



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20186

Generic Copy

Issue Date: 20-Aug-2013

TITLE: NCV7471 Datasheet Update

PROPOSED FIRST SHIP DATE: 20-Nov-2013 or earlier upon customer request

AFFECTED CHANGE CATEGORY(S): Device specification and test process

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Ondrej Kupcik <ondrej.kupcik@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or your Customer Quality interface

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

Several corrections are made with the publication of the 2nd revision of the NCV7471 data sheet:

- Figures updated:
 - Page 1: Marking Diagram
- Electrical characteristics updated; datasheet-related only:
 - Vop_VS (recommended operating ranges) parameter added
 - ILI (CAN pins leakage current) parameter split into ILI_CANH and ILI_CANL; conditions range extended
 - LIN_off_dom, ILIN_off_dom_slp, ILIN_off_rec, ILIN_no_GND, ILIN_no_VS parameters moved from LINx Transmitter to LINx Receiver table; conditions of LIN_off_dom and ILIN_off_dom_slp updated



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- Electrical characteristics updated; limits / test conditions changed:
 - Vo(sym)(bus_dom) (CAN bus output voltage symmetry) parameter added
 - Limits of Io(SC)(CANH) and Io(SC)(CANL) (CAN pins short-circuit current limitation) changed (narrowed)
 - Conditions of Vi(dif)(th) (CAN bus differential receiver threshold) changed (testing range extended)
 - Conditions of ILIN_lim (LIN short-circuit current limitation) changed from VS = 28 V to VS = 18 V

- Typos corrected:
 - Page 47: Rpullup_pinx description corrected

RELIABILITY DATA SUMMARY:

There is no change in reliability data. Characterization data is available upon request.

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical parameter	Datasheet page	Old limits	New limits	Notes
Operating Ranges				
Vop_VS	38	NA	6 to 28 V	Parameter added
CAN Transmitter DC Characteristics				
Vo(sym)(bus_dom)	42	NA	0.9 to 1.1 VCC_CAN	Parameter added
Io(SC)(CANH)	42	min -120 mA	min -100 mA	
Io(SC)(CANL)	42	max 120 mA	max 100 mA	
CAN Receiver DC Characteristics				
Vi(dif)(th)	42	No change		Condition updated from “-5 V < V(CANH/L)” to “-12 V < V(CANH/L)”
ILI	43	-5 to 5 µA	ILI_CANL: -5 to 5 µA	ILI splitted to ILI_CANH and ILI_CANL; Condition updated: “VCC_CAN = 0 V” changed to “0 Ω < R(VCC_CAN to GND) < 1 MΩ
			ILI_CANH: -5 to 5 µA	
LINx Transmitter / Receiver DC Characteristics				
LIN_off_dom	44	No change		parameters moved from “LINx Transmitter DC Characteristics” to “LINx Receiver DC Characteristics” table
ILIN_off_dom_slp	44	No change		
ILIN_off_rec	44	No change		
ILIN_no_GND	44	No change		
ILIN_no_VS	44	No change		
ILIN_lim	44	No change		Condition updated from “VS = 28 V” to “VLIN = VS = 18 V”



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CHANGED PART IDENTIFICATION:

Parts with updated specification will have a Finish Good Date Code representing Work Week 30, 2013 or newer.

List of affected General Parts:

NCV7471DQ5G
NCV7471DQ5R2G