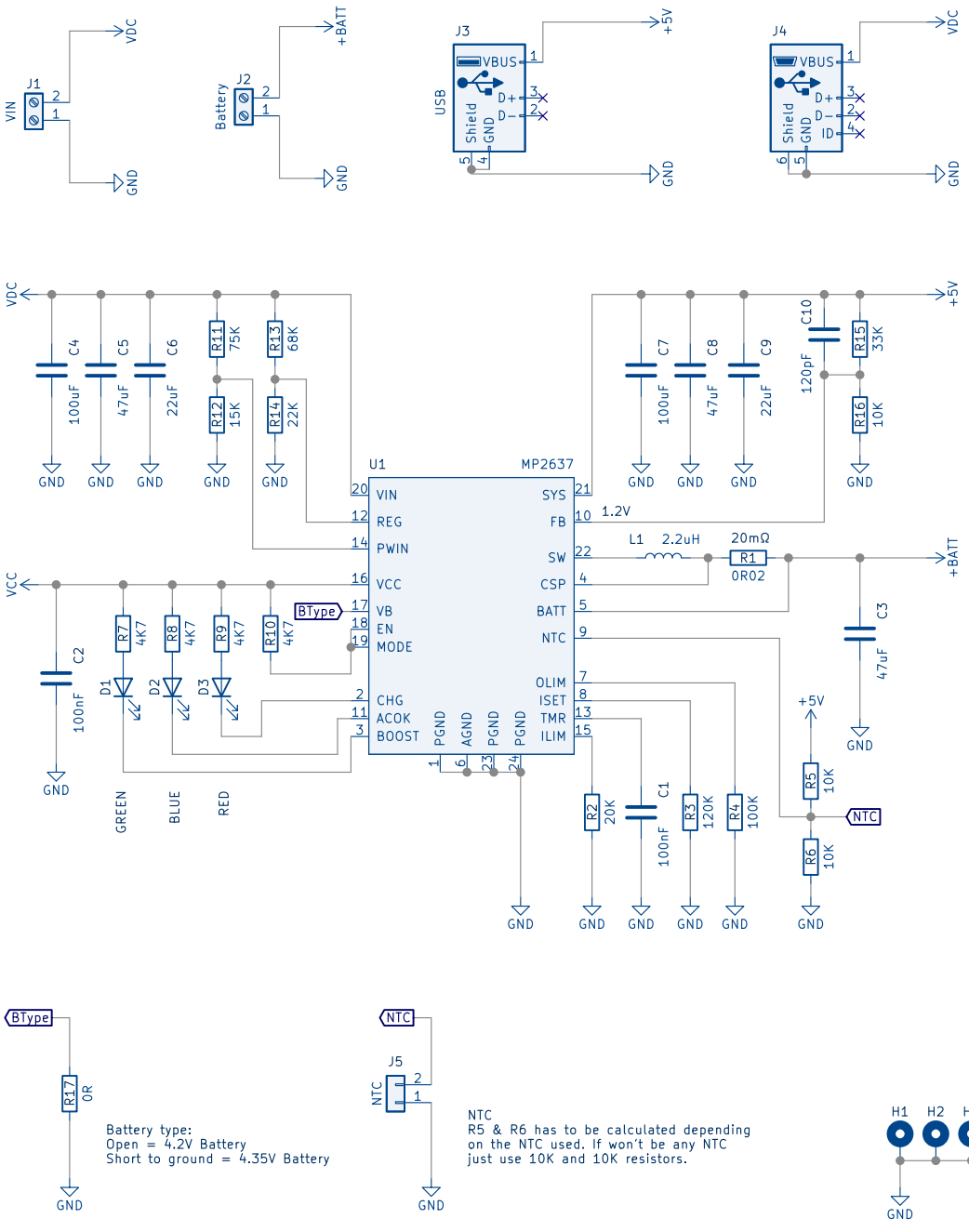

NOTES

REG = Input Voltage Feedback for input voltage regulation loop. Voltage at REG pin drops to the inner threshold, the charge current is reduced to maintain the input voltage at the regulation value.

REG = 1.2V	Feedback
REG = 4.9V	Calculated

PWIN = Input pin to detect the presence of valid input power.

PWIN = 0.8V (MIN) – 1.15V (MAX)	Feedback
PWIN = 4.8V	Calculated

ILIM = Input Current Set. (4.2A Max)

ILIM (A) = 45KΩ / RILIM	Original
ILIM (A) = 45KΩ / R2	Applied
2.25 (A) = 45KΩ / R2	Result

OLIM = Programmable Output–Current Limit for boost mode. (2.4A Max)

OLIM (A) = 2400 / (ROLIM * RS1)	Original
OLIM (A) = 2400 / (R4 * R1)	Applied
1.2 (A) = 2400 / (R4 * R1)	Result

*ROLIM CANNOT be lower than 47.5kΩ.

ISET = Programmable Charge Current Pin. (2.5A Max)

ICHG (A) = 2400 / (RISET * RS1)	Original
ICHG (A) = 2400 / (R3 * R1)	Applied
1.0 (A) = 2400 / (R3 * R1)	Result

CHG = Charge Completion Indicator. Logic LOW indicates charge mode.
ACOK = Valid Input Supply Indicator. Logic LOW indicates the presence of a valid power supply.
BOOST = Boost Mode indicator. Logic LOW indicates boost mode in operation.

VCC ← VCC it's a 5mA max current so C2 must be at max 100nF.

MP2637 based USB Uninterruptible Power Supply
.rpv
Sheet: /
File: USB_MP2637.sch

Title: USB UPS

Size: A4	Date:	**Rev: 1.0**
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