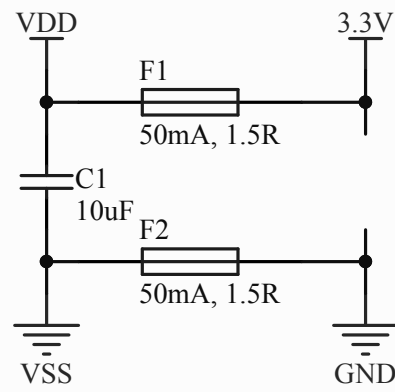


Pin connection diagram for SM08B-SURS. The device has pins 1 through 8 and three additional pins labeled A, B, and C. Pin 8 is connected to VDD. Pin 7 is labeled PWM1. Pin 6 is connected to CS. Pin 5 is connected to SCLK. Pin 4 is connected to DO. Pin 3 is connected to DO. Pin 2 is connected to DO. Pin 1 is connected to VSS. Pins A, B, and C are connected to VSS.

Output connector  
(connects to motordriver board)  
(with twisted cable)



Make C12 0R if you do NOT want to chain more encoders at input

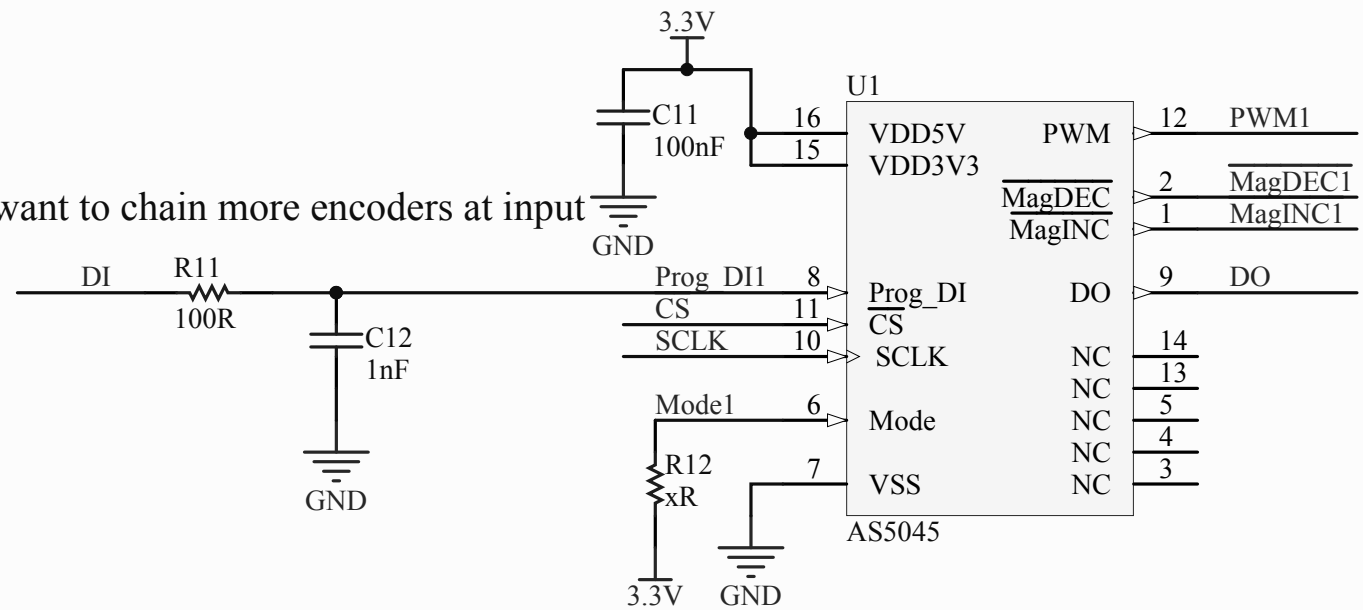


Diagram illustrating the pin configuration for the SM08B-SURS component. The component is shown as a rectangular block with pins labeled B, A, 1, 2, 3, 4, 5, 6, 7, 8. The pins are connected to various signals and power rails:

- Pin 4 is labeled CS.
- Pin 5 is labeled SCLK.
- Pin 7 is labeled DI.
- Pin 3 is connected to VDD.
- Pin 8 is connected to VSS.

The component is identified as SM08B-SURS and is labeled as the Input connector.


Input connector  $\overline{\text{VSS}}$   
(connects to double encoder board at knee)  
(with twisted cable)

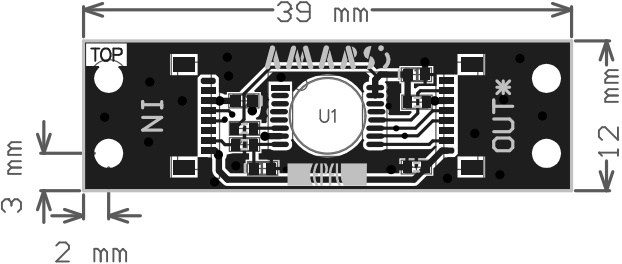
Oncilla hip magnetic encoder  
Main page

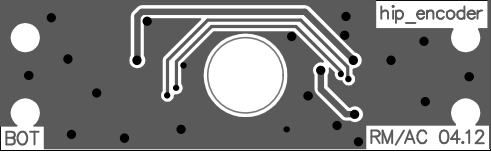
Biorobotics Laboratory  
École Polytechnique Fédérale de Lausanne

09.08.2011

Rico Möckel

Title <b><i>Oncilla L1 (hip) magnetic encoder</i></b>			<i>Rico Möckel</i> <i>BioRob / EPFL</i>	
Size: A4	Number: 1	Revision: 2		
Date: 18/03/2014	Time: 19:25:14	Sheet 1 of 1		
File: Z:\oncilla-hardware\electronics\magnetic-encoders\l1\l1.SchDoc				





hip\_encoder

BOT

RM/AC 04.12

# Part List

Oncilla L1 (hip) magnetic encoder

Source Data From:

I1.SchDoc

Project:

I1.PrjPcb

Variant:

None

Report Date: 18/03/2014

19:25:21

Print Date: 18-Mar-14

7:25:27 PM

Designator	Comment	LibRef	Footprint	Description
C1	10uF	Cap	CAPC1608L	Capacitor
C11	100nF	Cap	CAPC1608L	Capacitor
C12	1nF	Cap	CAPC1608L	Capacitor
F1, F2	50mA, 1.5R	Fuse 1	RESC1608L	Ferrit Bead
R11	100R	Res1	RESC1608L	Resistor
R12	xR	Res1	RESC1608L	Resistor
U1	AS5045	AS5045	SSOP16	12 Bit Programmable Magnetic Rotary Enco
X1, X2	SM08B-SURS	SM08B-SURS	SM08B-SURS	wire-to-board connector