MCP1630 Low Cost Li-Ion Battery Charger Ref. Des.

Part Number: MCP1630RD-LIC2





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The MCP1630 Low Cost Li-Ion Battery Charger is used to evaluate Microchip's MCP1630 used in a SEPIC power converter application. The MCP1630 Low Cost Li-lon Charger is capable of charging a single-cell, Li-Ion battery pack utilizing an input voltage of 6V to 18V (battery packs are not included). The MCP1630 Low Cost Li-lon Battery Charger provides a constant current - constant voltage charge with preconditioning, cell temperature monitoring, and battery pack fault monitoring. The battery charger provides a status and fault indication. The MCP1630 Low Cost Li-lon Battery Charger automatically detects the insertion or removal of a battery pack.



Features

Package Contents

- Programmed parameters modified in firmware
- Factory Settings:
 - Preconditioning Charge Current = 200 mA
 - Preconditioning Threshold = 3V
 - Constant Current Fast Charge = 2A
 - Constant Voltage Charge = 4.2V
- Charge Termination Threshold = 100 mA
- Overvoltage protection (battery removed)
- Over charge protection to prevent the battery from becoming dangerously overcharged
- Over current protection in the event of a shorted battery
- Overtemperature protection to prevent the battery from reaching too high a temperature during charge
- Fast charge termination if the battery temperature is outside a preset window
- Controlled soft-start
- The MCP1630 Low Cost Li-Ion Battery Charger terminates charge by detecting a predefined charge current threshold during constant voltage charge, or a specified elapsed time
- The MCP1630 Low Cost Li-Ion Battery Charger has the flexibility to optimize the charging algorithm for new battery technology and add proprietary features by coding the microcontroller

Documents	Last Updated	Size
MCP1630/MCP1630V Data Sheet	2/5/2013 2:41:28 PM	345KB
MCP1630 Low-Cost Li-lon Battery Charger Ref Design Gerbers	1/18/2006 4:02:36 PM	40KB
MCP1630 Low-Cost Li-lon Battery Charger Ref Design Firmware	1/16/2006 9:33:47 AM	36KB
MCP1630 Low-Cost Li-lon Battery Charger User's Guide	1/4/2006 9:47:10 AM	501KB









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