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3	Power Supply, Battery, uSD

Revisions & Change Log

Rev	Description	Date	Approved
X1	27909 base Initial Draft	03/07/13	J. SCOTT
A	27909 Prototype Release	03/26/13	J. SCOTT
AX1_UD	27982 (BT Version) Under Development	07/16/13	J. SCOTT
AX1	27982 (BT Version) PPL & A070 RELEASE	07/22/13	J. SCOTT
AX2	27982 (BT Version) Block Diagram Update	08/07/13	J. SCOTT
B	27982 (BT Version) Release candidate	08/23/13	J. SCOTT
BX1	27982 (UNDER DEVELOPMENT) I2C swap fix	09/25/13	J. SCOTT
C	27982 Release to prod. Block diagram update	09/27/13	J. SCOTT

FRDM-FXS-MULTI

freescale

Automotive, Industrial & Multi-Market Solutions Group

6501 William Cannon Drive West Austin, TX 78735-8598

ICAP Classification: FCP: FIUO: PUBI: X

Designer: RAFAEL DEL REY	Drawing Title: FRDM-FXS-MULTI_B	
Drawn by: RAFAEL DEL REY	Page Title: TITLE PAGE	
Approved: JAMES SCOTT	Size C / Document Number SCH-27982 | PDF: SPF-27982	Rev C
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1. Unless Otherwise Specified:
   All resistors are in ohms, 5%, 1/8 Watt
   All capacitors are in uF, 20%, 50V
   All voltages are DC
   All polarized capacitors are aluminum electrolytic

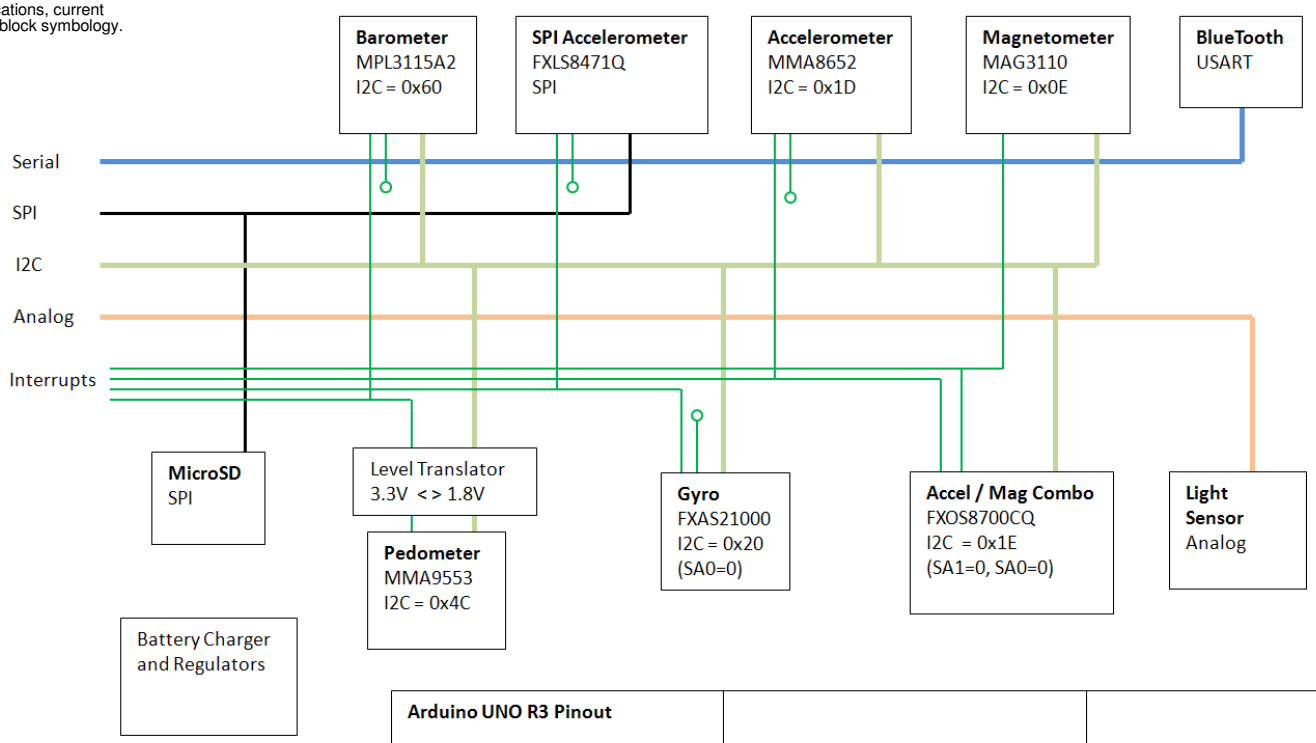
2. Interrupted lines coded with the same letter or letter combinations are electrically connected.

3. Device type number is for reference only. The number varies with the manufacturer.

4. Special signal usage:
   _B Denotes - Active-Low Signal
   <> or [] Denotes - Vectored Signals

5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

FRDM-FXS-MULTI Block Diagram



Arduino UNO R3 Pinout		
D0 = BlueTooth RX	D8 = Interrupt Pedometer or Pressure 1	A0 = BT_Wakeup
D1 = BlueTooth TX	D9 = test point	A1 = BT_Monitor
D2 = Interrupt Combo 1 or Mag	D10 = SPI_SS_SPI_ACCEL	A2 = SPI_SS_SD
D3 = test point	D11 = SPI_MOSI	A3 = Light Sensor Analog Signal
D4 = Interrupt Combo 2 or Accel 1	D12 = SPI_MISO	A4 = Main I2C Data
D5 = Interrupt Gyro or SPI Accel 1	D13 = SPI_CLK	A5 = Main I2C Clock
D6 = test point	D14 = Optional I2C Data	
D7 = test point	D15 = Optional I2C Clock	

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ICAP Classification: FCP: ___ FIUO: X PUBI: ___

Drawing Title: **FRDM-FXS-MULTI_B**

Page Title: **BLOCK DIAGRAM**

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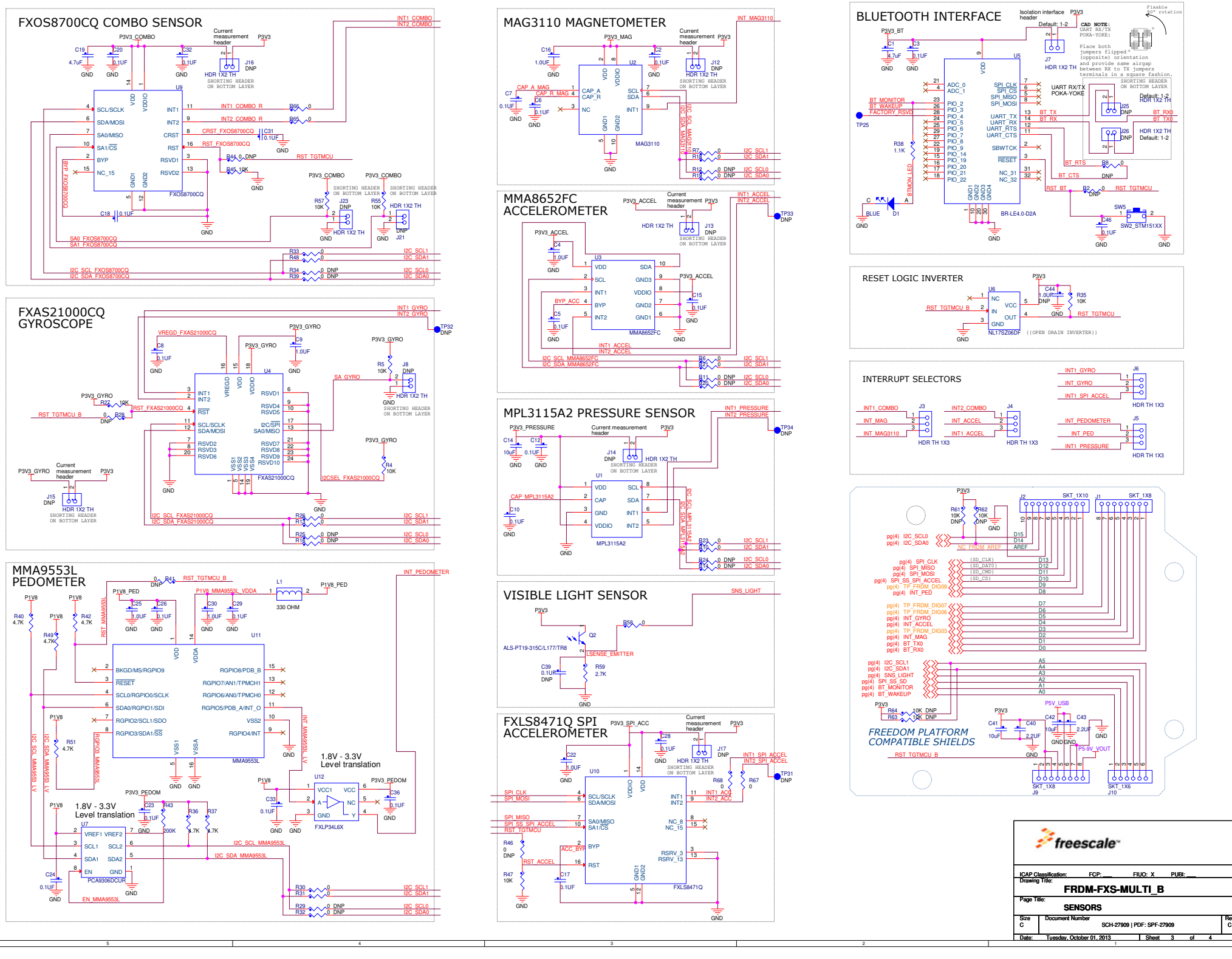
FXOS8700CQ COMBO SENSOR
MAG3110 MAGNETOMETER
BLUETOOTH INTERFACE
MMA8652FC ACCELEROMETER
RESET LOGIC INVERTER
FXAS21000CQ GYROSCOPE
INTERRUPT SELECTORS
MPL3115A2 PRESSURE SENSOR
MMA9553L PEDOMETER
VISIBLE LIGHT SENSOR
FXLS8471Q SPI ACCELEROMETER
FREEDOM PLATFORM COMPATIBLE SHIELDS
1.8V - 3.3V Level translation
freescale
ICAP Classification:
FCP:
FIUO: X
PUBI:
Drawing Title:
FRDM-FXS-MULTI_B
Page Title:
SENSORS
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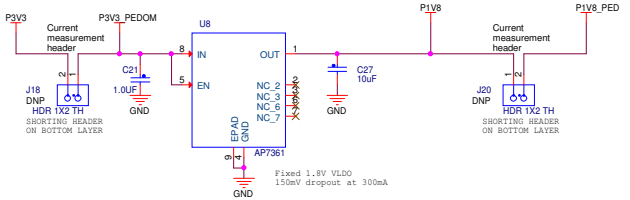
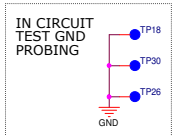
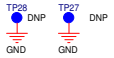
VOLTAGE REGULATION



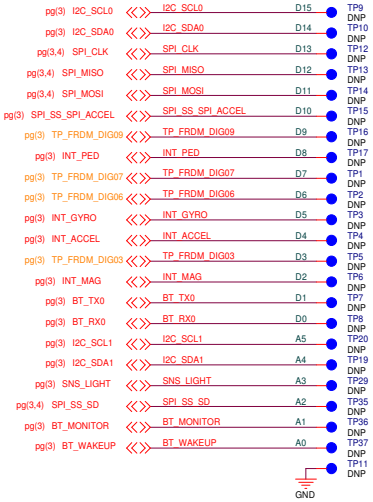
IN CIRCUIT TEST GND PROBING



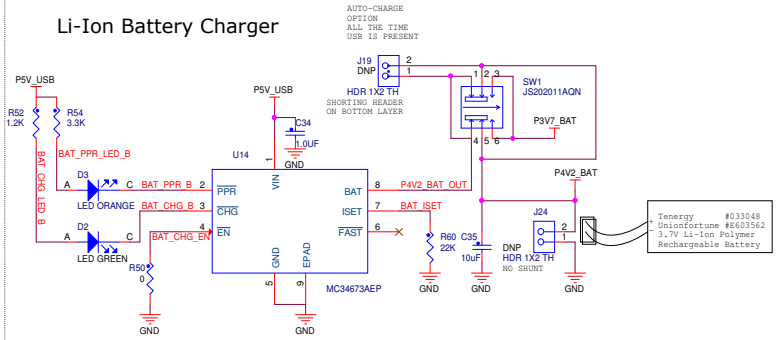
DEBUG GROUND HOOK



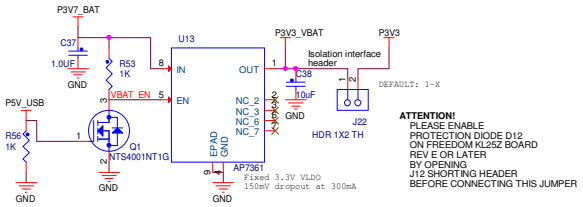
Prototyping Area Heading Signals



Li-Ion Battery Charger

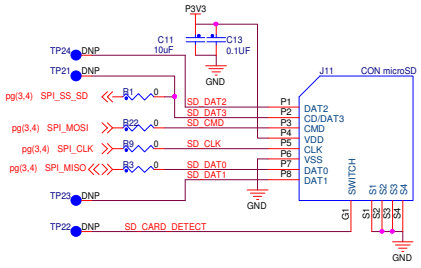


Battery Regulation



ATTENTION!
PLEASE ENABLE
PROTECTION DIODE D12
ON FREEDOM KL25Z BOARD
REV E OR LATER
BY OPENING
J12 SHORTING HEADER
BEFORE CONNECTING THIS JUMPER

microSD Card Connector, SPI Mode



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ICAP Classification:	FCP: ___	FIUO: X	PUBI: ___
Drawing Title:	FRDM-FXS-MULTI_B		
Page Title:	POWER SUPPLY		
Size: C	Document Number: SCH-27909 | PDF: SPF-27909		Rev: C
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