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MCP1640EV-SBC

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MCP1640 Sync Boost Converter Evaluation Board [Buy it Now](#)

Part Number: MCP1640EV-SBC

Devices Supported: MCP1640

Summary Description:

This evaluation board uses the MCP1640 in a high-efficiency (up to 96%), fixed frequency (500MHz), step-up DC-DC converter. It demonstrates:

Easy-to-use and minimum number of external components power supply solution for applications powered by one-cell, two-cell, or three-cell alkaline, NiCd/NiMH; one-cell Li-Ion or Li-Polymer batteries

Selection of the best operating mode for efficiency (PWM/PFM)

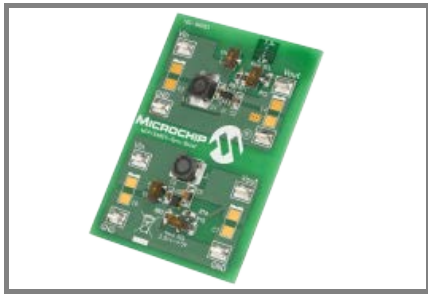
A wide input voltage range (0.35 to 5.5V) and low start-up voltage (0.65V)

PCB layouts recommendation for SOT23-6 and 2x3mm-8 DFN packages

Three common output voltages to evaluate: 2.0V, 3.3V and 5.0V enable selection (when disabled, the MCP1640 disconnects the path from input to output for "true-disconnect").

This Kit Contains:

One MCP1640 Synchronous Boost Converter Evaluation Board



Features:

- Input voltage range, VIN: 0.35V to 5.5V, with VIN ≤ VOUT; 1mA load after start-up
- Fixed output voltage: 2.0V or 3.3V and 3.3V or 5.0V, selected using a mini dip switch on board
- Output current: typical 100mA @ 3.3V Output, 1.2V Input or 350mA @ 5.0V Output, 3.3V Input
- Start-up voltage: 0.65V at VIN = 1.2V, VOUT = 3.3V and IOU = 1mA, resistive load
- Automatic PFM/PWM Operation
- PWM Switching Frequency = 500 kHz
- Enable state selectable using mini-dip switch on board
- Peak Input Current Limit up to 800mA
- Over-temperature (if the die temperature exceeds 150°C, 10°C hysteresis)
- For standby applications operates and consumes only 19µA while operating at no load and provides a true disconnect from input to output while shutdown

Downloads

Title	Date Published	Size	D/L
MCP1640 Sync Boost Converter Eval Bd Gerbers	3/9/2010 4:09:47 PM	117 KB	
MCP1640 Synchronous Boost Converter Evaluation Board User's Guide	2/25/2010 1:57:00 PM	234 KB	
MCP1640/B/C/D Data Sheet	3/22/2011 11:06:06 AM	476 KB	
Quick Guide to Microchip Development Tools	3/4/2011 10:09:50 AM	582 KB	

