

## LMR14006YDDCR

# Conv DC-DC 4V to 40V Step Down Single-Out 0.8V to 30V 0.6A Automotive 6-Pin TSOT-23 T/R

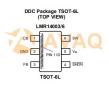
Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: SOT23-6

**Product Type:** Power Management ICs

RoHS: RoHS Compliant/Lead free RoHS

**Lifecycle:** Active



Images are for reference only

Inquiry

#### **General Description**

The LMR14006 is a PWM DC/DC buck (step-down) regulator. With a wide input range of 4 V-40 V, it is suitable for a wide range of application from industrial to automotive for power conditioning from an unregulated source. The regulator's standby current is  $28 \mu A$  in sleep mode, which is suitable for battery operating systems. An ultra low 1  $\mu A$  current can further prolong battery life in shutdown mode. Operating frequency is fixed at 1.1 MHz (X version) and 2.1 MHz (Y version) allowing the use of small external components while still being able to have low output ripple voltage. Soft-start and compensation circuits are implemented internally, and these allow the device to be used with minimized external components. The LMR14006 is optimized for up to 600 mA load current which has a 0.765 V typical feedback voltage. The device has built-in protection features such as pulse by pulse current limit, thermal sensing and shutdown due to excessive power dissipation. The LMR14006 is available in a low profile TSOT-6L package.

#### **Key Features**

Ultra Low 28 µA Standby Current in Sleep Mode

Input Voltage Range 4 V to 40 V

 $1~\mu A$  Shutdown Current

High Duty Cycle Operation Supported

Output Current up to 600 mA

1.1 MHz and 2.1 MHz Switching Frequency

Internal Compensation

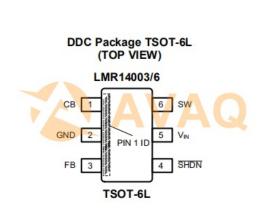
High Voltage Enable Input

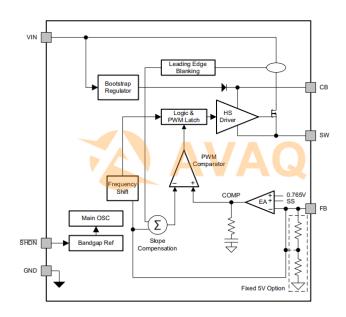
Internal Soft Start

Over Current Protection

Over Temperature Protection

Small Overall Solution Size (TSOT-6L Package)





### **Recommended For You**

LM234Z-3 LM2116MH LM234Z-3

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP24 TSSOP20 TO-92

LM27761DSGR LM74700QDBVRQ1 LM2991S

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

WSON8 SOT23-6 TO-263

LM74800QDRRRQ1 LMR14030SDDAR LM2940CT-12

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

WSON-12 SOP8 TO-220

LM536035QPWPTQ1 LM5575MH LM536013QDSXTQ1

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

HTSSOP-16 TSSOP16 WSON-10

LM5160QPWPRQ1 LM5576MH LMQ61460AFSQRJRRQ1

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

HTSSOP14 TSSOP20 VQFN-14