

18V, 2.5A, I²C Controlled Output Synchronous Step-Down Converter

DESCRIPTION

The ETA1459 is a wide input range, high-efficiency, DC-to-DC step-down switching regulator, capable of delivering up to 2.5A of output current. Its output can be dynamically controlled by I²C interface. Current mode PWM control allows the use of small external components, such as ceramic input and output caps, as well as small inductors, while still providing low output ripples. On top of the integrated internal synchronous rectifier that eliminates external Schottky diode, ETA1459 also employs a proprietary control scheme that switches the device into a power save mode during light load, thereby extending the range of high efficiency operation. Therefore, ETA1459 is a much superior solution in comparison to other competitions in terms of efficiency and cost. Cycle-by-cycle current limit provides output short-circuit protection and an input OVP function guards ETA1459 against possible input voltage surge. Overall, ETA1459 is a highly efficient and robust solution for DC-DC step-down applications that requires wide input ranges. ETA1459 is housed in an ESDP8 Package.

FEATURES

- I²C Dynamic Output Control
- Wide Input Operating Range from 4.2V to 18V
- High Efficiency:
 - Up to 90% at Light Load
 - Up to 95% at Heavy Load
- Capable of Delivering 2.5A
- Input OVP at 20V
- No External Schottky Diode Needed
- Thermal shutdown and UVLO

APPLICATIONS

- Smart TVs, Smart Set Top Box
- Tablet computer, MID

ORDERING INFORMATION

PART	PACKAGE PIN	TOP MARK
ETA1459	ESDP8	ETA1459 YWPPL

TYPICAL APPLICATION

