

# **TPS563201DDCT**

# Conv DC-DC 4.5V to 17V Synchronous Step Down Single-Out 0.76V to 7V 3A 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

**Lifecycle:** Active



Images are for reference only

Inquiry

## **General Description**

The TPS563201 and TPS563208 are simple, easy-to-use, 3 A synchronous step-down converters in SOT-23 package.

The devices are optimized to operate with minimum external component counts and also optimized to achieve low standby current.

These switch mode power supply (SMPS) devices employ D-CAP2 mode control providing a fast transient response and supporting both low-equivalent series resistance (ESR) output capacitors such as specialty polymer and ultra-low ESR ceramic capacitors with no external compensation components. TPS563201 operates in pulse skip mode, which maintains high efficiency during light load operation. The TPS563201 and TPS563208 are available in a 6-pin

#### **Key Features**

TPS563201 and TPS563208 3-A Converter Integrated 95-m $\Omega$  and 57-m $\Omega$  FETs

D-CAP2? Mode Control with fast transient response

Input Voltage Range: 4.5 V to 17 V

Output Voltage Range: 0.76 V to 7 V

Pulse-skip mode (TPS563201) or Continuous Current Mode (TPS563208)

580-kHz Switching Frequency

Low Shutdown Current Less than 10 µA

2% Feedback Voltage Accuracy (25°C)

Startup from Pre-Biased Output Voltage

Cycle-by-Cycle Overcurrent Limit

Hiccup-mode Overcurrent Protection

Non-Latch UVP and TSD Protections

Fixed Soft Start: 1.0 ms

#### Description

The TPS563201 and TPS563208 are simple, easy-to-use, 3 A synchronous step-down converters in SOT-23 package.

The devices are optimized to operate with minimum external component counts and also optimized to achieve low standby current.

These switch mode power supply (SMPS) devices employ D-CAP2 mode control providing a fast transient response and supporting both low-equivalent series resistance (ESR) output capacitors such as specialty polymer and ultra-low ESR ceramic capacitors with no external compensation components. TPS563201 operates in pulse skip mode, which maintains high efficiency during light load operation. The TPS563201 and TPS563208 are available in a 6-pin

1.6-mm × 2.9-mm SOT (DDC) package, and specified from a -40°C to 125°C junction temperature.

## **Recommended For You**

TPD3S014DBVR	TPS2065CDBVR	TPS2557DRBT

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

SOT23-6 SOT23-5 SON8

TPS2042BDR TPS2051BDR TPL7407LPWR

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

SOP8 SOP8 TSSOP16

TPS23753APWR TPS2116DRLR TPS259460ARPWR

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

TSSOP14 SOT5X3-8 VQFN-10

TPS23751PWPR

TPS65150QPWPRQ1

TPS2410PWR

Texas Instruments, Inc

Texas Instruments, Inc

Texas Instruments, Inc

HTSSOP16

HTSSOP-24

TSSOP-14

TPS22914BYFPR

TPS2115ADRBR

TPS2113ADRBR

Texas Instruments, Inc

Texas Instruments, Inc

Texas Instruments, Inc

DSBGA4

VSON8

SON8