MCU

U2 — SAMD21G

POWER MANAGEMENT

U6 — MCP73871

VBAT — MCP1700T-3302E/MB — VOUT

Switch Sel low when USB plugged in reducing max current draw.

SEL – Input type selection (Low for USB port, High for AC-DC adapter)
PROG2 – USB port input current limit selection when SEL = Low (Low = 100 mA, High = 500 mA)
PG – Power-Good Status Output (Open-Drain)
STAT2 – Charge Status Output 2 (Open-Drain)
STAT1/LBO – Charge Status Output 1 (Open-Drain). Low battery output indicator when VBAT > VIN
TE – Timer Enable; Enables Safety Timer when active Low
PROG3 – Termination set point for both AC-DC adapter and USB port. Iterm=1000V/Rprog3
PROG1 – Fast charge current regulation setting with SEL = High. Ireg=1000V/Rprog1
CE – Device Charge Enable; Enabled when CE = High

MOUNTING

M1 M2 M3 M4

LOGO

USB

D1 — USBLC6-2
P1 — USB_OTG

RFM95W

J1 — SMA-EDGE
U5 — RF95W

AUDIO

U7 — MAX5387
U9 — PAM8403
P7 — SPK_L
P8 — SPK_R

IMU

U1 — MPU9250

GPS

U3 — PA6C

FLASH

U4 — S25FL116K

SWD

P5 — CONN_02X05

NOTES

Alex Muir
Sheet: /
File: MainCollar.sch
Title: OpenFence: Main Collar
Size: A3   Date: 28-04-2016   Rev: 0.1
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