

Conv DC-DC 4.75V to 45V Synchronous Step Down Single-Out 0.6V to 16V 1.8A Automotive 8-Pin DSO EP T/R

Images are for reference only

Manufacturer: [Infineon Technologies Corporation](#)**Package/Case:** HSOP8**Product Type:** Power Management ICs**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active[Inquiry](#)**General Description**

There are three versions available, two fixed voltage with 5.0 V (TLE8366EV50) or 3.3 V (TLE8366EV33) and a variable voltage variant named TLE8366EV with a reference feedback voltage of only 600 mV. The wide input voltage range from 4.75 to 45 V makes the TLE8366 suitable for a wide variety of applications. The device is designed to be used under harsh automotive environment. The switching frequency of nominal 370 kHz allows the use of small and cost-effective inductors and capacitors, resulting in a low, predictable output ripple and in minimized consumption of board space. If desired the device could be synchronized to an external frequency source between 200 and 530 kHz. The TLE8366 includes safety features such as a cycle-by-cycle current limitation, over-temperature shutdown and input under voltage lockout. The enable function, in shutdown mode with less than 2 μ A current consumption, enables easy power management in battery-powered systems. The voltage regulation loop provides an excellent line and load regulation. The stability of the loop could be adjusted by using an external compensation network. This compensation network combined with voltage mode regulation and a feed-forward control path guarantees a highly effective line transient rejection. During start-up the integrated soft-start limits the inrush current peak and prevents from a voltage overshoot.

Key Features

1.8A step down voltage regulator
Adjustable output voltage: 0.6 V up to 16V
Integrated power transistor
PWM regulation with feedforward
Input voltage range from 4.75V to 45V
370 kHz switching frequency
Synchronization input
Very low shutdown current consumption (<2uA)
Soft-start function
Input undervoltage lockout
Suited for automotive applications:>
Green Product (RoHS compliant)
AEC Qualified
Easy to implement
Wide output voltage
No overshoot at start-up

Application

General purpose
Pre-regulator

Recommended For You

TLF94112ELXUMA1

Infineon Technologies Corporation
SSOP24

TLF8104E

Infineon Technologies Corporation
SOP20

TLF7232CS

Infineon Technologies Corporation
SSOP

TLF50211ELXUMA2

Infineon Technologies Corporation
SSOP-14

TLF35584QVVS1XUMA2

Infineon Technologies Corporation
VQFN48

TLF35584QKVS1XUMA2

Infineon Technologies Corporation
LQFP-64

TLF4252DATMA1

Infineon Technologies Corporation
TO252

TLF810B1EJV50XUMA1

Infineon Technologies Corporation
SOP8

TLF115D0EJXUMA1

Infineon Technologies Corporation
PG-DSO-8

TLS205B0EJV50XUMA1

Infineon Technologies Corporation
SOIC8

TLE4284DV50ATMA1

Infineon Technologies Corporation
TO-252

TLE4476DATMA1

Infineon Technologies Corporation
TO-252

TLE4264GHISA1

Infineon Technologies Corporation
SOT223

TLE4253EXUMA2

Infineon Technologies Corporation
SOP8

TLS715B0EJV50XUMA1

Infineon Technologies Corporation
SOP-8