ON Semiconductor

PRODUCT BULLETIN # 20674

Generic Copy

Issue Date: 29-Oct-2014

TITLE: NCV4949A (NCV4949A/D) datasheet update

PROPOSED FIRST SHIP DATE: 29-Oct-2014

AFFECTED CHANGE CATEGORY(S): Datasheet

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor sales office or <Peter.Lanyon@onsemi.com>

NOTIFICATION TYPE:
ON Semiconductor considers this change approved unless specific conditions of acceptance are provided in writing. To do so, contact <quality@onsemi.com>.

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DESCRIPTION AND PURPOSE:

1) Change made on page 1 in **Features** of the datasheet of NCV4949A/D.
"NCV Prefix for Automotive and Other Applications Requiring Site and Change Control" replaced with "AEC−Q100 Grade 1 Qualified and PPAP Capable".

2) Changes made on page 2 in **ABSOLUTE MAXIMUM RATINGS** table of the datasheet of NCV4949A/D. See below highlighted in yellow the updated values.

ABSOLUTE MAXIMUM RATINGS

Rating	Symbol	Value	Unit
DC Operating Supply Voltage (Note 1)	V_{CC}	28	V
Transient Supply Voltage (t < 1.0 s)	$V_{CC\ TR}$	40	V
Output Current	I_{out}	Internally Limited	–
Output Voltage (Note 1)	V_{out}	20	V
Sense Input Current	I_{SI}	±1.0	mA
Sense Input Voltage (Note 1)	V_{SI}	V_{CC}	–
Output Voltages (Note 1)			V
Reset Output	V_{Reset}	20	
Sense Output	V_{SO}	20	
Output Currents			mA
Reset Output	I_{Reset}	5.0	
Sense Output	I_{SO}	5.0	
Preregulator Output Voltage (Note 1)	V_Z	7.0	V
Preregulator Output Current	I_Z	5.0	mA
Reset Delay Voltage (Note 1)	C_T	7.0	V
Reset Delay Current	C_T	Internally Limited	–
ESD Protection at any pin			V
Human Body Model	–	4000	
Machine Model	–	200	
Charged Device Model (SOIC−20 W)	–	1000	
Thermal Resistance, Junction−to−Air	$R_{\theta JA}$		°C/W
SOIC−8		189.3	
SOIC−8 EP		84.8	
SOIC−20 W		95.8	
Operating Junction Temperature Range	T_J	−40 to +150	°C
Storage Temperature Range	T_{stg}	−65 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.
1. Absolute negative voltage on these pins not to go below −0.3 V.

3) Change made on page 3. Note added to **ELECTRICAL CHARACTERISTICS / PREREGULATOR** table of the datasheet of NCV4949A/D.

ELECTRICAL CHARACTERISTICS (continued) (V_{CC} = 14 V, −40°C < T_A < 125°C, unless otherwise specified.)
PREREGULATOR

Preregulator Output Voltage (I_Z = 10 μA)	V_Z	–	6.3	–	V

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

4) Change made on page 4 in **PIN FUNCTION DESCRIPTION** table of the datasheet of NCV4949A/D. Comment added to Si pin description.

PIN FUNCTION DESCRIPTION

Pin SO−8, SO−8 EP	Pin SO−20 W	Symbol	Description
1	19	V_{CC}	Supply Voltage
2	20	S_I	Input of Sense Comparator. If not used, connect to V_{out}.
3	1	V_Z	Output of Preregulator

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List of affected General Parts:

NCV4949ADR2G
NCV4949APDR2G
NCV4949ADWR2G