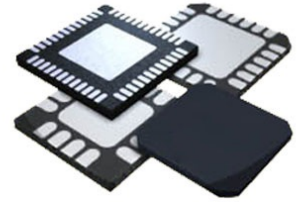


**RF Amp Single DIFF Amp 2GHz  $\pm$ 2.625V/5.25V 14-Pin UQFN  
T/R**

Images are for reference only

[Inquiry](#)**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** QFN**Product Type:** Amplifier ICs**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active**General Description**

The LM53603 and LM53602 buck regulators are specifically designed for 12-V industrial and automotive applications, providing an adjustable output voltage from 3.3 V to 10 V at 3 A or 2 A, from an input voltage of up to 36 V. Advanced high-speed circuitry allows the device to regulate from an input of up to 20 V, while providing an output of 5 V at a switching frequency of 2.1 MHz. The innovative architecture allows the device to regulate a 3.3-V output from an input voltage of only 3.5 V. All aspects of this product are optimized for the industrial and automotive customer. An input voltage range up to 36 V, with transient tolerance up to 42 V, eases input surge protection design. An open-drain reset output, with filtering and delay, provides a true indication of system status. This feature negates the requirement for an additional supervisory component, saving cost and board space. Seamless transition between PWM and PFM modes, along with a no-load operating current of only 24  $\mu$ A, ensures high efficiency and superior transient response at all loads.

## Key Features

3-A or 2-A Maximum Load Current

Input Voltage Range From 3.5 V to 36 V: Transients to 42 V

Adjustable Output Voltage From 3.3 V to 10 V

2.1-MHz Fixed Switching Frequency

±2% Output Voltage Tolerance

–40°C to 150°C Junction Temperature Range

1.7-µA Shutdown Current (Typical)

24-µA Input Supply Current at No Load (Typical)

Reset Output With Filter and Delay

Automatic Light Load Mode for Improved Efficiency

User-Selectable Forced PWM Mode (FPWM)

Built-In Loop Compensation, Soft-Start, Current Limit, Thermal Shutdown, UVLO, and External Frequency Synchronization

Thermally Enhanced 16-Lead Package: 5 mm × 4.4 mm × 1 mm

## Application

Signal Processing, Industrial, RF Communications, Test & Measurement

## Recommended For You

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### LM311MX

Texas Instruments, Inc

SOP8

### LMV7219M5

Texas Instruments, Inc

SOT23-5

### LM348D

Texas Instruments, Inc

SOP-14

### LM224N

Texas Instruments, Inc

DIP14

### LM239J

Texas Instruments, Inc

CDIP14

### LMV331M5

Texas Instruments, Inc

SOT23-5

### LM393ADR

Texas Instruments, Inc

SOP8

### LM293DR

Texas Instruments, Inc

SOP8

### LM293D

Texas Instruments, Inc

SOP8

### LMV824MIX

Texas Instruments, Inc

TSSOP

### LMV358M

Texas Instruments, Inc

SOP8

### LMV321M5

Texas Instruments, Inc

SOT23-5

**LM741H**

Texas Instruments, Inc

CAN8

**LMI93AH**

Texas Instruments, Inc

CAN8

**LMI11H/NOPB**

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CAN8