3.3V Power Supply

VCC

U1
1 VIN VOUT 5 VCC_3V3
3 CE
2 VSS NC/G0 4
XC6210B33

C5 10uF
C1 0.1uF
C3 0.1uF
C2 10uF

GND GND GND GND GND

External Connections

VCC — ○ J3
AD4/SDA — ○ J4
AD5/SCL — ○ J5
GND — ○ J6
INT1 — ○ J7
INT2 — ○ J8

TinyShield Expansion – Bottom

VBATT +5V
VCC +3V3

J2
AD5/SCL 1 | 1 2 | 2 IOREF
AD4/SDA 3 | 3 4 | 4
AD3 5 | 5 6 | 6
AD2 7 | 7 8 | 8
AD1 9 | 9 10 | 10 VIN
AD0 11 | 11 12 | 12
AREF 13 | 13 14 | 14
SCK 15 | 15 16 | 16 RSV2
MISO 17 | 17 18 | 18 RSV1
MOSI 19 | 19 20 | 20 RSV0
SS 21 | 21 22 | 22 RESET
IO9 23 | 23 24 | 24 IO0
IO8 25 | 25 26 | 26 IO1
IO7 27 | 27 28 | 28 IO2
IO6 29 | 29 30 | 30 IO3
IO5 31 | 31 32 | 32 IO4
DF12-32-DS

GND

STmicro L3G4200D

VCC_3V3
VCC_3V3

U4
8 GND VDD 16
7 INT1 RESV_VDD 15
6 INT2 PLLFILT 14
5 CS GND5 13
4 SA0 GND4 12
3 SDA GND3 11
2 SCL GND2 10
1 VDD_IO GND1 9
L3G4200D

INT1
INT2

SDA_3V3
SCL_3V3

C4 0.1uF
GND

C10 10nF
C9 0.47uF
R1 10.0K

GND

C6 10uF
GND GND

I2C Level Shifter

VCC

U2
VCC_3V3 1 | 1 VCCA VCCB 8
SCL_3V3 2 | 2 A1 B1 7 AD5/SCL
SDA_3V3 3 | 3 A2 B2 6 AD4/SDA
4 GND OE 5 VCC_3V3
TX0102

GND

TinyShield Expansion – Top

VBATT +5V
VCC +3V3

J1
AD5/SCL 1 | 1 2 | 2 IOREF
AD4/SDA 3 | 3 4 | 4
AD3 5 | 5 6 | 6
AD2 7 | 7 8 | 8
AD1 9 | 9 10 | 10 VIN
AD0 11 | 11 12 | 12
AREF 13 | 13 14 | 14
SCK 15 | 15 16 | 16 RSV2
MISO 17 | 17 18 | 18 RSV1
MOSI 19 | 19 20 | 20 RSV0
SS 21 | 21 22 | 22 RESET
IO9 23 | 23 24 | 24 IO0
IO8 25 | 25 26 | 26 IO1
IO7 27 | 27 28 | 28 IO2
IO6 29 | 29 30 | 30 IO3
IO5 31 | 31 32 | 32 IO4
DF12-32-DP

GND

TINYCIRCUITS
http://www.TinyCircuits.com

TITLE: TinyShield – 3-Axis Gyro
Document Number: AS-SCH-ASD2614
REV: 1
Date: 2/18/2016 7:10:15 PM
Sheet: 1/1