CCS Battery Charger

The CCS9620EB Evaluation Board is a battery charger module suitable for all common battery chemistries.

With a few settings only it is possible to charge batteries of different chemistries, different capacities and different battery voltages with one and the same charging circuit.

Absolute Maximum Ratings:

Supply Voltage	25VDC
V_{bat} to GND	-3V< V_{bat} <30V
Vc,Prog, OVP	8V
I_{charge} (average)	1,5A
I_{charge} (pulse-peak)	2A
Ambient Temp	-10..+60°C

Technical Data:

Dimensions	65x55x7mm	25.6x21.6x2.75in
Weight	17g	

	min.	typ.	max.	Value
Standby current without load		8		mA
LED current	10@2,2V	12@1,6V	18@5V	mA
5V output current			50	mA
Ambient Temp.	-10		+60	°C
Efficiency				
Charging current		800	1200	mA
Nominal charge duration	1*		4*	h
Battery capacity			5	Ah

* full charge of an empty battery

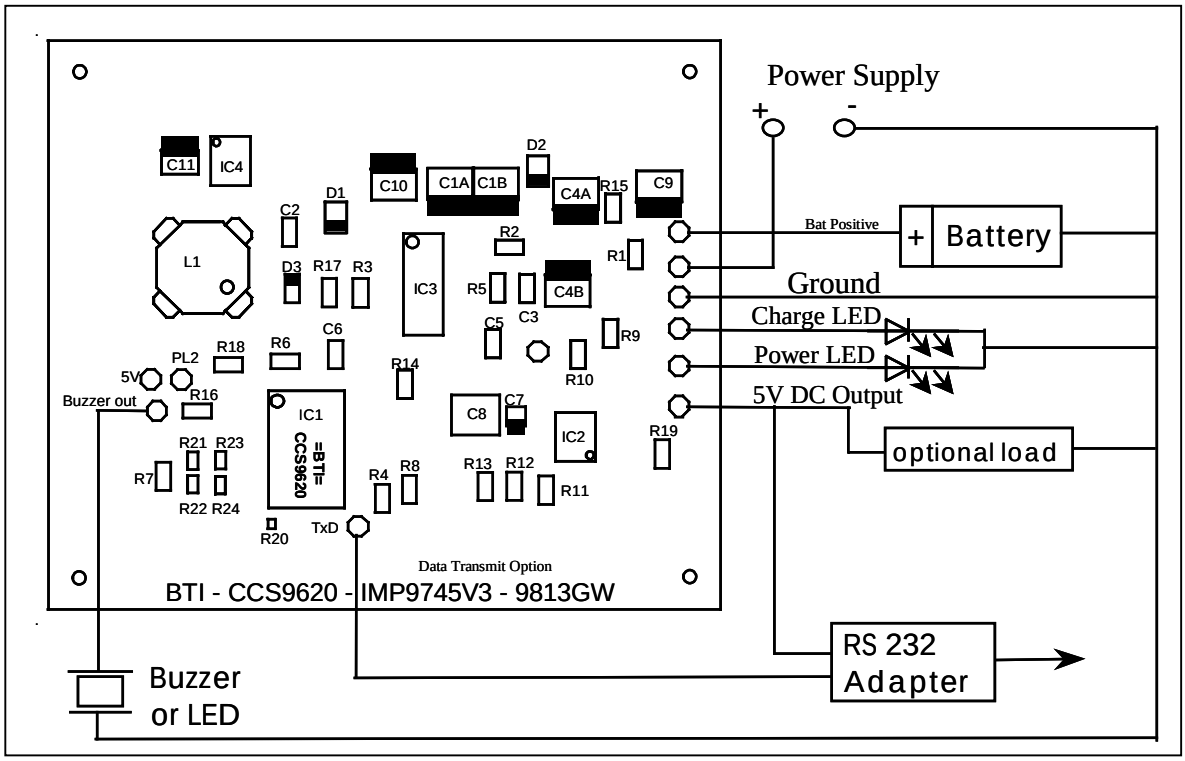
Configuration:

		Component	
Battery type			
Battery voltage		R9	
Battery capacity			
Max. voltage		R17	
Charging current		R1	3
MT settings (charge mode)			
Charge controller		IC1	

Connecting the Board:

All measures are referenced to GND
Check correct resistor divider settings for selected battery.
Power LED terminal is connected to the anode of a (green) LED. Cathode of LED to GND.
Charge LED terminal is connected to the anode of a (red) LED. Cathode of LED to GND.
Connect Supply Voltage to DC (+) and GND. (Max. 25V)
Connect Battery Anode to Bat-Positive and the Cathode of the battery to GND.

Optionally connect an additional 5V circuit (load max. 50mA) to5V-Output and GND.
Optionally connect a 5V Piezo-Buzzer to Buzzer-out (via) and GND.
Optionally connect a Data-Adapter to TxD (via) and GND.



Handling Instructions:

1) Power supply on:	1 beep and Power LED on (standby mode).
2) Battery connected:	2 short beep and Charge LED on.
3) Charging:	click with 1 sec. period and Charge LED on.
4) Battery full:	1 beep and Charge LED off.
5) Battery defective: (false current or voltage)	5 short beep and Charge LED flashing.
6) Interrupt:	3 times 2 short beep.
7) Disconnect of the battery:	last signal repeated (full or defective).