

## Product Overview

### AMIS-41682: CAN Transceiver, Fault Tolerant, 5.0 V

For complete documentation, see the data sheet.

The new AMIS-41682 and AMIS-41683 are interfaces between the protocol controller and the physical wires of the bus lines in a control area network (CAN). AMIS-41683 is identical to the AMIS-41682 but has a true 3.3V digital interface to the CAN controller. The device provides differential transmit capability but will switch in error conditions to a single-wire transmitter and or receiver. Initially it will be used for low speed applications, up to 125kbaud, in passenger cars. Both AMIS-41682 and AMIS-41683 are implemented in I2T100 technology enabling both high-voltage analog circuitry and digital functionality to co-exist on the same chip. These products consolidate the expertise of ON Semiconductor for in-car multiples transceivers and support together with OREM-002-XTP (VAN), AMIS-30660 and AMIS-30663 (CAN high speed) and AMIS-30600 (LIN) another widely used physical layer.

### Features

- Fully compatible with ISO11898-3 standard
- Very low electromagnetic emission (EME)
- Fully integrated receiver filters
- Permanent monitoring of transmit data input
- High electromagnetic susceptibility (EMS) in normal- and low-power modes
- In the event of bus failure, automatic switching to single-wire mode
- The device will automatically reset to differential mode if the bus failure is removed
- During failure modes there is full wake-up capability
- Un-powered nodes do not disturb bus lines
- Bus errors and thermal shutdown activation is flagged on ERRB pin

For more features, see the data sheet

### Applications

- Automotive

### Part Electrical Specifications

Product	Compliance	Status	Data Transmission Standard	Data Rate	Number of Drivers	Number of Receivers	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	t <sub>PLH</sub> Max (μs)	I <sub>O</sub> Max (μA)	I <sub>IH</sub> Max (mA)	Package Type
AMIS41682CANM1RG	AEC Qualified PPAP Capable Pb-free Halide free	Active	CAN		1	1	4.75	5.25				SOIC-14

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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