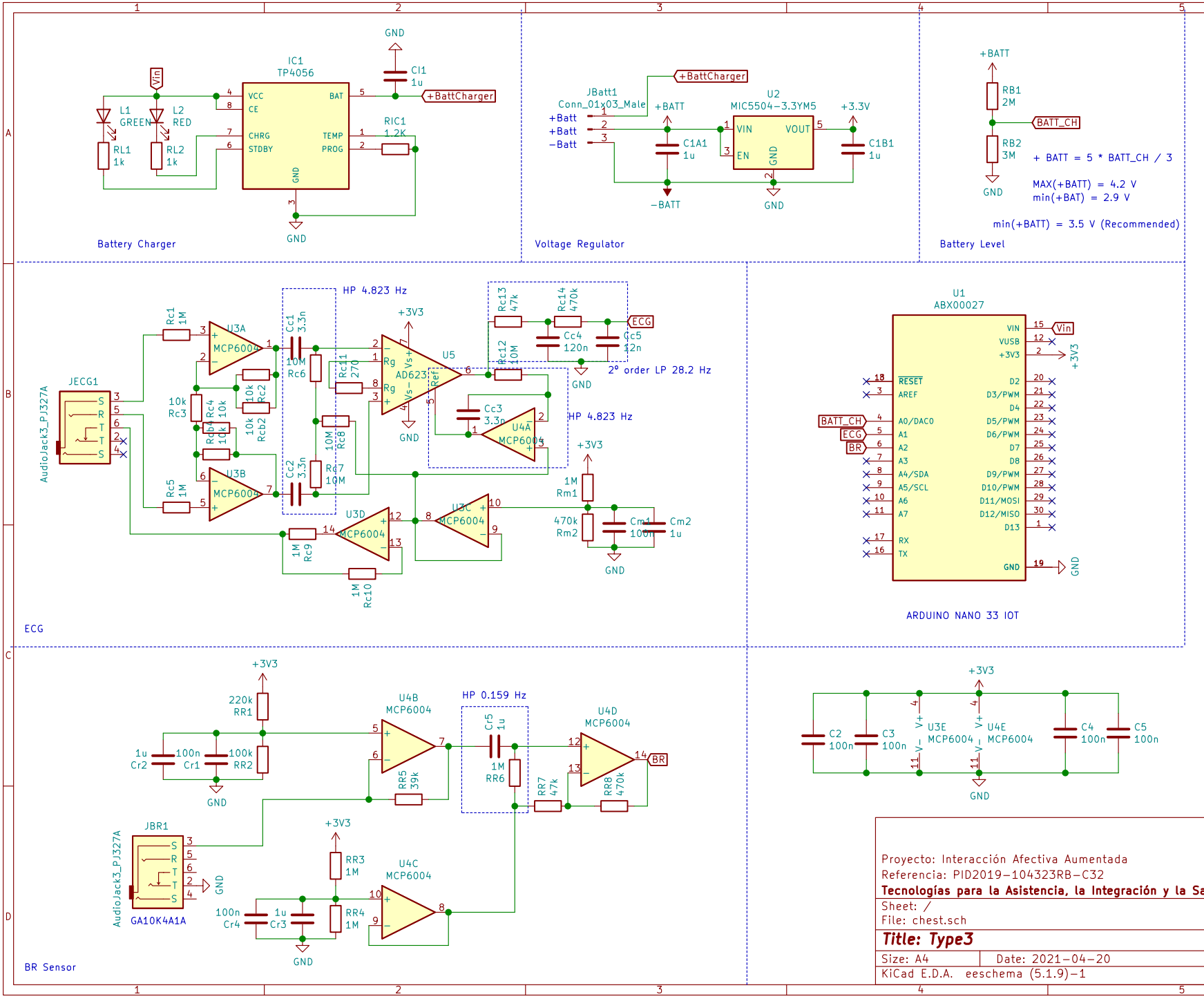
Battery Charger
IC1
TP4056
VCC
CE
CHRG
STDBY
BAT
TEMP
PROG
GND
Vin
L1
GREEN
L2
RED
RL1
1k
RL2
1k
CI1
1u
RIC1
1.2K
+BattCharger
Voltage Regulator
JBatt1
Conn_01x03_Male
+Batt
+Batt
−Batt
U2
MIC5504-3.3YM5
VIN
VOUT
EN
GND
+3.3V
C1A1
1u
C1B1
1u
−BATT
Battery Level
+BATT
RB1
2M
RB2
3M
BATT_CH
+ BATT = 5 * BATT_CH / 3
MAX(+BATT) = 4.2 V
min(+BAT) = 2.9 V
min(+BATT) = 3.5 V (Recommended)
ECG
JECG1
AudioJack3_PJ327A
Rc1
1M
Rc5
1M
U3A
U3B
MCP6004
Rc3
10k
Rc4
10k
Rc2
10k
Rcb4
10k
Rcb2
10k
Cc1
3.3n
Cc2
3.3n
10M
Rc6
10M
Rc8
Rc7
10M
HP 4.823 Hz
Rc11
270
U5
AD623
Rg
Vs+
Vs−
Ref
+3V3
GND
Rc13
47k
Rc14
470k
Rc12
10M
Cc4
120n
Cc5
12n
ECG
2° order LP 28.2 Hz
Cc3
3.3n
U4A
MCP6004
HP 4.823 Hz
U3C
MCP6004
U3D
MCP6004
1M
Rc9
1M
Rc10
1M
Rm1
470k
Rm2
Cm1
100n
Cm2
1u
U1
ABX00027
VIN
VUSB
+3V3
RESET
AREF
A0/DAC0
A1
A2
A3
A4/SDA
A5/SCL
A6
A7
RX
TX
D2
D3/PWM
D4
D5/PWM
D6/PWM
D7
D8
D9/PWM
D10/PWM
D11/MOSI
D12/MISO
D13
GND
BATT_CH
ECG
BR
ARDUINO NANO 33 IOT
BR Sensor
220k
RR1
1u
Cr2
100n
Cr1
100k
RR2
U4B
MCP6004
RR5
39k
HP 0.159 Hz
Cr5
1u
1M
RR6
RR7
47k
U4D
MCP6004
RR8
470k
BR
JBR1
AudioJack3_PJ327A
GA10K4A1A
RR3
1M
RR4
1M
U4C
MCP6004
100n
Cr4
1u
Cr3
C2
100n
C3
100n
U3E
MCP6004
U4E
MCP6004
C4
100n
C5
100n
Proyecto: Interacción Afectiva Aumentada
Referencia: PID2019-104323RB-C32
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