

Getting started with the AVR battery charger reference design.

The AVR battery charger reference design is designed for use with several types of batteries and various number of battery cells.

The AVR battery charger reference design is supplied with resistor values for scaling down the charge voltage to a valid voltage range for the internal AVR A/D converter. Before using the AVR battery charger reference design control that the scaling resistors are correct for the battery type in use.

The AVR microcontroller must be programmed with the proper charging algorithm before applying power to the reference design board. When selecting battery type make sure the correct values for charge voltage and charge current are calculated in the corresponding include file.

Selecting resistor values for AVR battery charger reference design:

Battery Type	Number of cells	Max Voltage	R8, R9	R16, R17
NiMh	1-2	3 V	0	Open*
NiMh	3-4	6 V	6K8	10K
NiMh	5-6	9 V	12K	10K
Li-ion	1	4.2 V	2K2	10K
Li-ion	2	8.2 V	15K	10K
Li-ion	3	12.6V	33K	10K⁺

* Default resistor values for tiny15 battery charger

⁺ Default resistor values for 2333 battery charger