

## Current Limit SW 2-IN 2-OUT to 42A Automotive 16-Pin PowerSSO EP T/R

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

Package/Case: SSOP16

**Product Type:** Switches

**Lifecycle:** Active



Images are for reference only

Inquiry

## **General Description**

The device is a double 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 Doublechannelsmarthigh-sidedriverwithMultiSenseanalogfeedback Verylowstandbycurrent Compatible with 3 Vand 5 VCMOSoutputs MultiSensediagnostic functions Multiple xed analog feedback of: load current with high precision proportional current mirror, VCC supply voltage and TCHIP device temperature and the proportional current mirror of the proportional current mirror. The proportional current mirror of the proportional current mirror of the proportional current mirror. The proportional current mirror of the proportOverloadandshorttoground(powerlimitation)indication Thermalshutdownindication OFF-stateopen-loaddetection OutputshorttoVCCdetection Senseenable/disable Protections Undervoltageshutdown Overvoltageclamp Loadcurrentlimitation Selflimitingoffastthermaltransients Configurable latch-off on overtemperature or power limitation with dedicated fault resetpin LossofgroundandlossofVCC Reversebatterywithexternalcomponents Electrostatic discharge protection **Recommended For You** VN5050JTR-E VNLD5160TR-E VND5T050AKTR-E STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc HSSOP12 SOP8 SSOP24

VNS3NV04PTR-E VN7003ALHTR VND7140AJ12TR STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

Octapak-7

SOP8

HSSOP12

VN330SP-E

STMicroelectronics, Inc

HSOP10

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VN7007AHTR

STMicroelectronics, Inc

TO252-7

VND5E160AJTR-E

STMicroelectronics, Inc

HSSOP12

VNL5050N3TR-E

STMicroelectronics, Inc

SOT-223

VNV35N07

STMicroelectronics, Inc

HSOP10

VNN7NV04PTR-E

STMicroelectronics, Inc

SOT223

VNB35NV04TR-E

STMicroelectronics, Inc

TO-263

VND5050AJTR-E

STMicroelectronics, Inc

HSSOP12

VN7004CLHTR

STMicroelectronics, Inc

TO-252