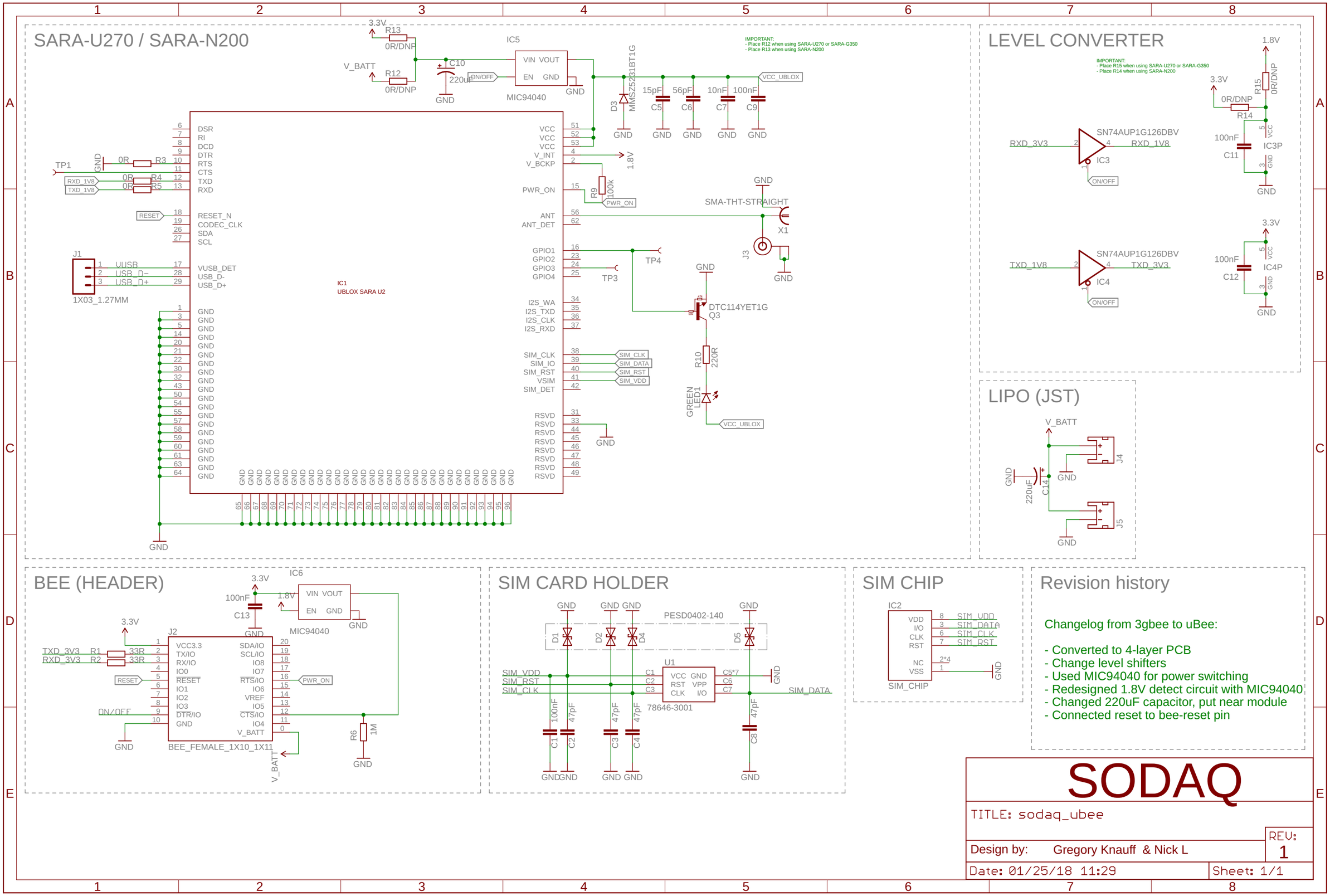
SARA-U270 / SARA-N200
IC1
UBLOX SARA U2
IC5
MIC94040
VIN VOUT
EN GND
ON/OFF
V_BATT
3.3V
R13
0R/DNP
R12
0R/DNP
C10
220uF
GND
D3
MMSZ5231BT1G
15pF
56pF
10nF
100nF
C5
C6
C7
C9
VCC_UBLOX
1.8V
IMPORTANT:
- Place R12 when using SARA-U270 or SARA-G350
- Place R13 when using SARA-N200
TP1
R3
R4
R5
RXD_1V8
TXD_1V8
RESET
J1
1X03_1.27MM
VUSB
USB_D−
USB_D+
R9
100k
PWR_ON
SMA-THT-STRAIGHT
X1
J3
TP4
TP3
DTC114YET1G
Q3
R10
220R
GREEN
LED1
SIM_CLK
SIM_DATA
SIM_RST
SIM_VDD
LEVEL CONVERTER
IMPORTANT:
- Place R15 when using SARA-U270 or SARA-G350
- Place R14 when using SARA-N200
R15
0R/DNP
R14
0R/DNP
SN74AUP1G126DBV
RXD_3V3
RXD_1V8
IC3
IC3P
C11
100nF
TXD_1V8
TXD_3V3
IC4
IC4P
C12
LIPO (JST)
J4
J5
C14
220uF
BEE (HEADER)
IC6
MIC94040
100nF
C13
J2
BEE_FEMALE_1X10_1X11
TXD_3V3
RXD_3V3
R1
R2
33R
ON/OFF
R6
1M
SIM CARD HOLDER
PESD0402-140
D1
D2
D4
D5
U1
78646-3001
VCC GND
RST VPP
CLK I/O
C1
C2
C3
C4
C5*7
C6
C7
C8
100nF
47pF
SIM CHIP
IC2
SIM_CHIP
VDD
I/O
CLK
RST
NC
VSS
Revision history
Changelog from 3gbee to uBee:
- Converted to 4-layer PCB
- Change level shifters
- Used MIC94040 for power switching
- Redesigned 1.8V detect circuit with MIC94040
- Changed 220uF capacitor, put near module
- Connected reset to bee-reset pin
SODAQ
TITLE: sodaq_ubee
Design by: Gregory Knauff & Nick L
REV: 1
Date: 01/25/18 11:29
Sheet: 1/1