5V/2.5A Output, 1MHz Synchronous Step-Up Converter with DCP emulator

DESCRIPTION

ETA1089 is an ETA Solutions' high efficiency, high frequency synchronous Step-Up converter, capable of delivering output current up to 2.5A at a 5V output from input as low as 3.3V. With a low Rdson Power MOS and a built-in synchronous rectifier, its efficiency can be as high as 93% at a 5V/2.1A load. This greatly minimizes power dissipation and reduces heat on the IC, making it ideal for applications that require small board space and have stringent temperature constraints, such as power banks and mobile devices. ETA1089 also integrates an USB emulator that provides correct electrical signature on the D+/D- for charging compliant devices. ETA1089 also incorporates ETA Solutions' True-Shutoff® technology that protects against overload and short-circuit conditions. All of these features are integrated in a tiny DFN3x3-12 package. With 1MHz switching frequency, small external input and output capacitors and inductor can be used.

FEATURES

- Up to 97% Energy Converting Efficiency
- Up to 2.5A output current at 5V output, 3.3V input
- Dedicated Charging Port (DCP) emulator
- True Shut off during shutdown and output short-circuit protection
- Thermal Shutdown
- DFN3x3-12

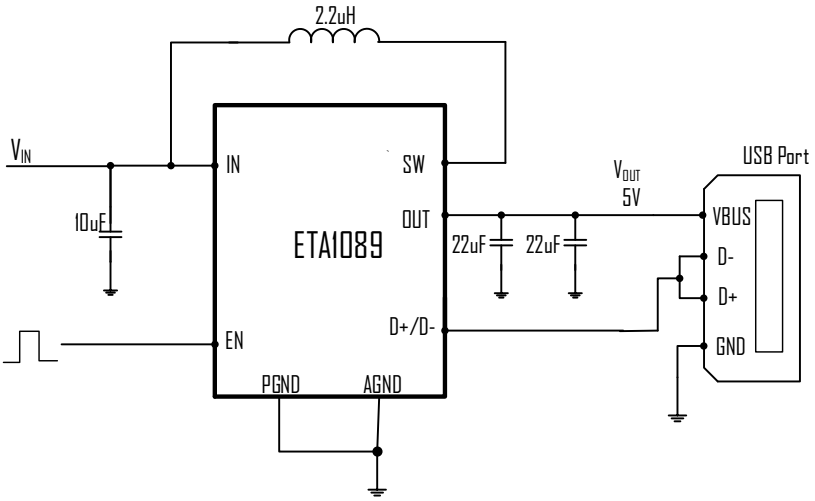
APPLICATIONS

- Power Bank
- Mobile 3G/4G WLAN
- Mobile Bluetooth music player and speaker

ORDERING INFORMATION

PART ID	PACKAGE	TOP MARK
ETA1089D3M	DFN3X3-12	ETA1089 YWW2L

TYPICAL APPLICATION



2.5A Output Synchronous Boost with USB DCP Emulator