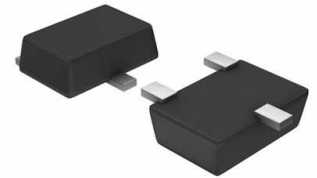


## Conv DC-DC 4V to 36V Synchronous Step Down Single-Out 1V to 28V 1A 6-Pin SOT-23 T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOT23-6

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

As A member of the SWIFT family of dc/dc regulators, the TPS54311, TPS54312, TPS54313, TPS54314, TPS54315 and TPS54316 low-input-voltage high-output current synchronous-buck PWM converter integrates all required active components. Included on the substrate with the listed features are a true, high performance, voltage error amplifier that provides high performance under transient conditions; an undervoltage-lockout circuit to prevent start-up until the input voltage reaches 3 V; an internally and externally set slow-start circuit to limit in-rush currents; and a power good output useful for processor/logic reset, fault signaling, and supply sequencing.

The TPS54311, TPS54312, TPS54313, TPS54314, TPS54315 and TPS54316 devices are available in a thermally enhanced 20-pin TSSOP (PWP) PowerPAD package, which eliminates bulky heatsinks. Texas Instruments provides evaluation modules and the SWIFT designer software tool to aid in quickly achieving high-performance power supply designs to meet aggressive equipment development cycles.

## Key Features

Controlled Baseline

One Assembly/Test Site, One Fabrication Site

Extended Temperature Performance of -55°C to 125°C

Enhanced Diminishing Manufacturing Sources (DMS) Support

Enhanced Product-Change Notification

Qualification Pedigree

60-m

0.9 V, 1.2 V, 1.5 V, 1.8 V, 2.5 V and 3.3 V Fixed Output Voltage Device With 1% Initial Accuracy

Internally Compensated for Low Parts Count

Fast Transient Response

Wide PWM Frequency: Fixed 350 kHz, 550 kHz, or Adjustable 280 kHz to 700 kHz

Load Protected by Peak Current Limit and Thermal Shutdown

Integrated Solution Reduces Board Area and Total Cost

## APPLICATIONS

Low-Voltage, High-Density Systems With Power Distributed at 5 V or 3.3 V

Point of Load Regulation for High Performance DSPs, FPGAs, ASICs, and Microprocessors

Broadband, Networking and Optical Communications Infrastructure

Automotive Telematics

SWIFT, PowerPAD are trademarks of Texas Instruments.

## Recommended For You

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### LM2637M

Texas Instruments, Inc

SOP24

### LM5116MH

Texas Instruments, Inc

TSSOP20

### LM234Z-3

Texas Instruments, Inc

TO-92

### LM27761DSGR

Texas Instruments, Inc

WSO8

### LM74700QDBVRQ1

Texas Instruments, Inc

SOT23-6

### LM2991S

Texas Instruments, Inc

TO-263

### LM74800QDRRRQ1

Texas Instruments, Inc

WSO8-12

### LMR14030SDDAR

Texas Instruments, Inc

SOP8

### LM2940CT-12

Texas Instruments, Inc

TO-220

**LM536035QPWPTQ1**

Texas Instruments, Inc

HTSSOP-16

**LM5575MH**

Texas Instruments, Inc

TSSOP16

**LM536013QDSXTQ1**

Texas Instruments, Inc

WSON-10

**LM5160QPWPRQ1**

Texas Instruments, Inc

HTSSOP14

**LM5576MH**

Texas Instruments, Inc

TSSOP20

**LMQ61460AFSQRJRRQ1**

Texas Instruments, Inc

VQFN-14