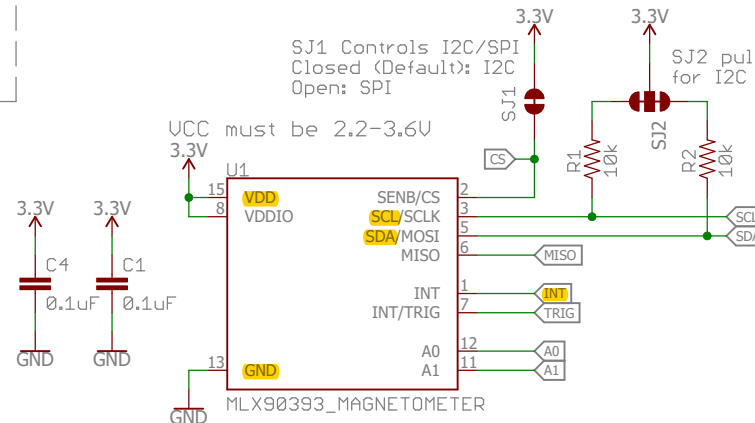# MLX90393 Breakout

MODES:
  I2C:
    Leave the copper-connected jumpers
    SJ1 and SJ2 as default.
    SJ1 is the LSB of the address.

  SPI 4-WIRE:
    Jumpers SJ2 can be opened to
    remove pull-ups on the SPI lines.
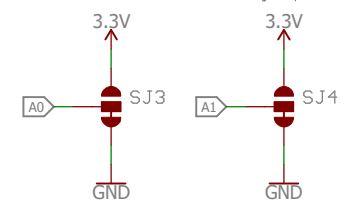   SJ1 must be open for SPI operation.

Magnetometer Circuitry

SJ1 Controls I2C/SPI
Closed (Default): I2C
Open: SPI

SJ2 pulls up the SCK and SDA lines
for I2C operation

VCC must be 2.2-3.6V

3.3V 3.3V

3.3V

3.3V 3.3V

SJ1

SJ2

R1 10k   R2 10k

CS

C4   C1
0.1uF 0.1uF

GND   GND

U1
15 VDD
8   VDDIO

13 GND

SENB/CS   2
SCL/SCLK   3
SDA/MOSI   5
MISO   6

INT   1
INT/TRIG   7

A0   12
A1   11

SCL

SCL
SDA

MISO

INT
TRIG

A0
A1

MLX90393_MAGNETOMETER
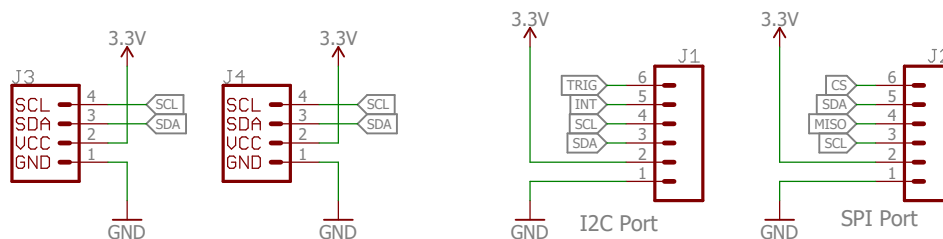
GND

I2C Addressing Table

A1	A0	I2C Address
GND	GND	0x0C
GND	VDD	0x0D
VDD	GND	0x0E
VDD	VDD	0x0F

Address selection jumpers

3.3V   3.3V

A0   SJ3   A1   SJ4

GND   GND

Default 7-bit I2C Adr: 0x0C

User Ports

J3
SCL 4
SDA 3
VCC 2
GND 1

3.3V

SCL
SDA

GND

J4
SCL 4
SDA 3
VCC 2
GND 1

3.3V

SCL
SDA

GND

3.3V

J1
TRIG 6
INT   5
SCL   4
SDA   3
      2
      1

GND   I2C Port

3.3V

J2
CS   6
SDA   5
MISO 4
SCL   3
      2
      1

GND   SPI Port

TITLE: Qwiic_MLX90393_Magnetometer

Design by: R. Reynolds
Revision By: A. England

REV:
v10

Date: 4/25/2018 2:59 PM

Sheet: 1/1

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