U_Torque_Signal_Conditioning
Torque_Signal_Conditioning.SchDoc

Chose size of UZ logo
by chosing footprint
type

LOGO1

INFO1

Project
ProjectRevision
AuthorParam
ProjectDate

Design Information

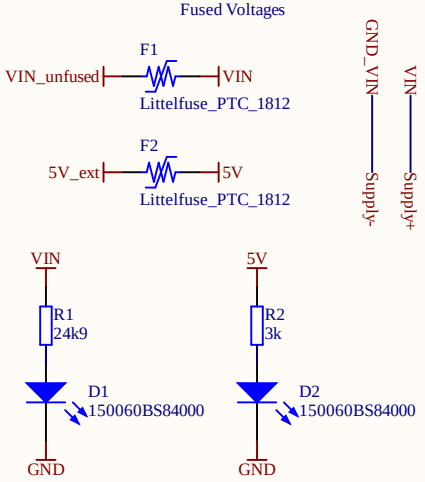
Serial1

Serial

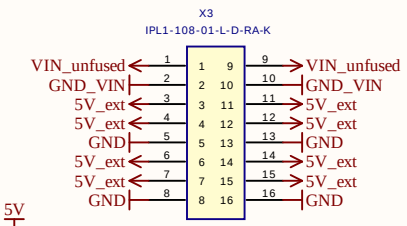
Serialnumber 6.3 x 6.3 mm

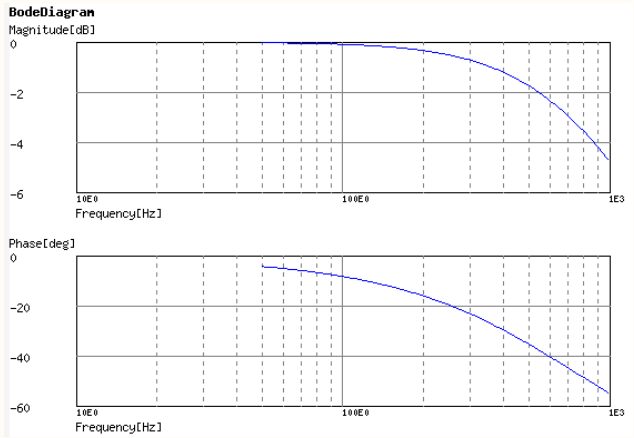
Title TopSheet.SchDoc		***UltraZohm***	
Revision: Rev01	Design Engineer: M. Hoerner	www.ultrazohm.com	
Project: uz_per_torque_box.PrjPCB		Date: 20.08.2024	
		Sheet 1 of 2	

Fused Voltages



Use pin 2 and 10 as return ground for VIN



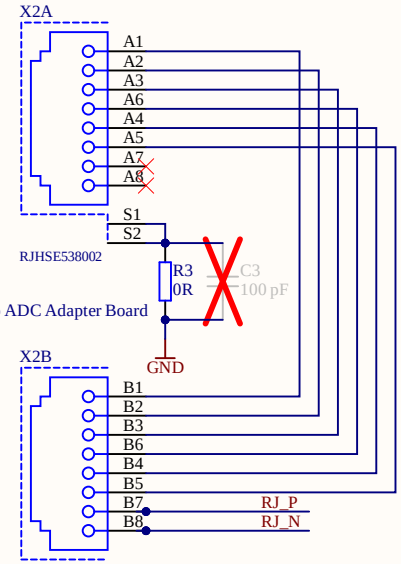


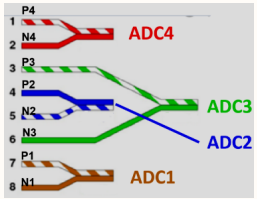
Signal definition of Burster Cable

Burster Cable
99540-000F-052XXXX

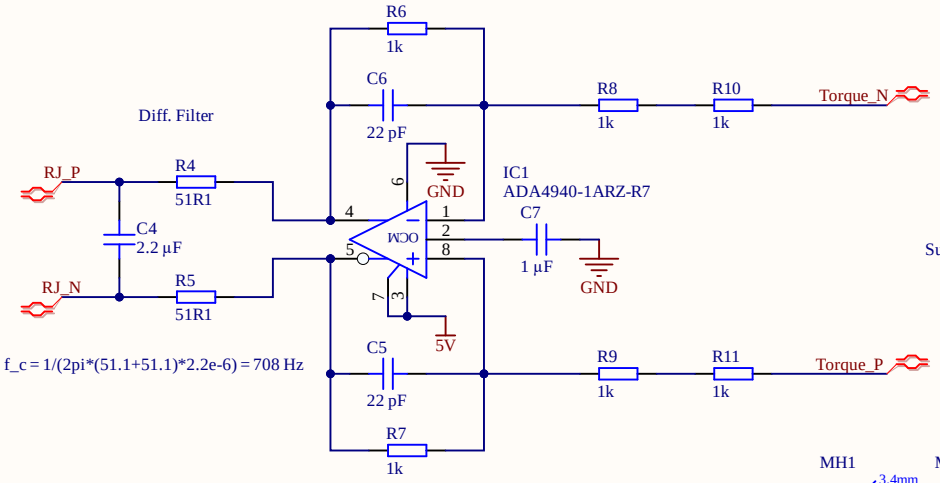
Pin	Signal	Color	D-Sub15 Pin
A	NC		
B	Angle B		
C	Torque+		15
D	Torque-		1
E	Supply-		14
F	Supply+		3
G	Angle A		
H	NC		
J	GND Angle		
K	Control In		
L	-		
M	NC		

Application Input Port



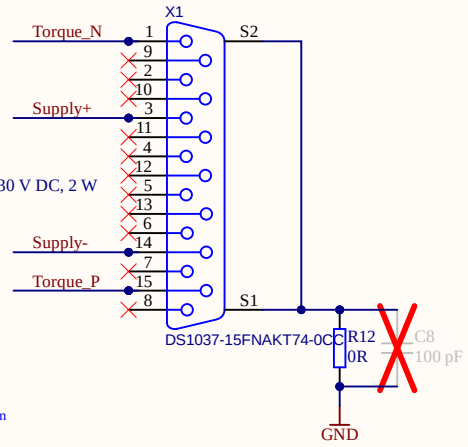


Diff. Filter

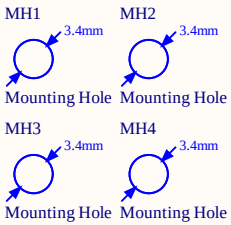


f_c = 1/(2pi*(51.1+51.1)*2.2e-6) = 708 Hz

Input Port Torque Sensor



Supply: 10 ... 30 V DC, 2 W



Torque Sensor Interface for Burster 8656:

This PCB can supply a Burster 8656 Torque Sensor.
The supply is taken from the voltage interface connector of an LTC2311 adapter board.
The torque signal (+-10V) is reduced to a level of +-5V and low-pass filtered. Finally the torque signal is connected to ADC1 channel of LTC2311, ADC2 ... 4 can still be used via the Application Input Port

Title Torque_Signal_Conditioning.SchDoc		UltraZohm www.ultrazohm.com
Revision: Rev01	Design Engineer: M. Hoerner	
Project: uz_per_torque_box.PrjPCB		Date: 20.08.2024 Sheet 2 of 2