

Conv DC-DC 5.5V to 48V Step Down Single-Out 1.22V 3A 8-Pin HSOP EP $\ensuremath{\mathsf{T/R}}$

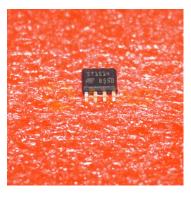
Manufacturer: <u>STMicroelectronics, Inc</u>

Package/Case: HSOP-8

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The ST1S14 is a step-down monolithic power switching regulator able to deliver up to 3 A DC current to the load depending on the application conditions. The high current level is also achieved thanks to a HSOP8 package with exposed frame, that allows to reduce the $R_{th(JA)}$ down to approximately 40 °C/W. The output voltage can be set from 1.22 V. The device uses an internal N-channel DMOS transistor (with a typical $R_{DS(on)}$ of 200 m Ω) as the switching element to minimize the size of the external components. The internal oscillator fixes the switching frequency at 850 kHz. Power good open collector output validates the regulated output voltage as soon as it reaches the regulation. Pulse-by-pulse current limit offers an effective constant current short-circuit protection. Current foldback decreases overstress in a persistent short-circuit condition.

Key Features

3 A DC output current

Operating input voltage from 5.5 V to 48 V

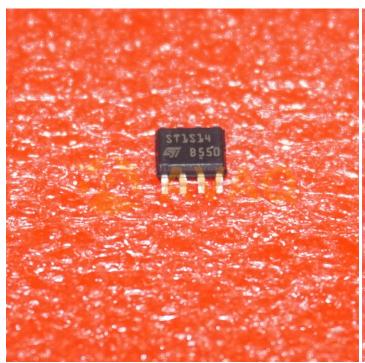
850 kHz internally fixed switching frequency

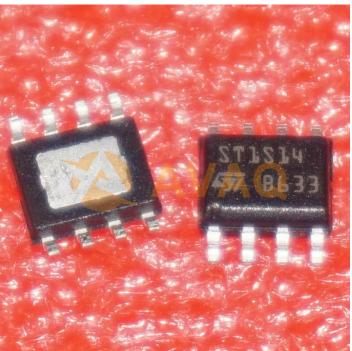
Internal soft-start

Power good open collector output

Current mode architecture

Embedded compensation network





Recommended For You

ST890CDR

STMicroelectronics, Inc

SOP-8

STM706TM6F

STMicroelectronics, Inc

SOP-8

STGAP2SICSNIR

STMicroelectronics, Inc

SOIC-8

STWBC

STMicroelectronics, Inc

QFN32

STSPIN240

STMicroelectronics, Inc

QFN16

STWD100YNYWY3F

STMicroelectronics, Inc

SOT23-5

STWD100NYWY3F

STMicroelectronics, Inc

SOT23-5

STSPIN230

STMicroelectronics, Inc

VFQFPN16

STWBC2

STMicroelectronics, Inc

SOP

STMPS2151MTR

STMicroelectronics, Inc

SOP8

STC3100IQT

STMicroelectronics, Inc

QFN

STPD01PUR

STMicroelectronics, Inc

24-QFN

STNS01PUR

STMicroelectronics, Inc

DFN-12

STMPS2171MTR

STMicroelectronics, Inc

SO-8

STC3115IJT

STMicroelectronics, Inc

CSP-10