: 2018-11-20
KiCad E.D.A. kicad (5.0.1)-3

Rev: Revision 8
Id: 2/6

Digital & Analog Power Supply



Kennedy Caisley, Ryan Donahue

University of Idaho

Sheet: /Power Supply/

File: croptop_psu.sch

Title: CropTop

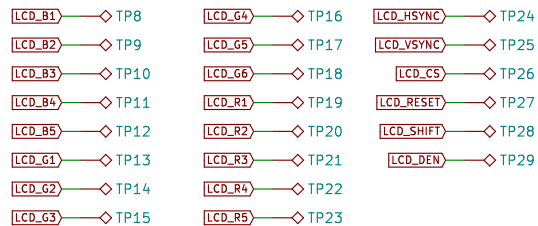
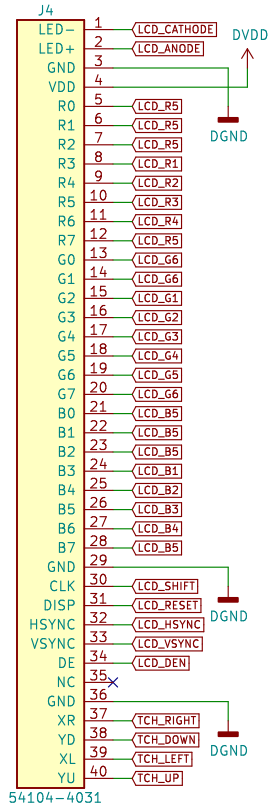
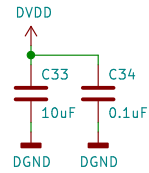
Size: USLetter	Date: 2018-11-20
----------------	------------------

KiCad E.D.A. kicad (5.0.1)-3

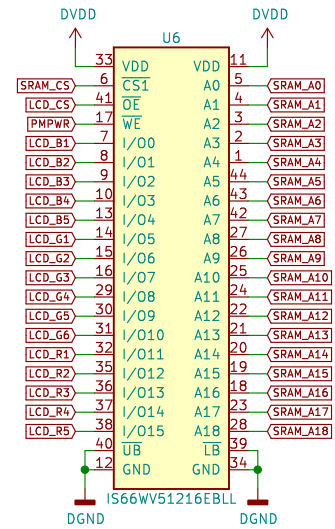
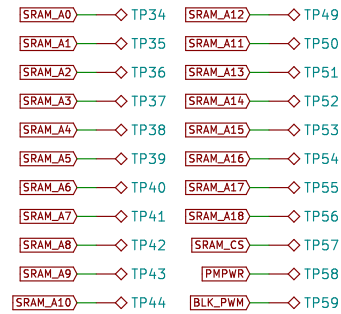
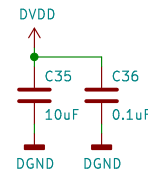
Rev: Revision 8

Id: 3/6

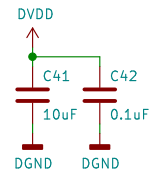
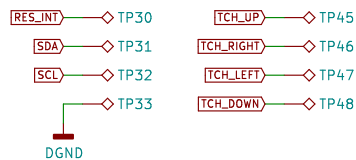
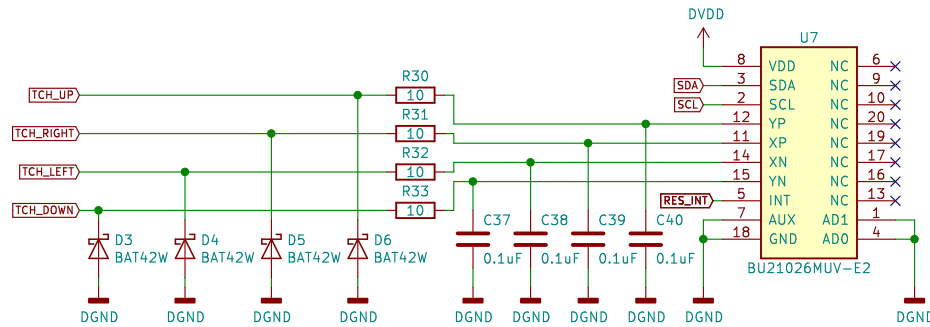
TFT LCD Header



Asynchronous SRAM



Resistive Touch Driver



Kennedy Caisley, Ryan Donahue

University of Idaho

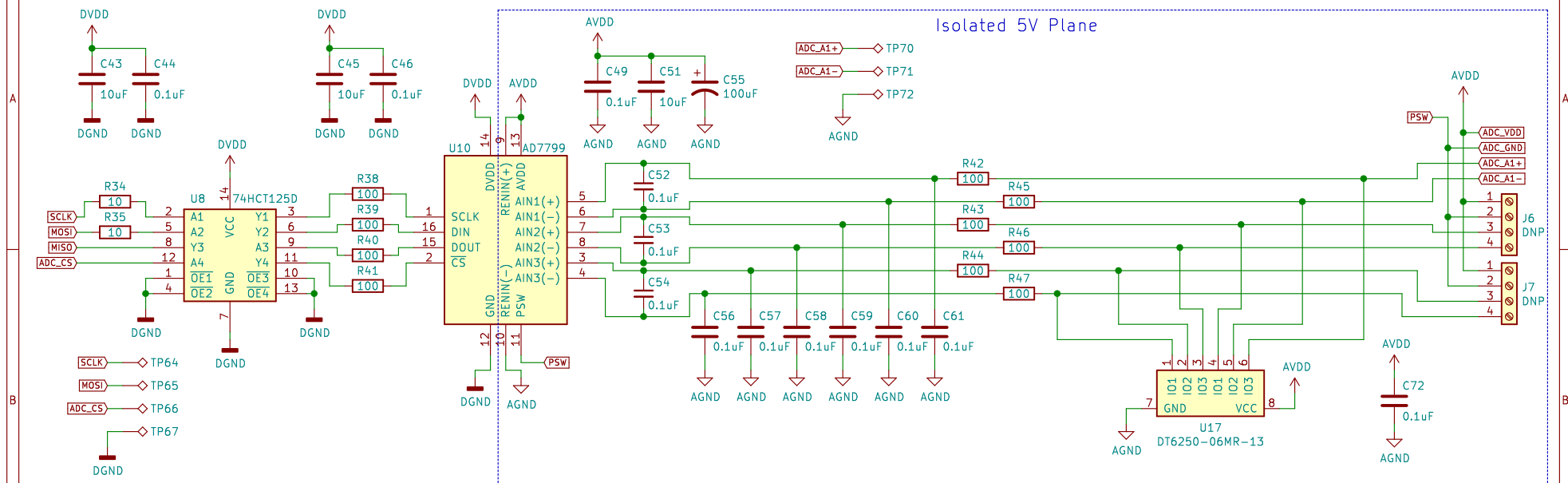
Sheet: /Display/
File: croptop_lcd.sch

Title: CropTop

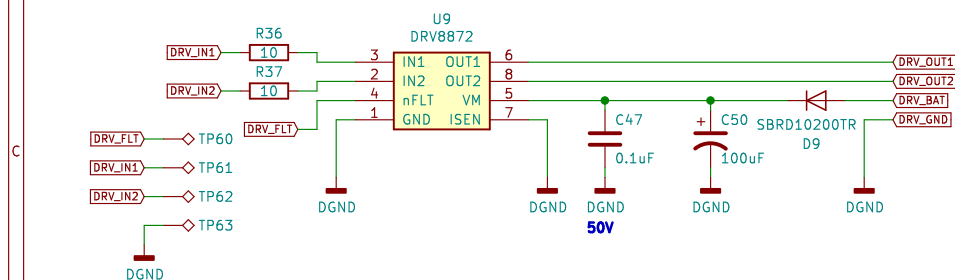
Size: USLetter Date: 2018-11-20
KiCad E.D.A. kicad (5.0.1)-3

Rev: Revision 8
Id: 4/6

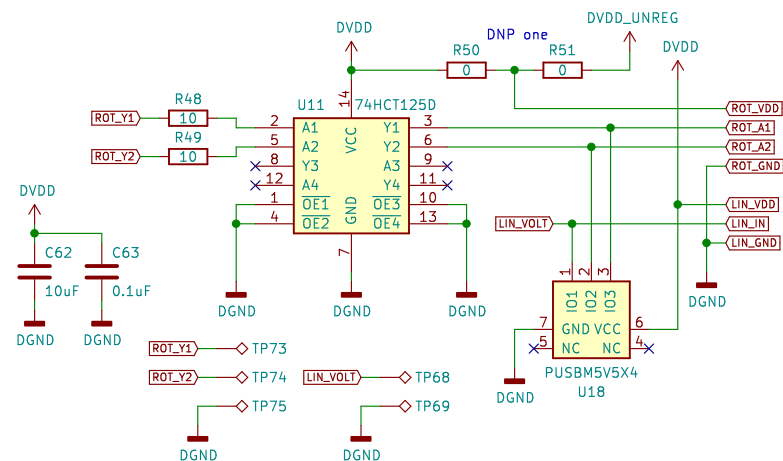
Force Sensor Interface w/ ADC and Buffer



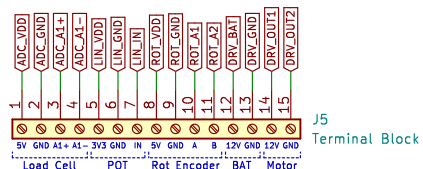
Linear Actuator Interface w/ DC Motor Driver



Linear and Rotary Encoder Interface



Peripheral Terminal Block



Kennedy Caisley, Ryan Donahue

University of Idaho

Sheet: /IO Peripherals/

File: croptop_io.sch

Title: CropTop

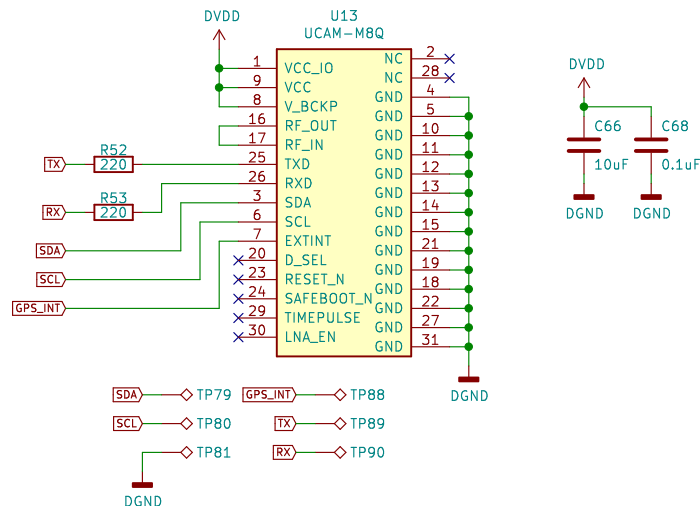
Size: USLetter Date: 2018-11-20

KiCad E.D.A. kicad (5.0.1)-3

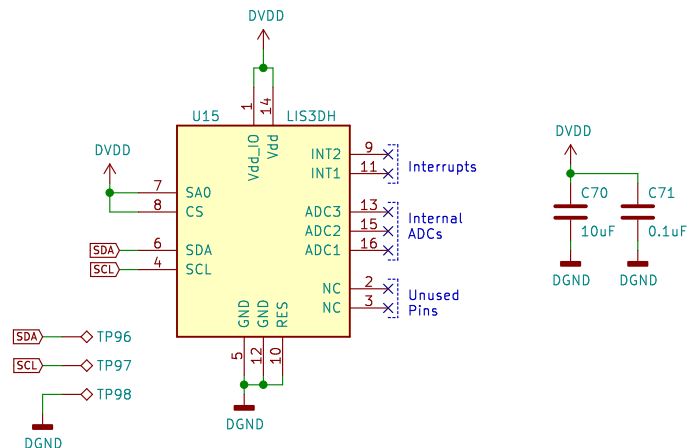
Rev: Revision 8

Id: 5/6

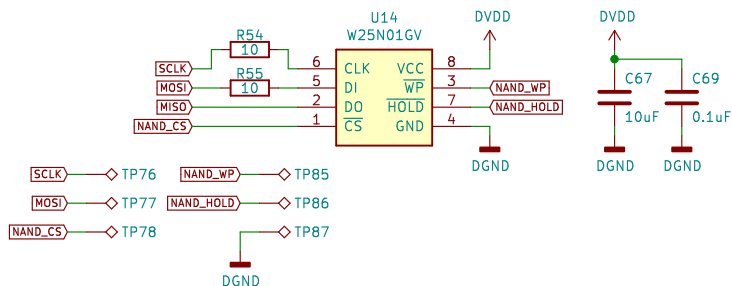
GPS Antenna and Reciever



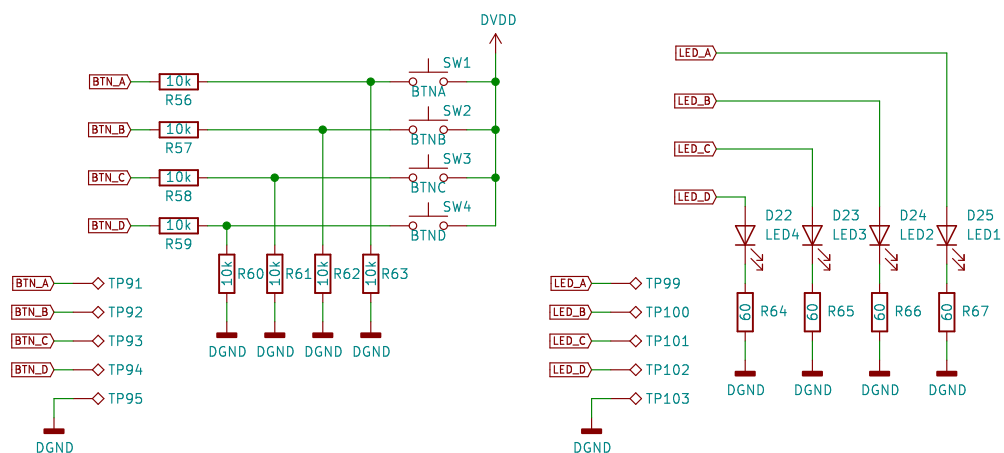
Three Axis Accelerometer



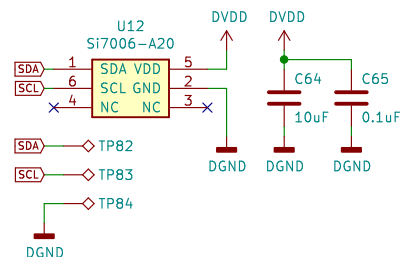
NAND Flash Memory



Debugging Buttons and LEDs



Temperature & Humidity Sensor



Kennedy Caisley, Ryan Donahue

University of Idaho

Sheet: /Onboard Peripherals/
File: croptop_onboard.sch

Title: CropTop

Size: USLetter Date: 2018-11-20

KiCad E.D.A. kicad (5.0.1)-3

Rev: Revision 8

Id: 6/6