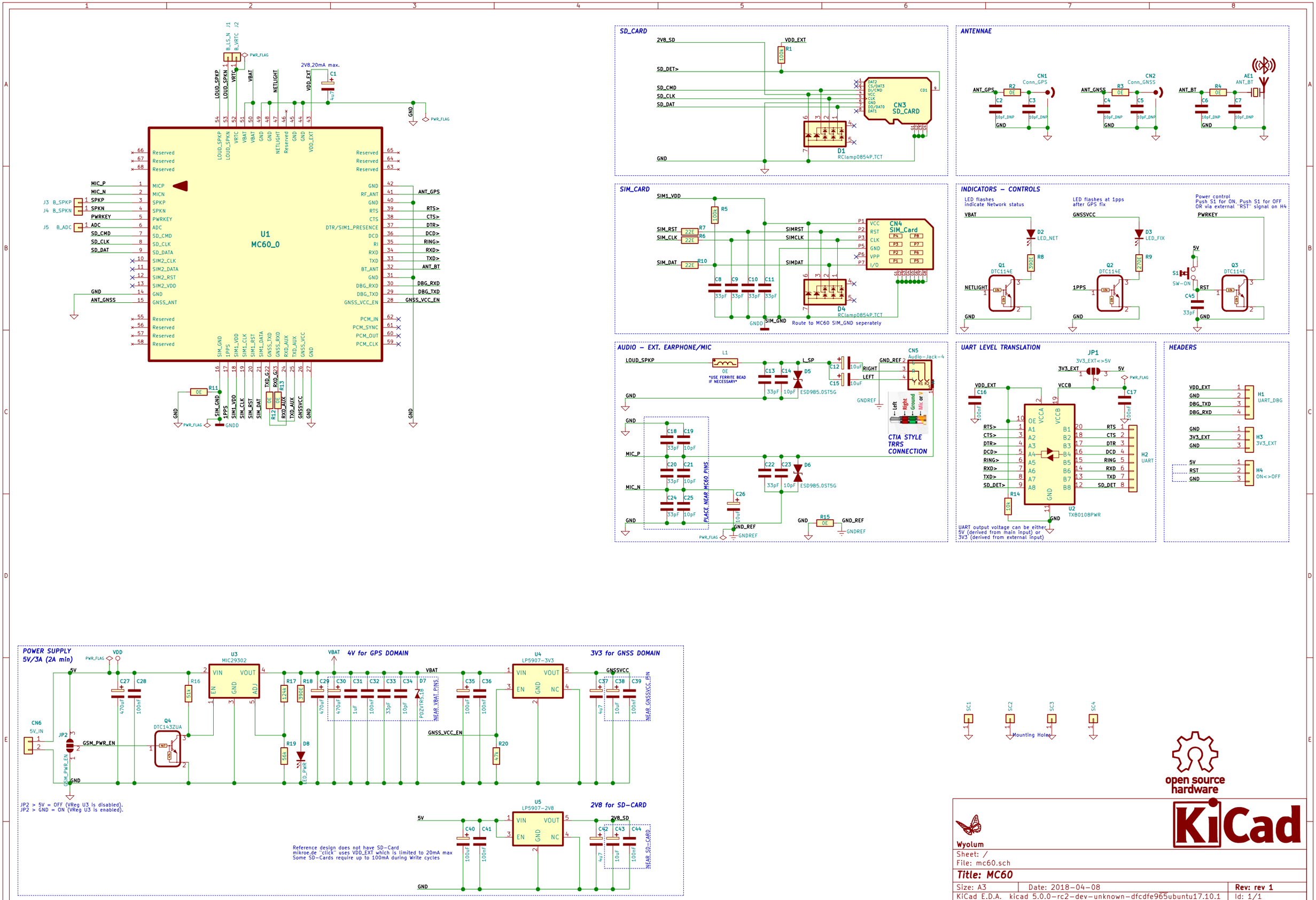
U1
MC60_0
SD_CARD
CN3
SD_CARD
D1
RClamp0854P.TCT
ANTENNAE
CN1
Conn_GPS
CN2
Conn_GNSS
AE1
ANT_BT
SIM_CARD
CN4
SIM_Card
D4
RClamp0854P.TCT
Route to MC60 SIM_GND seperately
INDICATORS – CONTROLS
LED flashes
indicate Network status
LED flashes at 1pps
after GPS fix
Power control
Push S1 for ON, Push S1 for OFF
OR via external "RST" signal on H4
D2
LED_NET
D3
LED_FIX
Q1
DTC114E
Q2
DTC114E
Q3
DTC114E
S1
SW-ON
AUDIO – EXT. EARPHONE/MIC
CN5
Audio-Jack-4
CTIA STYLE
TRRS
CONNECTION
PLACE NEAR MC60 PINS
UART LEVEL TRANSLATION
JP1
3V3_EXT<>5V
U2
TXB0108PWR
H2
UART
UART output voltage can be either
5V (derived from main input) or
3V3 (derived from external input)
HEADERS
H1
UART_DBG
H3
3V3_EXT
H4
ON<>OFF
POWER SUPPLY
5V/3A (2A min)
U3
MIC29302
4V for GPS DOMAIN
U4
LP5907-3V3
3V3 for GNSS DOMAIN
Q4
DTC143ZUA
CN6
5V_IN
JP2 > 5V = OFF (VReg U3 is disabled).
JP2 > GND = ON (VReg U3 is enabled).
U5
LP5907-2V8
2V8 for SD-CARD
Reference design does not have SD-Card
mikroe.de "click" uses VDD_EXT which is limited to 20mA max
Some SD-Cards require up to 100mA during Write cycles
Mounting Holes
open source
hardware
Wyolum
KiCad
Sheet: /
File: mc60.sch
Title: MC60
Size: A3
Date: 2018-04-08
Rev: rev 1
KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-dfcdfe965ubuntu17.10.1
Id: 1/1