Product Bulletin

Document #:PB25196Z
Issue Date:09 Jan 2023

Title of Change:	NCV7357 Datasheet Update
Effective date:	09 Jan 2023
Contact information:	Contact your local onsemi Sales Office or Jelle.Genne@onsemi.com
Type of notification:	This Product Bulletin is for notification purposes only. onsemi will proceed with implementation of this change upon publication of this Product Bulletin.
Change Category:	Datasheet
Change Sub-Category(s):	Product specific change

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	None

Description and Purpose:

Datasheet update from Rev. 0 to Rev. 1.

Correction of data sheet or issue of errata

- Typo corrections.
- SOIC-8 package Case code corrected.
- DFNW8 Marking corrected.
- Pin assignment drawing captions corrected.
- AEC-Q100 Qualification grade extended.
- Absolute maximum ratings clarification.
- Electrical characteristics clarification.
- ISO 11898−2:2016 Parameter Cross−Reference Table corrected.

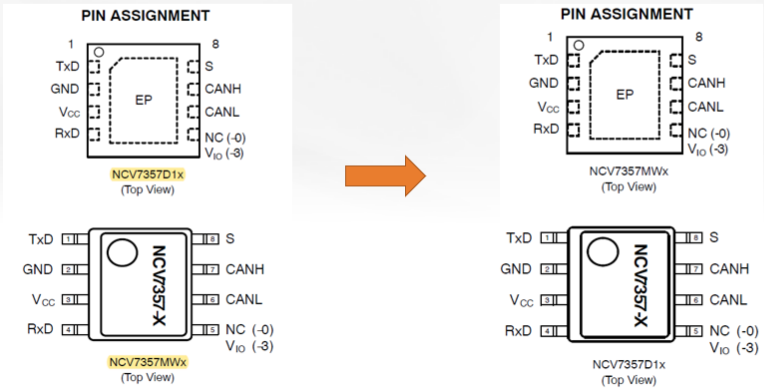
	From	To
Datasheet	NCV7357/D, Rev. 0	NCV7357/D, Rev. 1

Front page: SOIC-8 package Case code corrected.

Front page: DFNW8 Marking corrected (text string split to 3 lines).

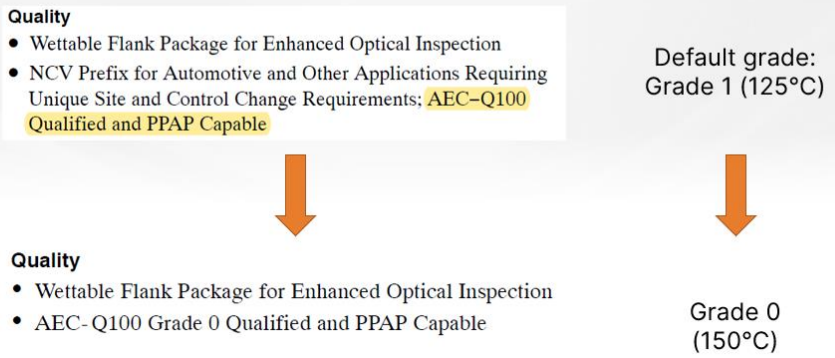
Front page: Pin assignment drawing captions corrected.

(SOIC-8 and DFNW8 drawings captions were swapped).



Front page: AEC-Q100 Qualification grade extended.

Qualification grade changed from Grade 1 (125°C) to Grade 0 (150°C).



Page 5: Absolute maximum ratings clarification.

(VI/O parameter split to VIN and VOUT. RxD pin absolute maximum rating limited to maximum given by digital pins supply voltage level + 0.3 V).

Table 3. ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Min.	Max.	Unit
$V_{I/O}$	DC voltage at pin TxD, RxD, S		−0.3	+6.0	V

Table 3. ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Min.	Max.	Unit
V_{IN}	DC voltage at pin TxD, S		-0.3	+6.0	V
V_{OUT}	DC voltage at pin RxD		-0.3	V_{SUP} + 0.3	V

Page 5: Absolute maximum ratings clarification.

(Vschaff parameter – Reference to test specification corrected).

V_{schaff}	Voltage transients, pins CANH, CANL. According to ISO7637−3, Class C (Note 6)	test pulses 1	−100		V
		test pulses 2a		+75	V
		test pulses 3a	−150		V
		test pulses 3b		+100	V

V_{schaff}	Voltage transients, pins CANH, CANL. Test Pulses According to ISO7637-2, Class C (Note 6)	test pulses 1	-100		V
		test pulses 2a		+75	V
		test pulses 3a	-150		V
		test pulses 3b		+100	V

Page 6: Electrical characteristics clarification.

(VIO conditions in Table 5 header corrected to 5.5 V to match the allowed VIO supply range, parameter VIO specified in Table 5 body. Irrelevant Note 11 removed from the table header).

Table 5. ELECTRICAL CHARACTERISTICS (V_{CC} = 4.75 V to 5.25 V; V_{IO} = 2.8 V to 5.25 V; for typical values T_A = 25°C, for min/max values T_J = −40 to +150°C; R_{LT} = 60 Ω, C_{RxD} = 15 pF; unless otherwise noted. All voltages are referenced to GND (pin 2). Positive currents flow into the respective pin; (Notes 11))

V_{IO} SUPPLY VOLTAGE (Pin V_{IO}) Only for NCV7357-3 version

V_{IO}	Supply voltage on pin V_{IO}	2.8	-	5.5	V

Table 5. ELECTRICAL CHARACTERISTICS (V_{CC} = 4.75 V to 5.25 V; V_{IO} = 2.8 V to 5.5 V; for typical values T_A = 25°C, for min/max values T_J = -40 to +150°C; R_{LT} = 60 Ω, C_{RxD} = 15 pF; unless otherwise noted. All voltages are referenced to GND (pin 2). Positive currents flow into the respective pin)

V_{IO} SUPPLY VOLTAGE (Pin V_{IO}) Only for NCV7357-3 version

V_{IO}	Supply voltage on pin V_{IO}	2.8	-	5.5	V

Page 11: ISO 11898−2:2016 Parameter Cross−Reference Table corrected.

(References swapped in two table sections).

RECEIVER OUTPUT CHARACTERISTICS, BUS BIASING ACTIVE		
Single ended output voltage on CAN_H	V_{CAN_H}	NA
Single ended output voltage on CAN_L	V_{CAN_L}	NA
Differential output voltage	V_{Diff}	NA
RECEIVER OUTPUT CHARACTERISTICS, BUS BIASING INACTIVE		
Single ended output voltage on CAN_H	V_{CAN_H}	$V_{o(off)\ (CANH)}$
Single ended output voltage on CAN_L	V_{CAN_L}	$V_{o(off)\ (CANL)}$
Differential output voltage	V_{Diff}	$V_{o(off)\ (diff)}$

RECEIVER OUTPUT CHARACTERISTICS, BUS BIASING ACTIVE		
Single ended output voltage on CAN_H	V_{CAN_H}	$V_{o(rec)}$
Single ended output voltage on CAN_L	V_{CAN_L}	$V_{o(rec)}$
Differential output voltage	V_{Diff}	$V_{o(rec)(diff)}$
RECEIVER OUTPUT CHARACTERISTICS, BUS BIASING INACTIVE		
Single ended output voltage on CAN_H	V_{CAN_H}	NA
Single ended output voltage on CAN_L	V_{CAN_L}	NA
Differential output voltage	V_{Diff}	NA

List of Affected Standard Parts:

***Note**: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.*

NCV7357MW3R2G	NCV7357MW0R2G	NCV7357D13R2G
NCV7357D10R2G		

onsemi

Appendix A: Changed Products

PCN#: PB25196Z
Issue Date: Jan 09, 2023

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCV7357MW3R2G		N/A		
NCV7357D13R2G		N/A		
NCV7357D10R2G		N/A		
NCV7357MW0R2G		N/A		