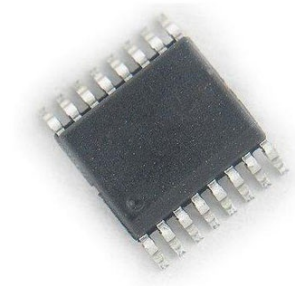


Current Limit SW 1-IN 1-OUT to 90A Automotive 16-Pin PowerSSO EP T/R



Images are for reference only

Manufacturer: [STMicroelectronics, Inc](#)

Package/Case: SSOP16

Product Type: Switches

Lifecycle: Active

[Inquiry](#)

General Description

The device is a dual channel high-side driver manufactured using ST proprietary VIPower M0-7 technology and housed in PowerSSO-16 package. The device is designed to drive 12 V automotive grounded loads through a 3 V and 5 V CMOS-compatible interface, providing protection and diagnostics.

The device integrates advanced protective functions such as load current limitation, overload active management by power limitation and overtemperature shutdown with configurable latch-off. A FaultRST pin unlatches the output in case of fault or disables the latch-off functionality. A dedicated multifunction multiplexed analog output pin delivers sophisticated diagnostic functions including high precision proportional load current sense, supply voltage feedback and chip temperature sense, in addition to the detection of overload and short circuit to ground, short to VCC and OFF-state open-load. A sense enable pin allows OFF-state diagnosis to be disabled during the module low-power mode as well as external sense resistor sharing among similar devices.

Key Features

AEC-Q100qualified

General

Singlechannelsmarthigh-sidedriverwithMultiSenseanalogfeedback

Verylowstandbycurrent

Compatiblewith3 Vand5 VCMOSoutputs

MultiSensediagnosticsfunctions

Multiplexedanalogfeedbackof:loadcurrentwithhighprecisionproportionalcurrentmirror,VCCsupplyvoltageandTCHIPdevicetemperature

Overloadandshorttoground(powerlimitation)indication

Thermalshutdownindication

OFF-stateopen-loaddetection

OutputshorttoVCCdetection

Senseenable/disable

Protections

Undervoltageshutdown

Overvoltageclamp

Loadcurrentlimitation

Selflimitingoffastthermaltransients

Configurablelatch-offonovertemperatureorpowerlimitationwithdedicatedfaultresetpin

LossofgroundandlossofVCC

Reversebatterywithexternalcomponents

Electrostaticdischargeprotection

Recommended For You

VN5050JTR-E

STMicroelectronics, Inc

HSSOP12

VNLD5160TR-E

STMicroelectronics, Inc

SOP8

VND5T050AKTR-E

STMicroelectronics, Inc

SSOP24

VNS3NV04PIR-E

STMicroelectronics, Inc

SOP8

VN7003ALHIR

STMicroelectronics, Inc

Octapak-7

VND7140AJ12TR

STMicroelectronics, Inc

HSSOP12

VN330SP-E

STMicroelectronics, Inc

HSOP10

VNL5050N3TR-E

STMicroelectronics, Inc

SOT-223

VNB35NV04TR-E

STMicroelectronics, Inc

TO-263

VN7007AHIR

STMicroelectronics, Inc

TO252-7

VNV35N07

STMicroelectronics, Inc

HSOP10

VND5050AJTR-E

STMicroelectronics, Inc

HSSOP12

VND5E160AJTR-E

STMicroelectronics, Inc

HSSOP12

VNN7NV04PIR-E

STMicroelectronics, Inc

SOT223

VN7004CLHIR

STMicroelectronics, Inc

TO-252