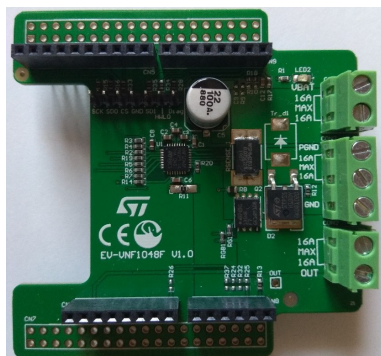


VNF1048F evaluation board



Product status link

[EV-VNF1048F](#)

Product summary

Order code	EV-VNF1048F

Features

Max transient supply voltage	VS	70 V
Operating voltage range	VS	6 V to 60 V
Operating voltage range (extended)	VS	6 V to 70 V
Standby current (max)	IS_Q	70 μ A
SPI I/O supply voltage	VSPI	3 V to 5.5 V
SPI standby current (max)	I_STBY	5 μ A

- EV-VNF1048F easy board that is able to work connected to EV-SPC582B to create an intelligent high side switch for 12 V, 24 V and 48 V automotive applications
- General
 - High side switch Control IC with e-fuse protection for Automotive 12 V, 24 V and 48 V applications
 - SPI slave interface for host control
 - 32-bit ST-SPI interface compatible with 3.3 V and 5 V CMOS level
 - 2 stage charge pump
 - Gate drive for an external MOSFET in high side configuration
 - High precision uni-directional digital current sense via SPI through an external high side shunt resistor
 - Input for a NTC resistor to monitor the external MOSFET temperature
 - Very low standby current
 - Robust fail-safe functionality through internal and external controls
 - SPI register lock-out by a dedicate digital input pin
 - Integrated ADC for TJ, VNTC, VOUT and VDS conversion
- Protections
 - Battery under-voltage shut-down
 - External MOSFET desaturation shutdown configurable via SPI
 - Hard short circuit latch-off configurable via SPI
 - Current vs time latch-off configurable via SPI (fuse-emulation)
 - Device overtemperature shutdown
 - External MOSFET overtemperature shutdown
- Intelligent high current fuse replacement for automotive applications
- Especially intended for automotive power distribution applications

Description

The EV-VNF1048F board provides an easy way to connect VNF1048F into existing system.

Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Sep-2022	1	Initial release.

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