

Min Limit switch signal

Max Limit switch signal

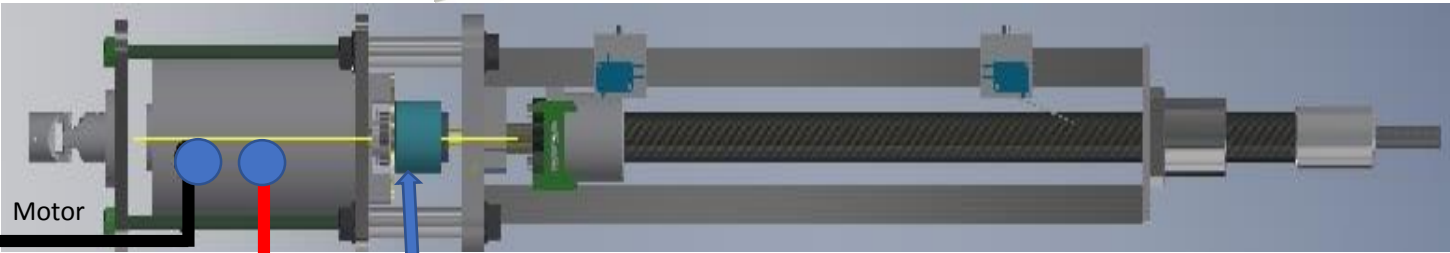
Sabertooth Dip switches
set 111011 (1 – 6)

12 Vdc (150 Amp) PSU Motor Supply

5V Pull up supply for
NO limit switches
(Min Max Travel)

NO contact
+5V = activated

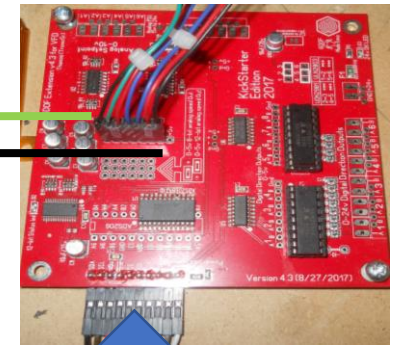
Sim PC running Simtools Or
SMC3 or Ians BFF Software .
Or FlyPtHexpod With USB
Connection To AMC128USB



Motor

Control Signal to Sabertooth Analogue signal S1 or S2 &
Ground from AMC128USB barebones Dig I/O Controller

Supply



BAREBONES
Digital I/O card
Linked Via AMC

600 CPR Optical
Encoder (Belt
Drive from Motor
shaft 1:1 Ratio



ENCODER2POS INTERFACE PCB

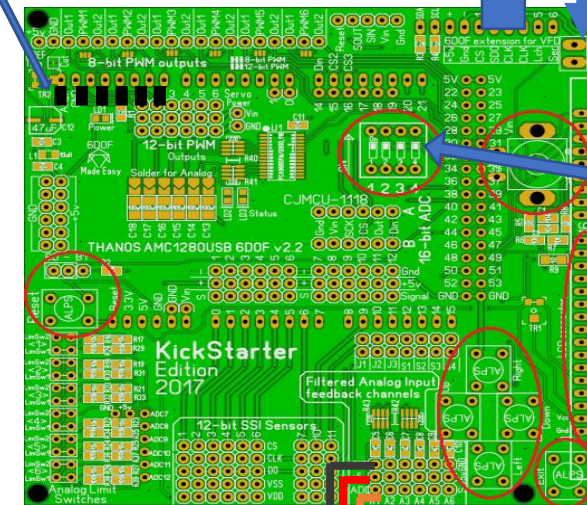
6DOF MOTION PLATFORM REF SINGLE ACTUATOR SETUP USING AMC128USB /SABERTOOTH 2X60 /ENCODER2POS INTERFACE

ULN2803A Motor
supply Relay
disable signals Out

Hi – Lo Limit Switch state Outputs
to ULN2803A pcb Or Opto isolated
Relay Modules for E-Stop Relay CCT

Encoder signal To AMC128USB barebones Controller
**Note +5V from AMC via Analog inputs also used to
supply Power to Encoder2Pos PCB**
If external USB supply used to power encoder PCB then
remove +5V connection from AMC to Encoder2Pos PCB

Solder bridges



AMC128USB
BAREBONES VERSION
card Dip switches set
(1000)

Menu set up Parameters
16 Bit
10 Bit analogue sensor
8 Bit Analogue Out
Ser Off
Motion Data
POS 123456
Position 100/99%
Start Position 48 – 50%

A+
B-
Low Lmt
High Lmt
Ov
+5V

C hall
25/02/19

0 V
+5V
Sig