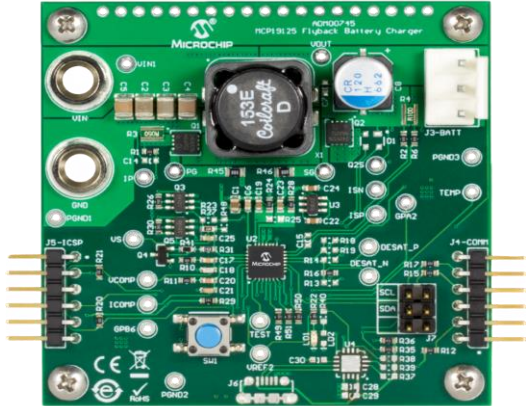




MCP19125 Flyback Battery Charger Eval Board

Part Number: ADM00745



Product Overview:

The MCP19125 is a highly-integrated, mixed-signal low-side synchronous Pulse Width Modulation (PWM) controller featuring individual analog PWM control loops for both current regulation and voltage regulation. The MCP19125 also features an integrated microcontroller core, making it an ideal device for battery charging applications, LED lighting systems, and any other low-side switch PWM applications. The MCP19125 Flyback Battery Charger Evaluation Board demonstrates how the MCP19125 device operates in a battery charging application utilizing a synchronous flyback topology. It is configured to regulate the amount of charge current, and the type of charging, while simultaneously reading the state of the battery to change between operation modes for optimized charge profiles. Nearly all operational and control system parameters are programmable by utilizing the integrated PIC® microcontroller. MPLAB X IDE can be used in conjunction with a downloadable Graphical User Interface (GUI) to easily configure the MCP19125. Alternatively, the user can program the MCP19125 using their own firmware, tailoring it to their application. The evaluation board contains headers for ICSP™ (In-Circuit Serial Programming™) as well as I2C communication, numerous test points, and a push button for system development.

Key Features:

Vin Range: 4.5V to 42V

- Maximum Charge Current: 1A
- Capable of charging:
 - Lithium Ion (Li-Ion): 2-4 Cells
 - Nickel Metal Hydride (NiMH): 2-7 Cells
 - Valve Regulated Lead Acid (VRLA): 3-6 Cells
- Programming and I2C headers
- Factory programmed for use with downloadable Graphical User Interface (GUI)

Package Contents:

1x MCP19125 Flyback Battery Charger Eval Bd (ADM00745)