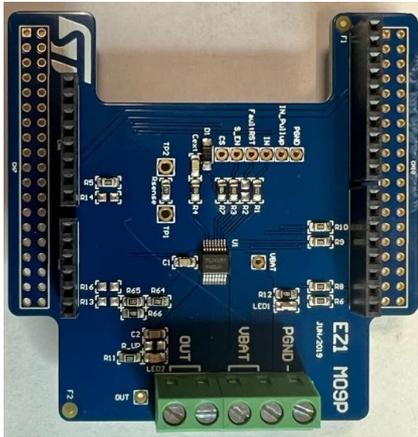


VN9016AJ evaluation board



Product status link

[EV-VN9016AJ](#)

Product summary

Order code	EV-VN9016AJ
------------	-------------

Features

Description	Parameter	Value
Max. transient supply voltage	V_{CC}	36 V
Operating voltage range	V_{CC}	4 to 28 V
Typ. on-state resistance (per channel)	R_{ON}	16 m Ω
Current limitation (typ.)	I_{LIMH}	50.6 A
Standby current (max.)	I_{STBY}	0.5 μ A

- General
 - Extreme low voltage operation for deep cold cranking applications (compliant with LV124, revision 2013)
 - Double channel smart high-side driver with current sense analog feedback
 - Very low standby current
 - Compatible with 3 V and 5 V CMOS outputs
- Current sense diagnostic functions
 - Multiplexed analog feedback of load current with high precision proportional current mirror
 - Overload and short to ground (power limitation) indication
 - Thermal shutdown indication
 - OFF-state open-load detection
 - Output short to V_{CC} detection
 - Sense enable/disable
- Protections
 - Undervoltage shutdown
 - Overvoltage clamp
 - Load current limitation
 - Self limiting of fast thermal transients
 - Configurable latch-off on overtemperature or power limitation with dedicated fault reset pin
 - Loss of ground and loss of V_{CC}
 - Reverse battery through self turn-on
 - Electrostatic discharge protection

Applications

- Automotive smart power distribution, glow plugs, heating systems, DC motors, relay replacement and high power resistive and inductive actuators.
- Protected supply for ADAS systems: radars and sensors.

Description

The [EV-VN9016AJ](#) board provides an easy way to connect VND9016AJ into the existing system.

Revision history

Table 2. Document revision history

Date	Revision	Changes
14-Feb-2022	1	Initial release.

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2023 STMicroelectronics – All rights reserved