

## 2.5A, 3MHz Switching Charger with Dynamic Power Path in 8-pin ESOP

### DESCRIPTION

ETA6002 is a switching Li-Ion battery charger with dynamic power-path control and input current limiting.

When a battery is connected, depending on the battery voltage, the DC-DC switching regulator either pre-conditions, fast-charges the battery or just regulates a system voltage ( $V_{SYS}$ ) to a preset voltage. It does not require an external sense resistor

### FEATURES

- ◆ Switching Charger with Power Path Management
- ◆ Up to 95% DC-DC Efficiency
- ◆ 50mΩ Power Path MOSFET
- ◆ Up to 2.5A Max charging current
- ◆ Instant on with a dead Battery or no Battery
- ◆ No battery detection
- ◆ No External Sense resistor
- ◆ Programmable Charging Current

for current sensing. The fast-charging current is determined by programming ISET pin. When the battery voltage reaches the termination voltage i.e. 4.2V, the charging path disconnects SYS to BATT. The ETA6002 also includes a dynamic power path when the SYS load current exceeds current limit of the DCDC regulator internally set, the SYS voltage falls below  $V_{BATT}$ , ETA6002 turns on the power-path to supplement the system load through the battery.

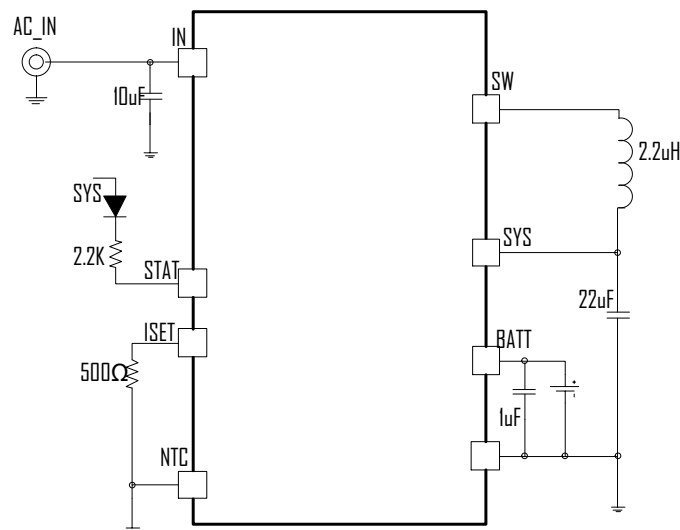
### APPLICATIONS

- ◆ Tablet, MID
- ◆ Smart Phone
- ◆ Power Bank

### ORDERING INFORMATION

PART	PACKAGE PIN	TOP MARK
ETA6002E8A	ESOP-8	ETA6002 YWWPL

### TYPICAL APPLICATION



2A Switching Charger with Minimum Component Count