Sheet: Sheet_Core

GIMBAL_STEP_ENA
GIMBAL1_STEP
GIMBAL1_DIR
GIMBAL2_STEP
GIMBAL2_DIR
GIMBAL3_STEP
GIMBAL3_DIR
GIMBAL4_STEP
GIMBAL4_DIR
GIMBAL1_MLP_3V
GIMBAL2_MLP_3V
GIMBAL3_MLP_3V
GIMBAL4_MLP_3V
GIMBAL1_SW_EXT_3V
GIMBAL1_SW_RET_3V
GIMBAL2_SW_EXT_3V
GIMBAL2_SW_RET_3V
GIMBAL3_SW_EXT_3V
GIMBAL3_SW_RET_3V
GIMBAL4_SW_EXT_3V
GIMBAL4_SW_RET_3V
GIMBAL1_TEMP_3V
GIMBAL2_TEMP_3V
GIMBAL3_TEMP_3V
GIMBAL4_TEMP_3V

File: GimbalNode_CoreInterface.sch

Sheet: Sheet_Temp

GIMBAL1_TEMP_3V
GIMBAL2_TEMP_3V
GIMBAL3_TEMP_3V
GIMBAL4_TEMP_3V

File: GimbalNode_Temperature.sch

Sheet: Sheet_MLP

GIMBAL1_MLP_3V
GIMBAL2_MLP_3V
GIMBAL3_MLP_3V
GIMBAL4_MLP_3V

File: GimbalNode_MLP_Interface.sch

Sheet: Sheet_LimitSwitches

GIMBAL1_SW_RET_3V
GIMBAL1_SW_EXT_3V
GIMBAL2_SW_RET_3V
GIMBAL2_SW_EXT_3V
GIMBAL3_SW_RET_3V
GIMBAL3_SW_EXT_3V
GIMBAL4_SW_RET_3V
GIMBAL4_SW_EXT_3V

File: GimbalNode_LimitSwitches.sch

Sheet: Sheet_G210x

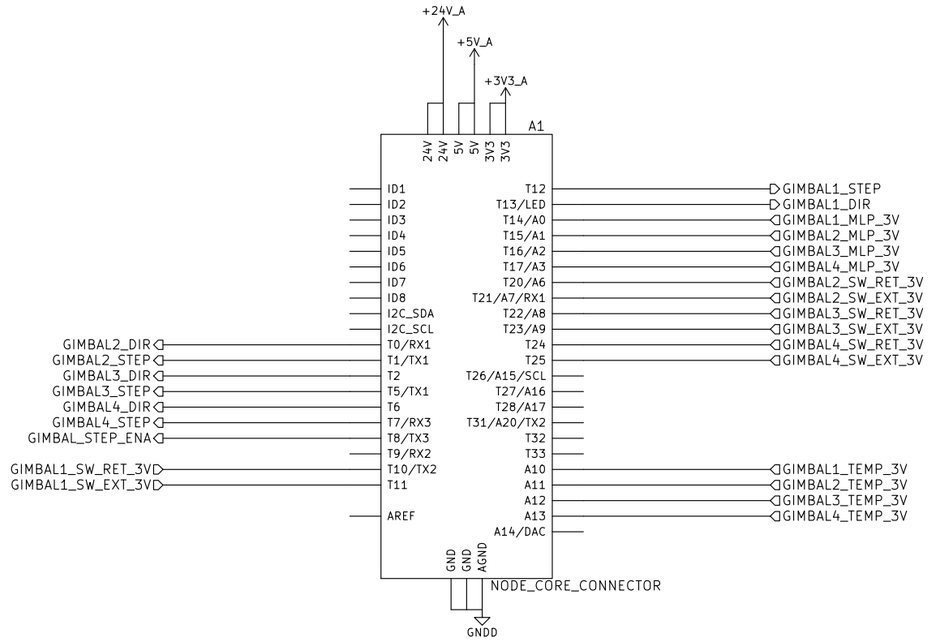
GIMBAL_STEP_ENA
GIMBAL1_STEP
GIMBAL1_DIR
GIMBAL2_STEP
GIMBAL2_DIR
GIMBAL3_STEP
GIMBAL3_DIR
GIMBAL4_STEP
GIMBAL4_DIR

File: GimbalNode_G210x_Interface.sch

Sheet: /
File: GimbalNode.sch

Title: Top Overview

Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 1/6



rLoop – Gimbal Node
Core Interface

Original Author: SafetyLok

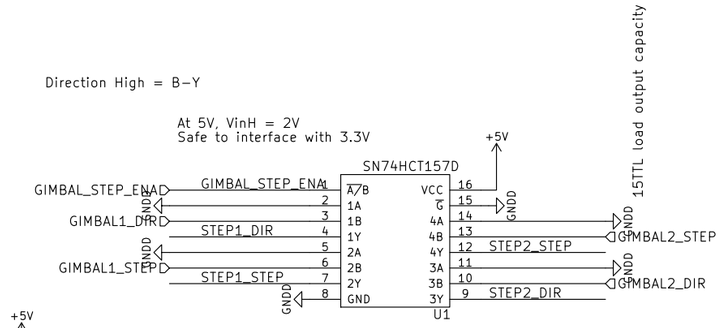
Sheet: /Sheet_Core/
File: GimbalNode_CoreInterface.sch

Title: Stepper Node – Core A

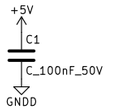
Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 2/6

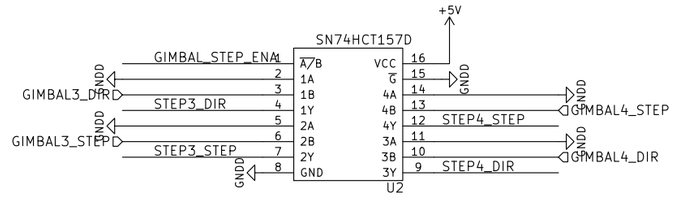
Direction High = B-Y

At 5V, VinH = 2V
Safe to interface with 3.3V

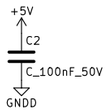


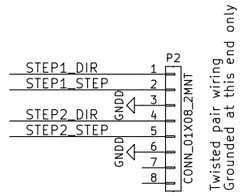
Step 1 and 2, Fwd Left and Aft Left Gimbal



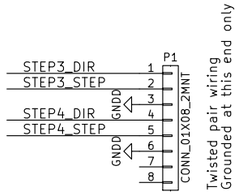


Step 3 and 4, Fwd Right and Aft Right Gimbal





Fwd Left and Aft Left Gimbal Controller



Fwd Right and Aft Right Gimbal Controller

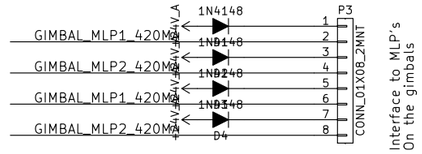
rLoop – Gimbal Node
G210x Multiplexer Interface

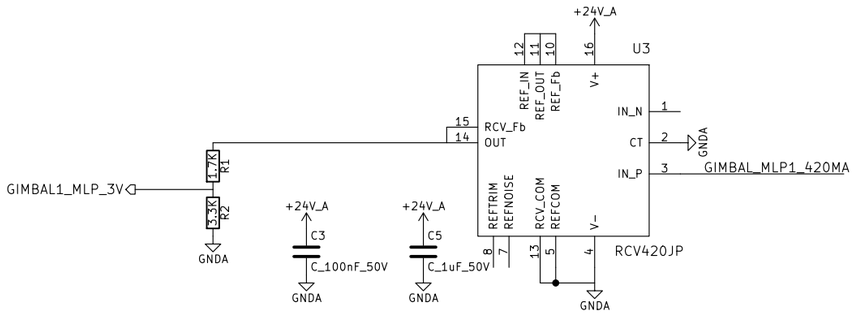
Original Author: SafetyLok

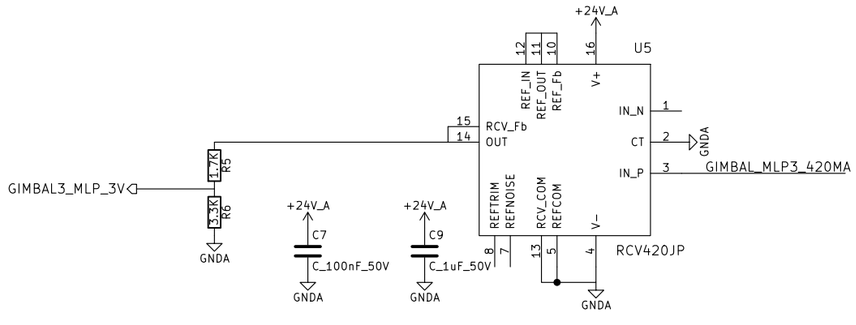
Sheet: /Sheet_G210x/
File: GimbalNode_G210x_Interface.sch

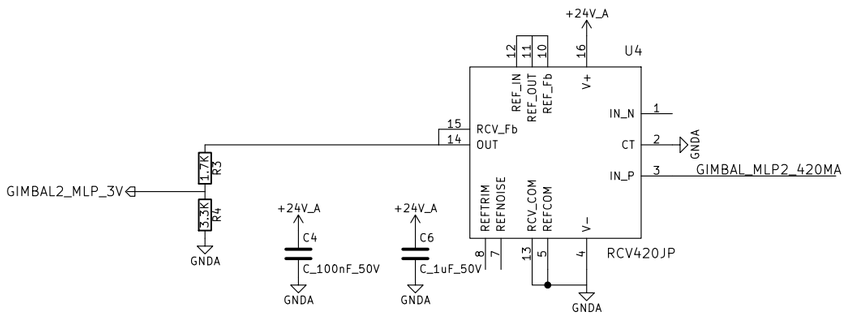
Title: G210 Multiplexers

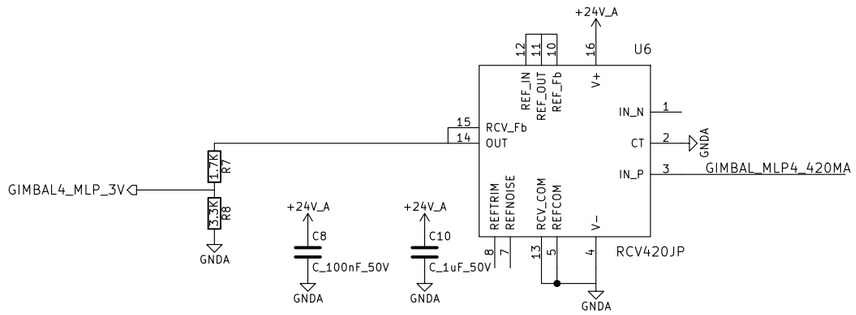
Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 3/6











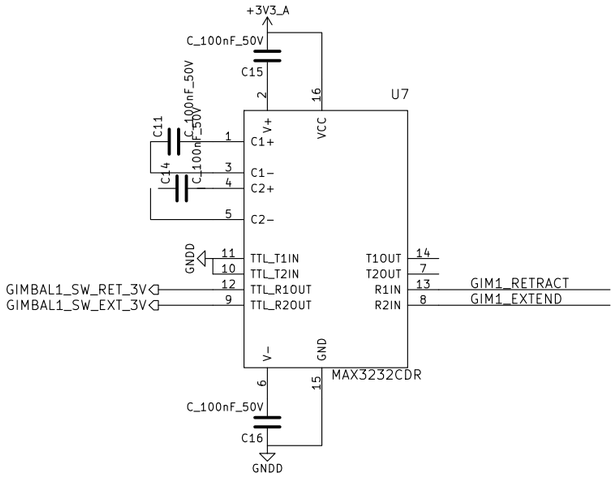
rLoop – Gimbal Node
Gimbal MLP 4–20 Interface

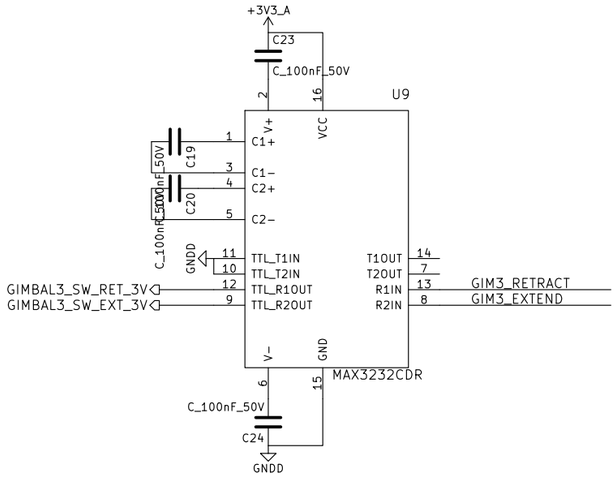
Original Author: SafetyLok

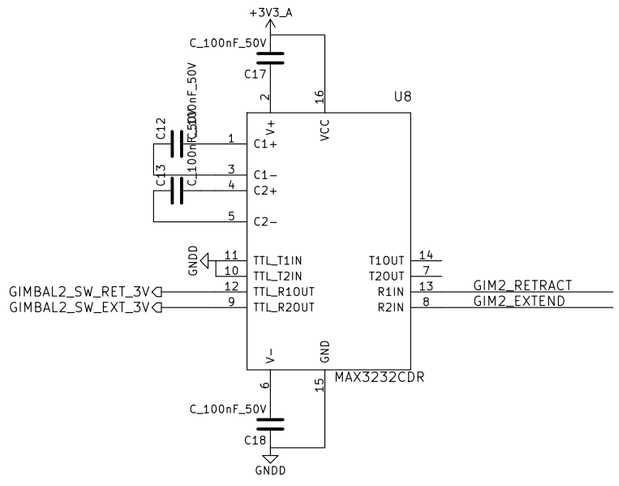
Sheet: /Sheet_MLP/
File: GimbalNode_MLP_Interface.sch

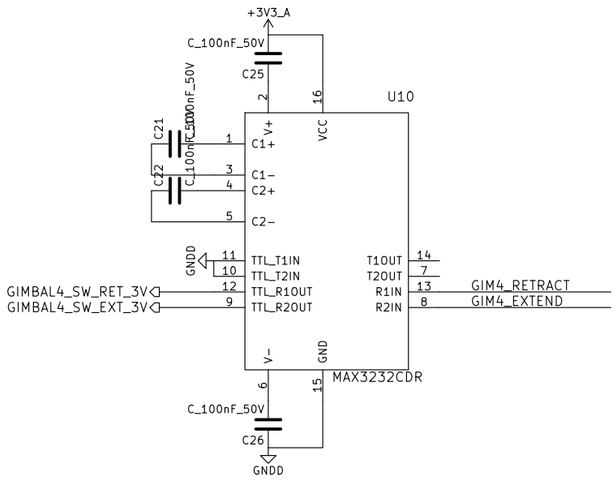
Title: Gimbal 4–20ma MLP Interface

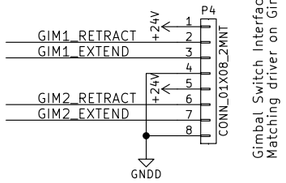
Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 4/6



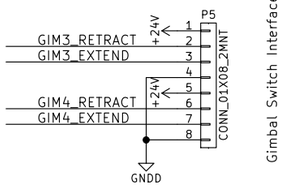








Gimbal Switch Interfaces
Matching driver on Gimbal PCB



Gimbal Switch Interfaces

rLoop – Gimbal Node
Gimbal Switch Interface

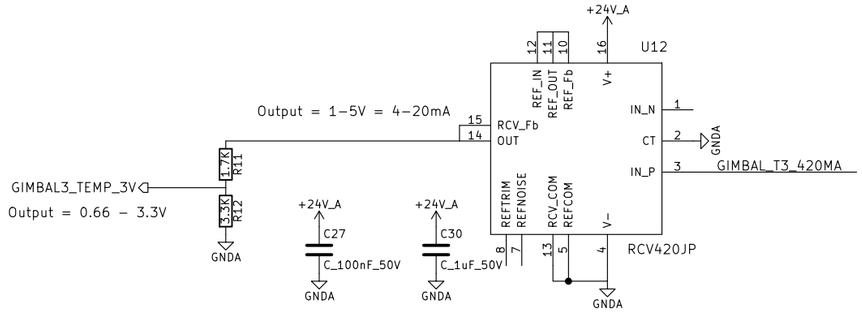
Original Author: SafetyLok

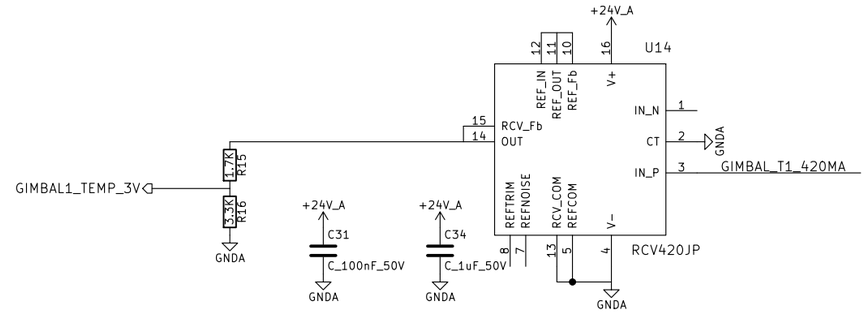
Sheet: /Sheet_LimitSwitches/
File: GimbalNode_LimitSwitches.sch

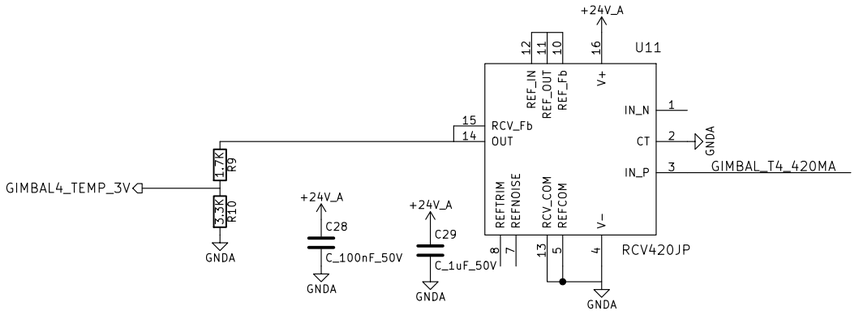
Title: Gimbal Switch Interface

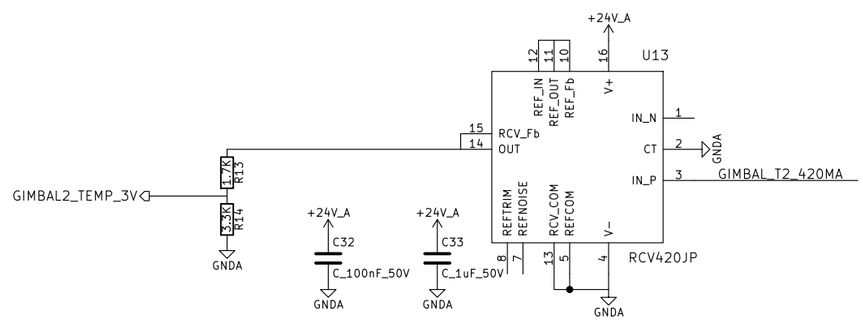
Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 5/6

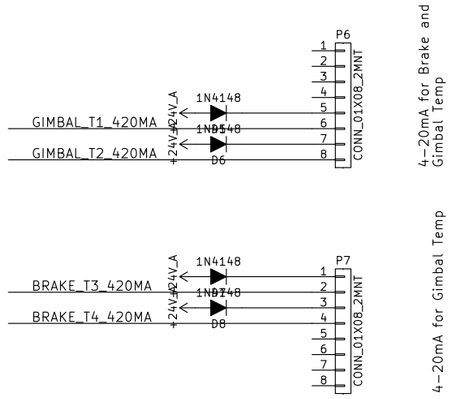
Review Notes: Check output impedance











rLoop - Gimbal Node
4-20mA Temp Sensor IF

Original Author: SafetyLok

Sheet: /Sheet_Temp/
File: GimbalNode_Temperature.sch

Title: Stepper Motor Temperature Interface

Size: A3	Date:	**Rev: 1**
KiCad E.D.A. kicad 4.0.2-stable		Id: 6/6