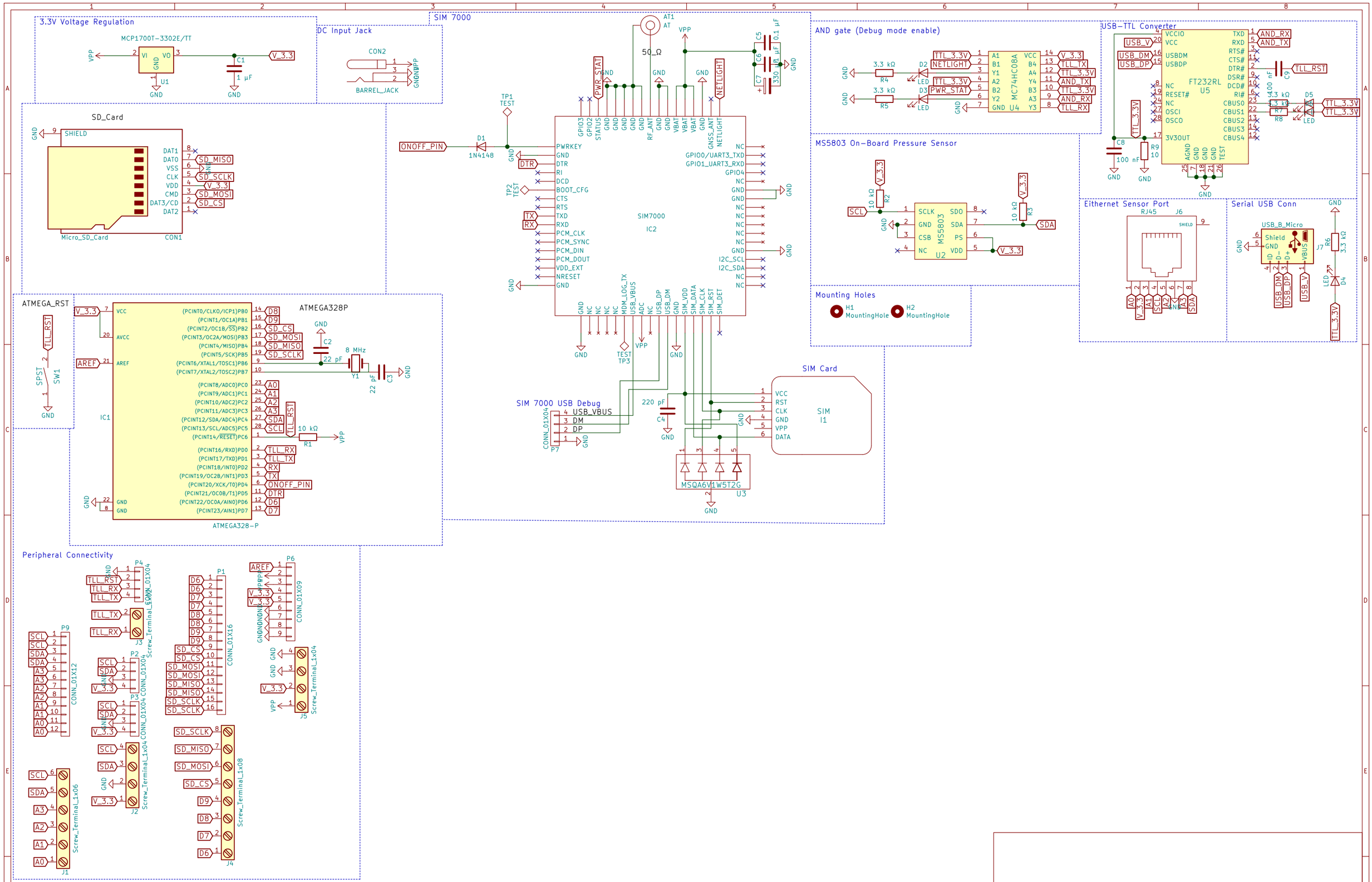
3.3V Voltage Regulation
MCP1700T-3302E/TT
U1
C1
1 µF
V_3.3
DC Input Jack
CON2
BARREL_JACK
SIM 7000
AT1
50_Ω
SIM7000
IC2
PWRKEY
GND
DTR
RI
DCD
BOOT_CFG
CTS
RTS
TXD
RXD
PCM_CLK
PCM_SYNC
PCM_DIN
PCM_DOUT
VDD_EXT
NRESET
GPIO0/UART3_TXD
GPIO1_UART3_RXD
GPIO4
I2C_SCL
I2C_SDA
ONOFF_PIN
D1
1N4148
TP1
TEST
TP2
TEST
TP3
TEST
PWR_STAT
NETLIGHT
C5
0.1 µF
C6
0.1 µF
C7
330 µF
SIM 7000 USB Debug
CONN_01X04
P7
USB_VBUS
DM
DP
C4
220 pF
SIM Card
SIM
I1
VCC
RST
CLK
GND
VPP
DATA
MSQA6V1W5T2G
U3
AND gate (Debug mode enable)
MC74HC08A
U4
R4
3.3 kΩ
R5
3.3 kΩ
D2
D3
LED
TTL_3.3V
NETLIGHT
PWR_STAT
AND_TX
AND_RX
TLL_RX
MS5803 On-Board Pressure Sensor
MS5803
U2
SCLK
SDO
SDA
CSB
PS
NC
VDD
R2
10 kΩ
R3
10 kΩ
SCL
SDA
V_3.3
Mounting Holes
H1
MountingHole
H2
MountingHole
USB-TTL Converter
FT232RL
U5
VCCIO
VCC
USBDM
USBDP
NC
RESET#
OSCI
OSCO
3V3OUT
TXD
RXD
RTS#
CTS#
DTR#
DSR#
DCD#
RI#
CBUS0
CBUS1
CBUS2
CBUS3
CBUS4
AGND
TEST
USB_V
USB_DM
USB_DP
C8
100 nF
R9
10
C9
100 nF
TLL_RST
R7
3.3 kΩ
R8
3.3 kΩ
D5
LED
Ethernet Sensor Port
RJ45
J6
SHIELD
Serial USB Conn
USB_B_Micro
J7
Shield
GND
ID
D-
D+
VBUS
R6
3.3 kΩ
D4
LED
SD_Card
SHIELD
DAT1
DAT0
VSS
CLK
VDD
CMD
DAT3/CD
DAT2
SD_MISO
SD_SCLK
SD_MOSI
SD_CS
Micro_SD_Card
CON1
ATMEGA_RST
SW1
SPST
TLL_RST
AREF
ATMEGA328P
IC1
VCC
AVCC
AREF
(PCINT0/CLKO/ICP1)PB0
(PCINT1/OC1A)PB1
(PCINT2/OC1B/SS)PB2
(PCINT3/OC2A/MOSI)PB3
(PCINT4/MISO)PB4
(PCINT5/SCK)PB5
(PCINT6/XTAL1/TOSC1)PB6
(PCINT7/XTAL2/TOSC2)PB7
(PCINT8/ADC0)PC0
(PCINT9/ADC1)PC1
(PCINT10/ADC2)PC2
(PCINT11/ADC3)PC3
(PCINT12/SDA/ADC4)PC4
(PCINT13/SCL/ADC5)PC5
(PCINT14/RESET)PC6
(PCINT16/RXD)PD0
(PCINT17/TXD)PD1
(PCINT18/INT0)PD2
(PCINT19/OC2B/INT1)PD3
(PCINT20/XCK/T0)PD4
(PCINT21/OC0B/T1)PD5
(PCINT22/OC0A/AIN0)PD6
(PCINT23/AIN1)PD7
GND
ATMEGA328-P
C2
22 pF
8 MHz
Y1
22 pF
C3
R1
10 kΩ
VPP
Peripheral Connectivity
P4
P1
P6
P9
P2
P3
J3
J2
J5
J1
J4
CONN_01X04
CONN_01X16
CONN_01X09
CONN_01X12
CONN_01X06
Screw_Terminal_1x04
Screw_Terminal_1x06
Screw_Terminal_1x08
Sheet: /
File: BoSL.sch
Title: Monash BoSL Board
Size: A3
Date: 2019-08-25
Rev: 0.3
KiCad E.D.A. kicad (5.1.2)-2
Id: 1/1