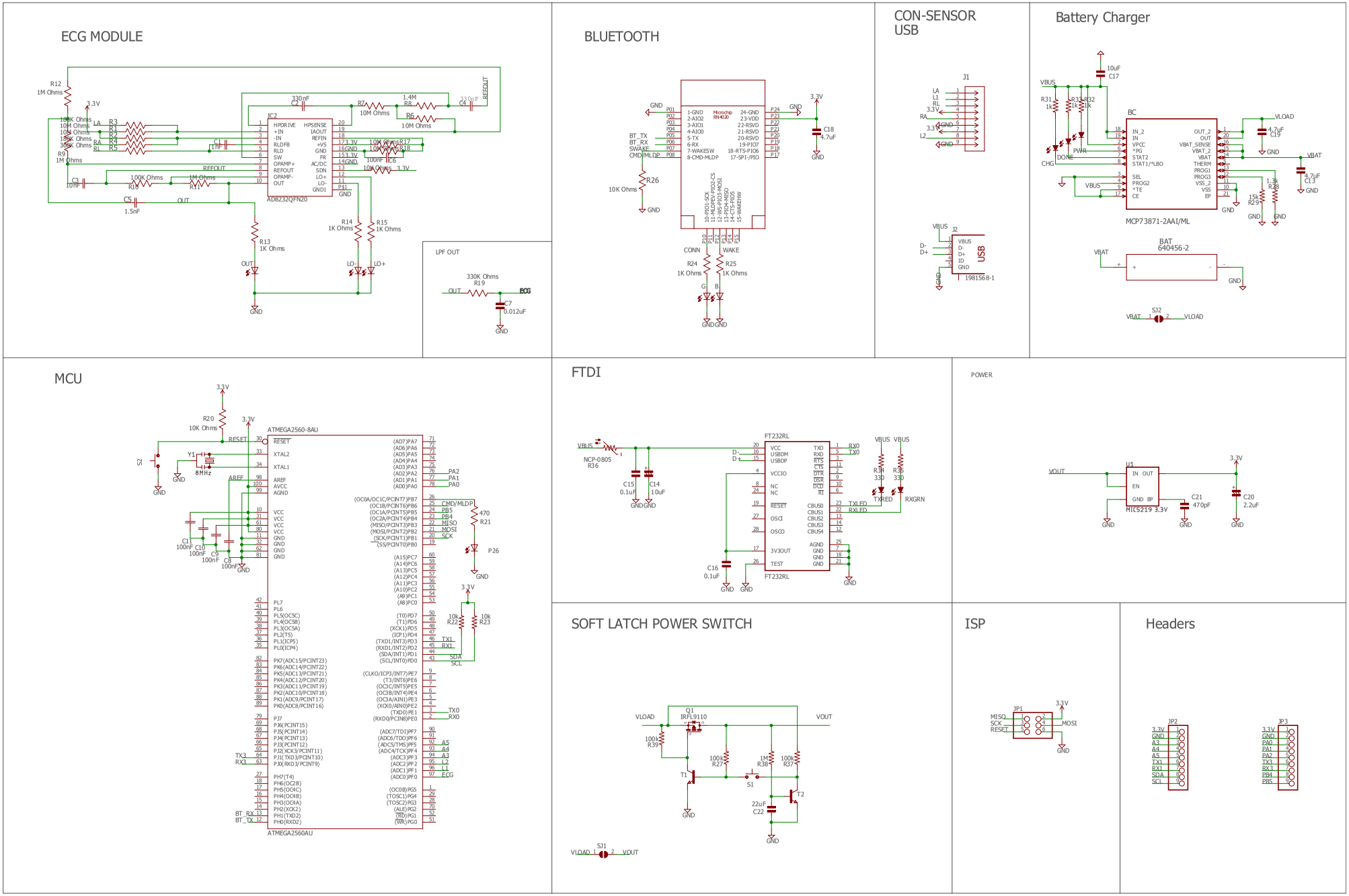
ECG MODULE
IC2
AD8232QFN20
HPDRIVE
HPSENSE
+IN
-IN
RLDFB
RLD
SW
OPAMP+
REFOUT
OPAMP-
OUT
IAOUT
REFIN
+VS
GND
FR
AC/DC
SDN
LO+
LO-
GND1
R12 1M Ohms
R3 10M Ohms
R2 10M Ohms
R4 10M Ohms
R5 10M Ohms
R1 10M Ohms
R9 1M Ohms
C1 1nF
C2 330nF
C3 10nF
C4 330nF
C5 1.5nF
R7 10M Ohms
R8 1.4M
R6 10M Ohms
R17 10M Ohms
R18 10M Ohms
R16 100K Ohms
R11 1M Ohms
R13 1K Ohms
R14 1K Ohms
R15 1K Ohms
REFOUT
OUT
LO-
LO+
3.3V
GND
LPF OUT
R19 330K Ohms
C7 0.012uF
ECG
BLUETOOTH
Microchip RN4020
1-GND
2-AIO2
3-AIO1
4-AIO0
5-TX
6-RX
7-WAKESW
8-CMD/MLDP
9-GND
10-PIO1-SCK
11-MLDP/PIO2-CS
12-WS-PIO3-MOSI
13-PCM-PIO4-MISO
14-CTS-PIO5
15-WAKEHW
16-VDD
17-SPI-/PIO
18-RTS-PIO6
19-PIO7
20-RSVD
21-RSVD
22-RSVD
23-VDD
24-GND
BT_TX
BT_RX
SWAKE
CMD/MLDP
CONN
WAKE
R26 10K Ohms
R24 1K Ohms
R25 1K Ohms
C18 4.7uF
3.3V
GND
CON-SENSOR USB
J1
LA
L1
RL
3.3V
RA
L2
J2
VBUS
D-
D+
ID
GND
USB
1981568-1
Battery Charger
IC
MCP73871-2AAI/ML
IN_2
IN
VPCC
*PG
STAT2
STAT1/*LBO
SEL
PROG2
*TE
CE
OUT_2
OUT
VBAT_SENSE
VBAT_2
VBAT
THERM
PROG1
PROG3
VSS_2
VSS
EP
10uF C17
4.7uF C19
4.7uF C13
1.3k R28
15k R29
VLOAD
VBAT
PWR
DONE
CHG
BAT 640456-2
S12
MCU
ATMEGA2560-8AU
ATMEGA2560AU
R20 10K Ohms
S2
Y1 8MHz
RESET
XTAL2
XTAL1
AREF
AVCC
AGND
VCC
GND
C11 100nF
C10 100nF
C9 100nF
C8 100nF
R21 470
P26
10k R22
10k R23
TX1
RX1
SDA
SCL
TX0
RX0
A5
A4
A3
L2
L1
ECG
CMD/MLDP
PA2
PA1
PA0
FTDI
FT232RL
VBUS
NCP-0805 R36
C15 0.1uF
C14 10uF
C16 0.1uF
VCC
USBDM
USBDP
VCCIO
NC
RESET
OSCI
OSCO
3V3OUT
TEST
TXD
RXD
RTS
CTS
DTR
DSR
DCD
RI
CBUS0
CBUS1
CBUS2
CBUS3
CBUS4
AGND
R34 330
R35 330
TXRED
RXGRN
TXLED
RXLED
POWER
U1
MIC5219 3.3V
VOUT
IN OUT
EN
GND BP
C21 470pF
C20 2.2uF
SOFT LATCH POWER SWITCH
Q1 IRFL9110
VLOAD
VOUT
100k R39
100k R27
1M R38
100k R37
T1
T2
S1
22uF C22
S11
ISP
JP1
MISO
SCK
RESET
MOSI
Headers
JP2
3.3V
GND
A3
A4
A5
TX1
RX1
SDA
SCL
JP3
PA0
PA1
PA2
PB4
PB5