



# ACE714532F

## 4.5V to 32V Input Current Mode Boost DC-DC Controller

### Description

The ACE714532F is a current mode fixed-frequency PWM controller for both flyback and step-up DC-DC converters. The device operates from an input supply between 4.5V and 32V and provides to drive an external N-channel MOSFET.

The ACE714532F contains all the necessary building blocks including a bandgap reference, a 330KHz oscillator, current-mode control circuitry, chip shutdown block, soft start block and gate driver, etc. Current mode control provides improved transient response and simplified loop compensation. On-chip soft start reduces the inrush current on power up. The other features include chip shutdown, over voltage

### Features

- Peak Current Mode DC-DC Boost/ Flyback Controller
- 4.5V to 32V Input Range
- 330kHz Switching Frequency
- $\pm 2\%$  Output Voltage Accuracy
- Cycle-by-Cycle Peak Inductor Current Limit
- On-Chip Slope Compensation
- Internal Soft-start
- Built-in 5V regulator
- Low Shutdown Current
- Operating Temperature Range:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Available in 10-pin SSOP package.
- Lead-free, ROHS-compliant, and Halogen-free

### Application

- TFT-LCD Bias Supplies
- XDSL Power Supplies
- Medical Equipments
- Digital Video Cameras
- Portable Devices



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### Absolute Maximum Ratings

Parameter	Value
VIN Terminal Voltage	-0.3V to 36V
Other Terminals Voltage	-0.3V to 6.5V
Operating Temperature	-40°C to 85°C
Thermal Resistance (Junction to Case)	200°C/W
Maximum Junction Temperature	150°C
Storage Temperature	-65°C to 150°C
Lead Temperature (Soldering)	260°C

Stresses beyond those listed under 'Absolute Maximum Ratings' may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions above those indicated in the operational sections of the specifications is not implied. Exposure to Absolute Maximum Rating Conditions for extended periods may affect device reliability.

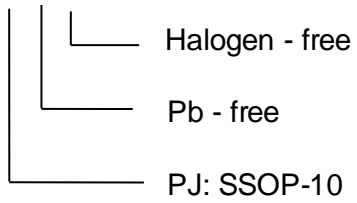


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## Ordering Information

ACE714532F XX + H





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### Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Technology Co., LTD. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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