ROHM Sensor Shield - ROHM_SENSORSHLD1-EVK-101

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Rev	Contents	
00	Starting Schematic	1-12-2015
	Added interfaces, ROHM RGB, pressure and MEMS	2-13-2015
	Added KXG03 Gyro	4-14-2015
	Pulled in NXP Feedback	4-28-2015
	Added corner accels	5-13-2015
00.1	Replaced J12 with R40 Fixed Corner Accels Added Magnetometer Removed excess header pins	9-11-2015
01	Final QC changes Removed excess headers Added expansion for breakout boards	3-07-2016

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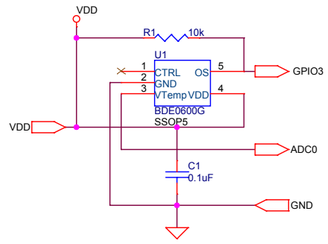
Temperature Sensor

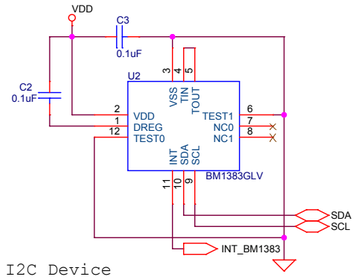
>>BDE0600G



ADC Device, 1 Interrupt (GPIO)

Pressure Sensor

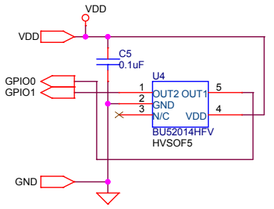
>>BM1383AGLV



I2C Device
Device Address = 0x5D

Hall Sensor

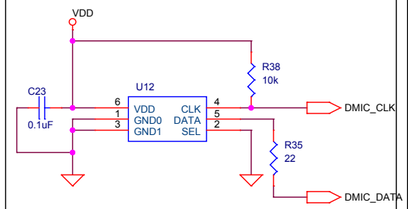
BU52014HFV



GPIO Output Device, 2 GPIO
OUT1/GPIO0 = South Pole Detection
OUT2/GPIO1 = North Pole Detection

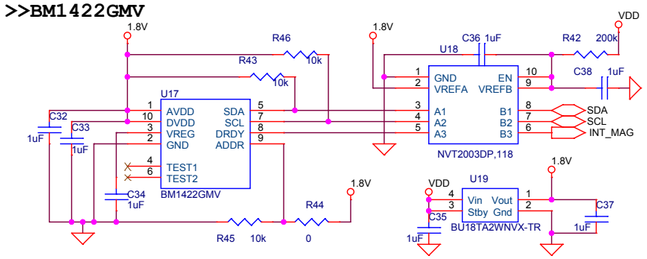
Digital Microphone

>>SPM0423HD4H-WB



3-Axis Magnetometer

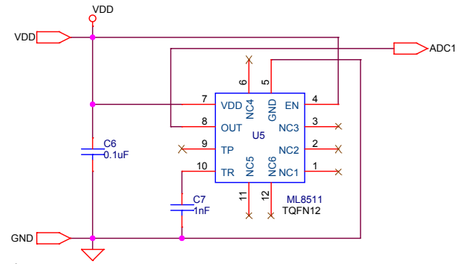
>>BM1422GMV



I2C Device
Device Addr = 0x0F

UV Sensor

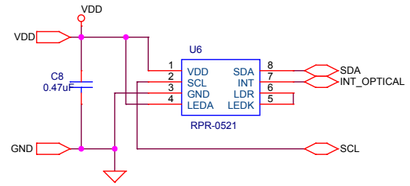
>>ML8511 or ML8511A



ADC Device

ALS/Proximity Sensor

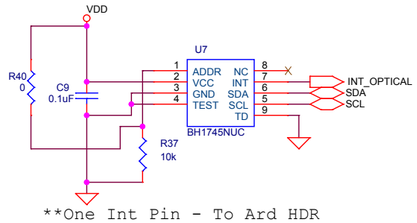
>>RPR-0521



I2C Device
Device Address = 0x70
INT - Open Drain

Color Sensor

>>BH1745NUC

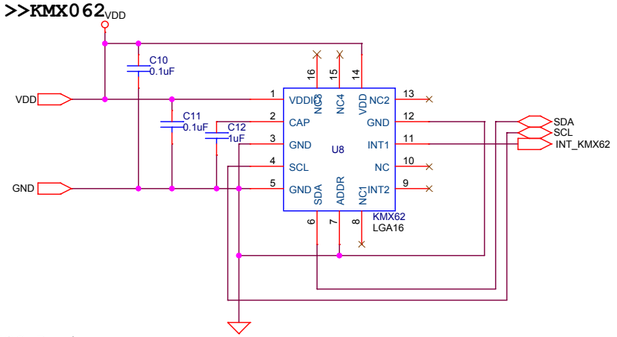


**One Int Pin - To Ard HDR

I2C Device
Use Jumper to select Addr Pin
Device Addr = 0x39
INT Open Drain

Accel + Mag MEM Sensors

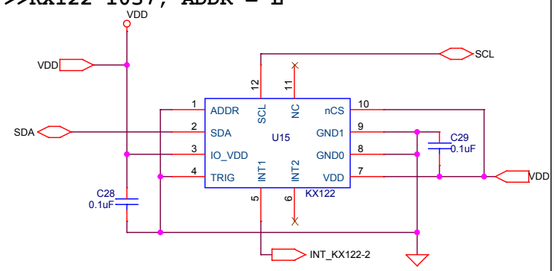
>>KMX062



I2C Device
Device Address = 0x0E

Accel MEM Sensors

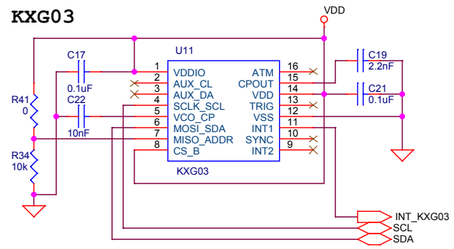
>>KX122-1037, ADDR = L



I2C Device
Device Address = 0x1E

Gyro

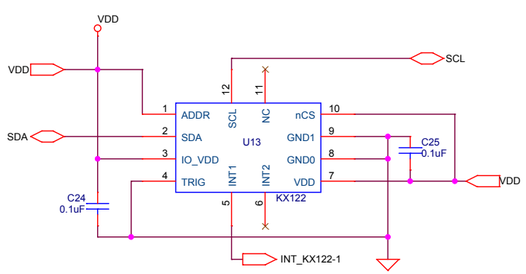
KXG03



I2C Device
Device Addr = 0x4F

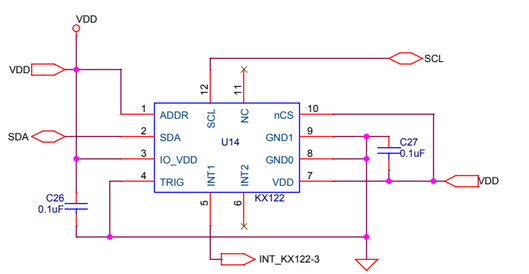
Corner Accels

>>KX122-1037, ADDR = H



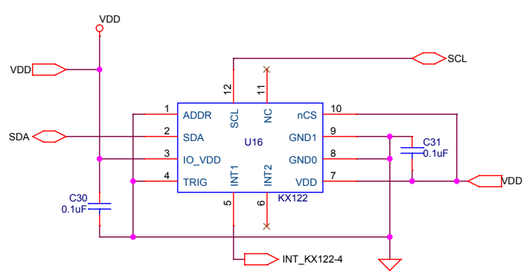
I2C Device
Device Address = 0x1F

>>KX122-????, ADDR = H



I2C Device
Device Address = ??

>>KX122-????, ADDR = L



I2C Device
Device Address = ??

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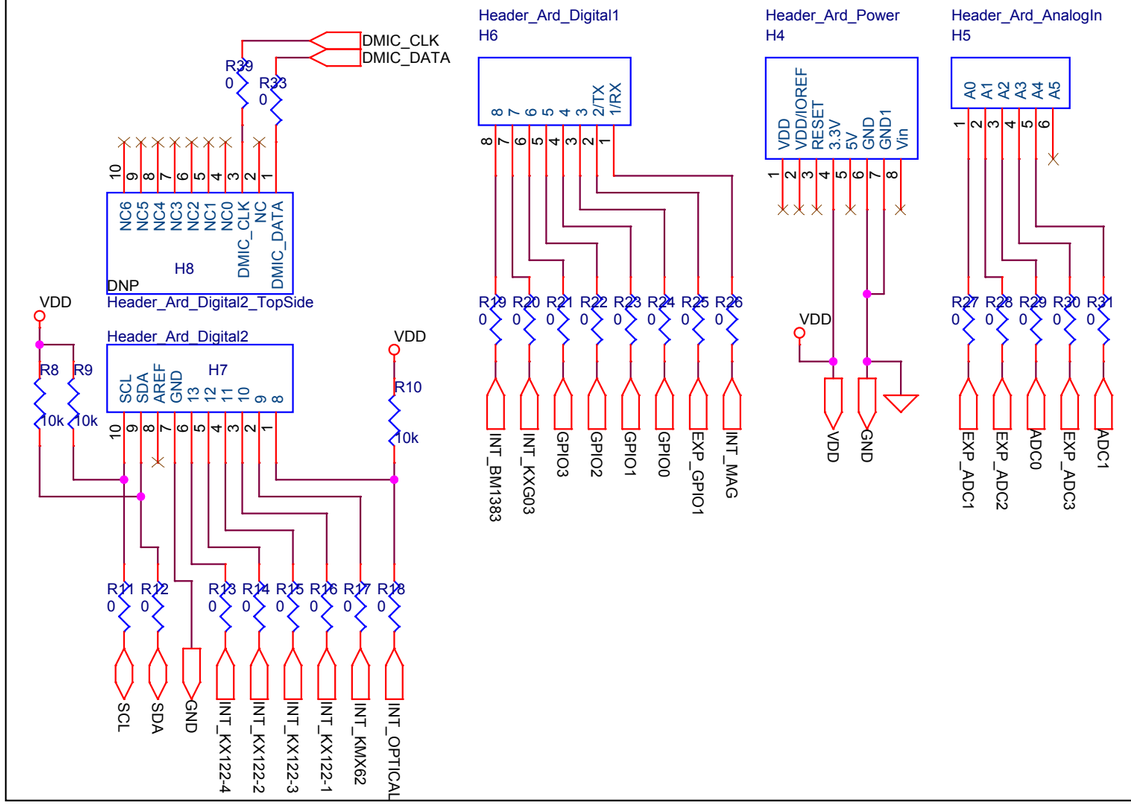
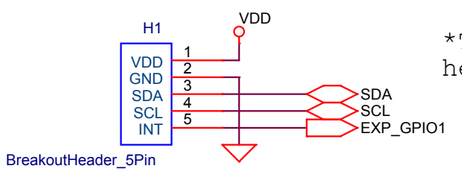
Common Platform Header Pins (Shield Layout)

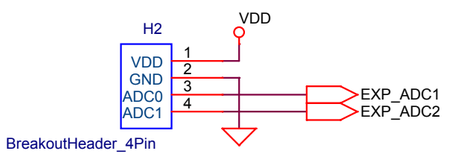


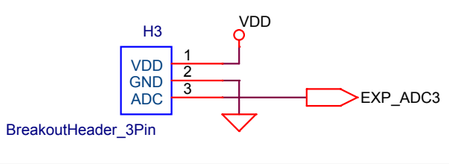
**Note:
"Header_Ard_Digital2_TopSide" connector needs to be placed right above "Header_Ard _Digital2" connector. Pin1 alignment and 2.54mm spacing still applies. Typical shield will only contain the header connector that matches "Header_Ard _Digital2", and that the "*_TopSide" header is only extension used with certian applications. H10 is DNP

*Note: these headers should be laid out by matching the arduino header specification.

Breakout Board Expansion

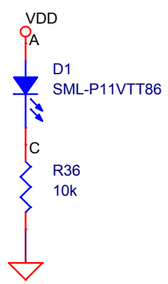






*These are standard pitch headers (1x5, 1x4, 1x3)

Shield Power Indicator



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