



Title of Change:	NLV18 Datasheet Changes
Effective date:	28 Dec 2020
Contact information:	Contact your local ON Semiconductor Sales Office or logic.fpcn@onsemi.com
Type of notification:	This Product Bulletin is for notification purposes only. ON Semiconductor will proceed with implementation of this change upon publication of this Product Bulletin.
Change Category:	Data sheet
Change Sub-Category(s):	Datasheet/Product Doc change

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
None	None

Description and Purpose:**NLV18VHC1GXX****Existing****New****Page 6****Table 1. MAXIMUM RATINGS**

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage (U04)	-0.5 to $V_{CC}+0.5$	V
	DC Output Voltage (Other functions)	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode ($V_{CC} \leq 0$ V)	-0.5 to $V_{CC}+0.5$ -0.5 to +6.5 -0.5 to +6.5
I_{IK}	DC Input Diode Current	-20	mA
I_{OK}	DC Output Diode Current (U04)	±20	mA
	DC Output Diode Current (Other functions)	-20	mA
I_{OUT}	DC Output Source/Sink Current	±25	mA
I_{CC} or I_{OND}	DC Supply Current Per Supply Pin or Ground Pin	±50	mA
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T_J	Junction Temperature Under Bias	±150	°C
θ_{JA}	Thermal Resistance (Note 2)	659	°C/W
P_D	Power Dissipation in Still Air at 85°C	190	mW
WGL	Moisture sensitivity	Level 1	
F_R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V_{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model	2000 1000
$I_{LATCHUP}$	Latchup Performance (Note 4)	±100	mA

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. Not applicable to devices with output that may be tri-stated.
2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.
3. HBM tested to EIA/JESD22-A114-A. CDM tested to JESD22-C101-A. JEDEC recommends that ESD qualification to EIA/JESD22-A115A (Machine Model) be discontinued.
4. Tested to EIA/JESD78 Class II.

θ_{JA}	Thermal Resistance (Note 1)	377	°C/W
P_D	Power Dissipation in Still Air	332	mW

Existing**New****Page 7****ALL PARTS**

Symbol	Parameter	Conditions	V_{CC} (V)	Min	Typ	Max	Min	Typ	Max	Unit
V_{OH} (Note 5)	High-Level Output Voltage	$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = -50 \mu A$	2.0	1.9	2.0	-	1.9	-	1.9	V
			3.0	2.9	3.0	-	2.9	-	2.9	V

All Parts (Unless otherwise indicated)

Symbol	Parameter	Conditions	V_{CC} (V)	Min	Typ	Max	Min	Typ	Max	Unit
V_{OH} (Note 5)	High-Level Output Voltage	$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = -50 \mu A$	2.0	1.9	2.0	-	1.9	-	1.9	V
			3.0	2.9	3.0	-	2.9	-	2.9	V

Existing**New****Page 8****Table 3. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1Gxx)**

Symbol	Parameter	Conditions	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $85^\circ C$		$T_A = -55^\circ C$ to $+125^\circ C$		Unit
				Min	Typ	Max	Min	Max	Min	Max	
V_{OL}	Low-Level Output Voltage	$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = 50 \mu A$	2.0	-	0.0	0.1	-	0.1	-	0.1	V
			3.0	-	0.0	0.1	-	0.1	-	0.1	V
			4.5	-	0.0	0.1	-	0.1	-	0.1	V
		$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = 4$ mA $I_{OL} = 8$ mA	3.0	-	-	0.36	-	0.44	-	0.52	V
			4.5	-	-	0.36	-	0.44	-	0.52	V
I_{IN}	Input Leakage Current	$V_{IN} = 5.5$ V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I_{CC}	Quiescent Supply Current	$V_{IN} = V_{CC}$ or GND	5.5	-	-	1.0	-	20	-	40	μA

Table 3. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1Gxx)

Symbol	Parameter	Conditions	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $85^\circ C$		$T_A = -55^\circ C$ to $+125^\circ C$		Unit
				Min	Typ	Max	Min	Max	Min	Max	
V_{OL}	Low-Level Output Voltage	$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = 50 \mu A$	2.0	-	0.0	0.1	-	0.1	-	0.1	V
			3.0	-	0.0	0.1	-	0.1	-	0.1	V
			4.5	-	0.0	0.1	-	0.1	-	0.1	V
		$V_{IN} = V_{IH} (V_{TR})$ or $V_{IL} (V_{TR})$ $I_{OL} = 4$ mA $I_{OL} = 8$ mA	3.0	-	-	0.36	-	0.44	-	0.52	V
			4.5	-	-	0.36	-	0.44	-	0.52	V
I_{IN}	Input Leakage Current	$V_{IN} = 5.5$ V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I_{OFF}	Power-Off Leakage Current (except function U04)	$V_{IN} = 5.5$ V or $V_{OUT} = 5.5$ V	0	-	-	1.0	-	10	-	10	μA
I_{OFF}	Power-Off Leakage Current (Function U04 only)	$V_{IN} = 5.5$ V	0	-	-	1.0	-	10	-	10	μA
I_{CC}	Quiescent Supply Current	$V_{IN} = V_{CC}$ or GND	6.0	-	-	1.0	-	20	-	40	μA



Table 4. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1GTxx)

			V _{OD} (V)			T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
Symbol	Parameter	Conditions				Min	Typ	Max	Min	Max	Min	Max			
ALL PARTS															
V _{OH} (Note 4)	High-Level Output Voltage	V _{IN} = V _{IH} (V _{TH}) or V _{IL} (V _{TL}) I _{OH} = -50 μA I _{OH} = -8 mA	4.5	4.4	4.5	-	4.4	-	4.4	-	4.4	-	-	V	
			4.5	3.94	-	-	3.80	-	3.66	-	-	-	-	-	
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IH} (V _{TH}) or V _{IL} (V _{TL}) I _{OL} = 50 μA I _{OL} = 8 mA	4.5	-	0.0	0.1	-	0.1	-	0.1	-	0.1	-	V	
			4.5	-	-	0.36	-	0.44	-	0.52	-	-	-	-	
I _{IN}	Input Leakage Current	V _{IN} = V _{CC} or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	-	±1.0	-	μA	
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND; I _O = 0 A	5.5	-	-	1.0	-	20	-	40	-	40	-	μA	
ΔI _{CC}	Additional Supply Current per Input	V _{IN} = 3.4 V; I _O = 0 A; Other input at V _{CC} or GND	5.5	-	-	1.35	-	1.5	-	1.65	-	1.65	-	mA	

Table 4. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1GTxx)

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
				Min	Typ	Max	Min	Max	Min	Max			
All Parts (Unless otherwise indicated)													
V _{OH} (Note 5)	High-Level Output Voltage	V _{IN} = V _{IN} (V _{TH}) or V _{IL} (V _{TL}) I _{OH} = -50 μA I _{OH} = -8 mA											V
			4.5	4.4	4.5	-	4.4	-	4.4	-			
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IN} (V _{TH}) or V _{IL} (V _{TL}) I _{OL} = 50 μA I _{OL} = 8 mA	4.5	3.94	-	-	3.80	-	3.66	-			V
			4.5	-	0.0	0.1	-	0.1	-	0.1			
	Input Leakage Current	V _{IN} = 5.5 V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	-	±1.0	μA
I _{OFF}	Power-Off Leakage Current	V _{IN} = 5.5 V or V _{OUT} = 5.5 V	0	-	-	1.0	-	10	-	10	-	10	μA
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND; I _O = 0 A	5.5	-	-	1.0	-	20	-	40	-	40	μA
ΔI _{CC}	Additional Supply Current per Input	V _{IN} = 3.4 V; I _O = 0 A; Other input at V _{CC} or GND	5.5	-	-	1.35	-	1.5	-	1.65	-	1.65	mA

Page 9

Table 5. AC ELECTRICAL CHARACTERISTICS (Input t_r = t_f = 3.0 ns)

Symbol	Parameter	Conditions	V _{CC} (V)			T _A = 25 °C			-40°C ≤ T _A ≤ 85°C			-55°C ≤ T _A ≤ 125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
t _{PLH} , t _{PHL}	Propagation Delay, A to Y (Figures 1 and 2)	C _L = 15 pF C _L = 50 pF	3.0 to 3.6	-	7.0	12.8	-	15.0	-	17.0	-	17.0	-	20.5	ns

Table 5. AC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)			T _A = 25 °C			-40°C ≤ T _A ≤ 85°C			-55°C ≤ T _A ≤ 125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
t _{PLH} , t _{PHL}	Propagation Delay, (A or B) to Y (Figures 1 and 2)	C _L = 15 pF C _L = 50 pF	3.0 to 3.6	-	7.0	12.8	-	15.0	-	17.0	-	17.0	-	20.5	ns

Page 10

V _{CC} , V	V _{DD} , V	V _{DD} , V				V _Y , V
		t _{PLH} , t _{PHL}	t _{PLZ} , t _{PLZ}	t _{PZH} , t _{PZH}	t _{PZH} , t _{PZH}	
3.0 to 3.6	V _{CC} /2	(V _{OH} - V _{OL})/2	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3
4.5 to 5.5	V _{CC} /2	(V _{OH} - V _{OL})/2	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3

V _{CC} , V	V _{DD} , V	V _{DD} , V				V _Y , V
		t _{PLH} , t _{PHL}	t _{PLZ} , t _{PLZ}	t _{PZH} , t _{PZH}	t _{PZH} , t _{PZH}	
3.0 to 3.6	V _{CC} /2	V _{CC} /2	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3
4.5 to 5.5	V _{CC} /2	V _{CC} /2	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3

NLV18HC1GXX

Existing

New

Page 5

Table 1. MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +6.5	V
V _{IN}	DC Input Voltage	-0.5 to V _{CC} +0.5	V
V _{OUT}	DC Output Voltage	-0.5 to V _{CC} +0.5	V
I _{IK}	DC Input Diode Current	±20	mA
I _{OK}	DC Output Diode Current	±20	mA
I _{OUT}	DC Output Source/Sink Current	±12.5	mA
I _{CC} or I _{GND}	DC Supply Current Per Supply Pin or Ground Pin	±25	mA
T _{STG}	Storage Temperature Range	-65 to +150	°C
T _L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T _J	Junction Temperature Under Bias	±150	°C
θ _{JA}	Thermal Resistance (Note 1)	659	°C/W
P _D	Power Dissipation in Still Air at 85°C	190	mW
MSL	Moisture Sensitivity	Level 1	
F _R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V _{ESD}	ESD Withstand Voltage (Note 2)	Human Body Model: 2000 Charged Device Model: 1000	V
I _{LATCHUP}	Latchup Performance (Note 3)	±100	mA

θ _{JA}	Thermal Resistance (Note 1)	377	°C/W
P _D	Power Dissipation in Still Air	332	mW

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. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.

2. HBM tested to EIA/JESD22-A114-A. CDM tested to JESD22-C101-A. JEDEC recommends that ESD qualification to EIA/JESD22-A115A (Machine Model) be discontinued.

3. Tested to EIA/JESD78 Class II.

1. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow per JESD51-7.

Page 8

Table 5. AC ELECTRICAL CHARACTERISTICS (NLV18HC1Gxx) (Input t_r = t_f = 6.0 ns)

Symbol	Parameter	Test Conditions	V _{CC} (V)			T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	

Table 5. AC Electrical Characteristics (NLV18HC1Gxx)

Symbol	Parameter	Test Conditions	V _{CC} (V)			T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	

Table 6. AC ELECTRICAL CHARACTERISTICS (NLV18HC1GTxx) (Input t_r = t_f = 6.0 ns)

Symbol	Parameter	Test Conditions	V _{CC} (V)			T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	

Table 6. AC Electrical Characteristics (NLV18HC1GTxx)

Symbol	Parameter	Test Conditions	V _{CC} (V)			T _A = 25 °C			T _A = -40°C to 85°C			T _A = -55°C to +125°C			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	



NLV18SZXX

Existing

Page 5

Table 1. MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage (U04)	-0.5 to $V_{CC}+0.5$	V
	DC Output Voltage (Other functions)	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode ($V_{CC} = 0$ V) -0.5 to $V_{CC}+0.5$ -0.5 to +6.5 -0.5 to +6.5	
I_{IK}	DC Input Diode Current	-50	mA
I_{OK}	DC Output Diode Current	-50	mA
I_{OUT}	DC Output Source/Sink Current	±50	mA
I_{CC} or I_{GND}	DC Supply Current Per Supply Pin or Ground Pin	±100	mA
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T_J	Junction Temperature Under Bias	+150	°C
θ_{JA}	Thermal Resistance (Note 2)	659	°C/W
P_D	Power Dissipation in Still Air at 85°C	190	mW
MSL	Moisture Sensitivity	Level 1	
F_R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V_{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model 2000 1000	V
$I_{LATCHUP}$	Latchup Performance (Note 4)	±100	mA

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. Not applicable to devices with output drivers that may be tri-stated.

2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.

3. HBM tested to EIA/JESD22-A114-A, CDM tested to JESD22-C101-A, JEDEC recommends that ESD qualification to EIA/JESD22-A115A (Machine Model) be discontinued.

4. Tested to EIA/JESD78 Class II.

θ_{JA}	Thermal Resistance (Note 1)	377	°C/W
P_D	Power Dissipation in Still Air	332	mW

Existing

Page 7

Table 4. AC ELECTRICAL CHARACTERISTICS ($t_R = t_F = 3.0$ ns)

Symbol	Parameter	Condition	V_{CC} (V)	$T_A = 25^\circ\text{C}$			$-55^\circ\text{C} \leq T_A \leq 125^\circ\text{C}$			Units
				Min	Typ	Max	Min	Max	Max	

Table 5. CAPACITIVE CHARACTERISTICS ($t_R = t_F = 3.0$ ns)

Symbol	Parameter	Condition	Typical	Units
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Page 8

V_{CC} , V	V_{IN} , V	V_{DDO} , V		V_{IL} , V
1.65 to 1.95	$V_{CC}/2$	I_{PLH}, I_{PHL}	$I_{PLZ}, I_{PLZ}, I_{DZH}, I_{PHZ}$	0.15
2.3 to 2.7	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3

NLV18SZ74

Existing

Page 2

MAXIMUM RATINGS

Symbol	Characteristics	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode ($V_{CC} = 0$ V) -0.5 to $V_{CC} + 0.5$ -0.5 to +6.5 -0.5 to +6.5	V
I_{IK}	DC Input Diode Current	$V_{IN} < GND$	-50
I_{OK}	DC Output Diode Current	$V_{OUT} < GND$	-50
I_{OUT}	DC Output Source/Sink Current		±50
I_{CC} or I_{GND}	DC Supply Current per Supply Pin or Ground Pin		±100
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_L	Lead Temperature, 1 mm from Case for 10 secs	260	°C
T_J	Junction Temperature Under Bias	+150	°C
θ_{JA}	Thermal Resistance (Note 2)	250	°C/W
P_D	Power Dissipation in Still Air	250	mW
MSL	Moisture Sensitivity	Level 1	
F_R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V_{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model 2000 1000	V
$I_{LATCHUP}$	Latchup Performance (Note 4)	±100	mA

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. Not applicable to devices with output drivers that may be tri-stated.

2. Measured with minimum pad spacing on an FR4 board, using 10mm-by-1inch, 2 ounce copper trace with no air flow.

3. HBM tested to ANSI/ESDA/JEDEC JS-001-2017, CDM tested to EIA/JESD22-C101-F, JEDEC recommends that ESD qualification to EIA/JESD22-A115-A (Machine Model) be discontinued per JEDEC/JEP172A.

4. Tested to EIA/JESD78 Class II.

P_D	Power Dissipation in Still Air	500	mW
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Page 4

AC ELECTRICAL CHARACTERISTICS (Input $t_r = t_f = 3.0$ ns)

Symbol	Parameter	V _{CC} (V)	Test Conditions	T _A = 25°C			T _A = -55 to 125°C		Units
				Min	Typ	Max	Min	Max	

AC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Condition	V _{CC} (V)	T _A = 25 °C			T _A = -55°C to 125°C		Unit
				Min	Typ	Max	Min	Max	

Page 5

CAPACITIVE CHARACTERISTICS ($t_{RI} = t_F = 3.0$ ns)

Symbol	Parameter	Condition	Typical	Units
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CAPACITIVE CHARACTERISTICS

Symbol	Parameter	Condition	Typical	Unit
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Page 6

V_{CC}, V	V_{DD}, V	V_{DD}, V		V_{IK}, V
		t_{PLH}, t_{PHL} ($V_{OH} - V_{OL}$)/2	$t_{PZL}, t_{PLZ}, t_{PZH}, t_{PHZ}$	
1.65 to 1.95	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3

V_{CC}, V	V_{DD}, V	V_{DD}, V		V_{IK}, V
		t_{PLH}, t_{PHL}	$t_{PZL}, t_{PLZ}, t_{PZH}, t_{PHZ}$	
1.65 to 1.95	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3

All the change will not impact form, fit, or function of products.

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](#).

NLV18SZ02DFT2G	NLV18SZ04DFT2G	NLV18SZ07DFT2G
NLV18SZ125DFT2G	NLV28WZ16DFT2G	NLV28WZU04DFT2G
NLV18SZ74USG	NLV18VHC1G00DFT2G	NLV18VHC1G04DFT2G
NLV18VHC1G09DFT2G	NLV18VHC1G125DFT2G	NLV18VHC1G132DFT2G
NLV18VHC1G14DFT2G	NLV18VHC1G32DFT1G	NLV18VHC1G32DFT2G
NLV18VHC1GT04DFT2G	NLV18VHC1GT08DFT2G	NLV18VHC1GT125DFT2G
NLV18VHC1GT50DFT2G	NLV18HC1G08DFT2G	NLV18HC1G32DFT2G
NLV18SG08DFT2G	NLV18SZ00DFT2G	NLV18SZ08DFT2G
NLV18SZ14DFT2G	NLV18SZ17DFT2G	NLV18SZ32DFT2G
NLV18VHC1G02DFT2G	NLV18VHC1G08DFT2G	

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: *The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.*

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。

製品速報

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連絡先情報:	現地のオン・セミコンダクター営業所または logic.fpcn@onsemi.com にお問い合わせください。
通知種別:	本製品速報は通知目的のみのものです。オン・セミコンダクターは本製品速報の発行により本変更を実行します。
変更カテゴリ:	データシート
変更サブカテゴリ:	データシート/製品資料の変更
影響を受ける拠点:	
オン・セミコンダクター拠点:	外部製造工場 / 下請業者拠点
なし	なし

説明および目的:

NLV18VHC1GXX

修正前
6 ページ

修正後

Table 1. MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +6.5	V
V _{IN}	DC Input Voltage	-0.5 to +6.5	V
V _{OUT}	DC Output Voltage (U04)	-0.5 to V _{CC} +0.5	V
	DC Output Voltage (Other functions)	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode (V _{CC} = 0 V)	-0.5 to V _{CC} +0.5 -0.5 to +6.5 -0.5 to +6.5
I _{IK}	DC Input Diode Current	-20	mA
I _{OK}	DC Output Diode Current (U04)	±20	mA
	DC Output Diode Current (Other functions)	-20	mA
I _{OUT}	DC Output Source/Sink Current	±25	mA
I _{CC} or I _{GND}	DC Supply Current Per Supply Pin or Ground Pin	±50	mA
T _{STG}	Storage Temperature Range	-65 to +150	°C
T _L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T _J	Junction Temperature Under Bias	+150	°C
θ _{JA}	Thermal Resistance (Note 2)	659	°C/W
P _D	Power Dissipation in Still Air at 85°C	190	mW
MSL	Moisture Sensitivity	Level 1	
F _R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V _{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model	2000 1000
I _{LATCHUP}	Latchup Performance (Note 4)	±100	mA

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. Applicable to devices with outputs that may be tri-stated.

2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.

3. HBM tested to EIA/JESD22-A114-A, CDM tested to JESD22-C101-A. JEDEC recommends that ESD qualification to EIA/JESD22-A115A (Machine Model) be discontinued.

4. Tested to EIA/JESD78 Class II.

θ _{JA}	Thermal Resistance (Note 1)	377	°C/W
P _D	Power Dissipation in Still Air	332	mW

2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow per JESD51-7.

修正前
7 ページ

修正後

ALL PARTS

Symbol	Parameter	Conditions	V _{CC} (V)	Min	Typ	Max	Min	Typ	Max	Unit
V _{OH} (Note 5)	High-Level Output Voltage	V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OH} = -50 μA	2.0	1.9	2.0	-	1.9	-	1.9	V
			3.0	2.9	3.0	-	2.9	-	2.9	

All Parts (Unless otherwise indicated)

Symbol	Parameter	Conditions	V _{CC} (V)	Min	Typ	Max	Min	Typ	Max	Unit
V _{OH} (Note 5)	High-Level Output Voltage	V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OH} = -50 μA	2.0	1.9	2.0	-	1.9	-	1.9	V
			3.0	2.9	3.0	-	2.9	-	2.9	

修正前
8 ページ

修正後

Table 3. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1Gxx)

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25°C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	
ALL PARTS											
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OL} = 50 μA	2.0	-	0.0	0.1	-	0.1	-	0.1	V
			3.0	-	0.0	0.1	-	0.1	-	0.1	
			4.5	-	0.0	0.1	-	0.1	-	0.1	
		V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OL} = 4 mA I _{OL} = 8 mA	3.0	-	-	0.36	-	0.44	-	0.52	
			4.5	-	-	0.36	-	0.44	-	0.52	
I _{IN}	Input Leakage Current	V _{IN} = 5.5 V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND	5.5	-	-	1.0	-	20	-	40	μA

Table 3. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1Gxx)

			T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C			
Symbol	Parameter	Conditions	V _{CC} (V)	Min	Typ	Max	Min	Max	Min	Max	Unit
All Parts (Unless otherwise indicated)											
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OL} = 50 μA	2.0	-	0.0	0.1	-	0.1	-	0.1	V
			3.0	-	0.0	0.1	-	0.1	-	0.1	
		V _{IN} = V _{IH} (V _{TR}) or V _{IL} (V _{TR}) I _{OL} = 4 mA	4.5	-	0.0	0.1	-	0.1	-	0.1	
			3.0	-	-	0.36	-	0.44	-	0.52	
		I _{OL} = 8 mA	4.5	-	-	0.36	-	0.44	-	0.52	
I _{IN}	Input Leakage Current	V _{IN} = 5.5 V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I _{IF}	Power-Off Leakage Current (except function U04)	V _{IN} = 5.5 V or V _{OUT} = 5.5 V	0	-	-	1.0	-	10	-	10	μA
I _{IF}	Power-Off Leakage Current (Function U04 only)	V _{IN} = 5.5 V	0	-	-	1.0	-	10	-	10	μA
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND	6.0	-	-	1.0	-	20	-	40	μA

製品速報

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Table 4. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1GTxx)

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	
ALL PARTS											
V _{OH} (Note 4)	High-Level Output Voltage	V _{IN} = V _{OH} (V _{T1}) or V _{IL} (V _{T1})									V
		I _{OH} = -50 μA	4.5	4.4	4.5	-	4.4	-	4.4	-	
		I _{OH} = -8 mA	4.5	3.94	-	-	3.80	-	3.66	-	
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{OH} (V _{T1}) or V _{IL} (V _{T1})									V
		I _{OL} = 50 μA	4.5	-	0.0	0.1	-	0.1	-	0.1	
		I _{OL} = 8 mA	4.5	-	-	0.36	-	0.44	-	0.52	
I _{IN}	Input Leakage Current	V _{IN} = V _{CC} or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND; I _O = 0 A	5.5	-	-	1.0	-	20	-	40	μA
ΔI _{CC}	Additional Supply Current per Input	V _{IN} = 3.4 V; I _O = 0 A; Other input at V _{CC} or GND	5.5	-	-	1.35	-	1.5	-	1.65	mA

Table 4. DC ELECTRICAL CHARACTERISTICS (NLV18VHC1GTxx)

			T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C			
Symbol	Parameter	Conditions	V _{CC} (V)	Min	Typ	Max	Min	Max	Min	Max	Unit
All Parts (Unless otherwise indicated)											
V _{OH} (Note 5)	High-Level Output Voltage	V _{IN} = V _{IN} (V _{T1}) or V _{IL} (V _{T1}) I _{OH} = -50 μA I _{OH} = -8 mA	4.5	4.4	4.5	-	4.4	-	4.4	-	V
			4.5	3.94	-	-	3.80	-	3.66	-	
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IN} (V _{T1}) or V _{IL} (V _{T1}) I _{OL} = 50 μA I _{OL} = 8 mA	4.5	-	0.0	0.1	-	0.1	-	0.1	V
			4.5	-	-	0.36	-	0.44	-	0.52	
I _{IN}	Input Leakage Current	V _{IN} = 5.5 V or GND	5.5	-	-	±0.1	-	±1.0	-	±1.0	μA
I _{OFF}	Power-Off Leakage Current	V _{IN} = 5.5 V or V _{OUT} = 5.5 V	0	-	-	1.0	-	10	-	10	μA
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND; I _O = 0 A	5.5	-	-	1.0	-	20	-	40	μA
ΔI _{CC}	Additional Supply Current per input	V _{IN} = 3.4 V, I _O = 0 A, Other input at V _{CC} or GND	5.5	-	-	1.35	-	1.5	-	1.65	mA

9 ページ

Table 5. AC ELECTRICAL CHARACTERISTICS (Input t_r = 3.0 ns)

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			-40°C ≤ T _A ≤ 85°C		-55°C ≤ T _A ≤ 125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	
t _{PLH} , t _{PHL} (Figures 1 and 2)	Propagation Delay, (A to Y)	C _L = 15 pF	3.0 to 3.6	-	7.0	12.8	-	15.0	-	17.0	ns
		C _L = 50 pF	-	-	8.5	16.3	-	18.5	-	20.5	

Table 5. AC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			-40°C ≤ T _A ≤ 85°C		-55°C ≤ T _A ≤ 125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	
t _{PLH} , t _{PHL} (Figures 1 and 2)	Propagation Delay, (A or B) to Y	C _L = 15 pF	3.0 to 3.6	-	7.0	12.8	-	15.0	-	17.0	ns
		C _L = 50 pF	-	-	8.5	16.3	-	18.5	-	20.5	

10 ページ

V _{CC} , V	V _{min} , V	V _{max} , V		V _{IL} , V
		t _{PLH} , t _{PHL}	t _{PLZ} , t _{PHZ}	
3.0 to 3.6	V _{CC} /2	(V _{OH} - V _{OL})/2	V _{CC} /2	0.3
4.5 to 5.5	V _{CC} /2	(V _{OH} - V _{OL})/2	V _{CC} /2	0.3

V _{CC} , V	V _{min} , V	V _{max} , V		V _{IL} , V
		t _{PLH} , t _{PHL}	t _{PLZ} , t _{PHZ}	
3.0 to 3.6	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3
4.5 to 5.5	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3

NLV18HC1GXX

修正前

5 ページ

Table 1. MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +6.5	V
V _{IN}	DC Input Voltage	-0.5 to V _{CC} +0.5	V
V _{OUT}	DC Output Voltage	-0.5 to V _{CC} +0.5	V
I _{IK}	DC Input Diode Current	±20	mA
I _{OK}	DC Output Diode Current	±20	mA
I _{OUT}	DC Output Source/Sink Current	±12.5	mA
I _{CC} or I _{ISND}	DC Supply Current Per Supply Pin or Ground Pin	±25	mA
T _{STG}	Storage Temperature Range	-65 to +150	°C
T _L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T _J	Junction Temperature Under Bias	+150	°C
θ _{JA}	Thermal Resistance (Note 1)	659	°C/W
P _D	Power Dissipation in Still Air at 85°C	190	mW
MSL	Moisture Sensitivity	Level 1	
F _R	Flammability Rating	Oxygen Index: 28 to 34	UL 94 V-0 @ 0.125 in
V _{ESD}	ESD Withstand Voltage (Note 2)	Human Body Model: 2000 Charged Device Model: 1000	V
I _{LATCHUP}	Latchup Performance (Note 3)	±100	mA

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. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.
2. MSL tested to EIA/JESD78-A, LUN tested to JEDEC-2011-A, JEDEC recommends that ESD qualification to ESD/JESD22-A115A (Machine Model) be discontinued.
3. Tested to EIA/JESD78 Class II.

修正後

θ _{JA}	Thermal Resistance (Note 1)	377	°C/W
P _D	Power Dissipation in Still Air	332	mW

8 ページ

Table 5. AC ELECTRICAL CHARACTERISTICS (NLV18HC1Gxx) (Input t_r = 6.0 ns)

Symbol	Parameter	Test Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	

Table 6. AC ELECTRICAL CHARACTERISTICS (NLV18HC1GTxx) (Input t_r = 6.0 ns)

Symbol	Parameter	Test Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	

Table 5. AC Electrical Characteristics (NLV18HC1Gxx)

Symbol	Parameter	Test Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	

Table 6. AC Electrical Characteristics (NLV18HC1GTxx)

Symbol	Parameter	Test Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to 85°C		T _A = -55°C to +125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	

製品速報

文書番号: PB23756Z

発行日: 28 Dec 2020

NLV18SZXX

修正前

5 ページ

Table 1. MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage (U04)	-0.5 to $V_{CC}+0.5$	V
	DC Output Voltage (Other functions)	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode ($V_{CC} = 0$ V)	-0.5 to $V_{CC}+0.5$ -0.5 to +6.5 -0.5 to +6.5
I_{IK}	DC Input Diode Current	-50	mA
I_{OK}	DC Output Diode Current	-50	mA
I_{OUT}	DC Output Source/Sink Current	±50	mA
I_{CC} or I_{GND}	DC Supply Current Per Supply Pin or Ground Pin	±100	mA
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_L	Lead Temperature, 1 mm from Case for 10 Seconds	260	°C
T_J	Junction Temperature Under Bias	+150	°C
θ_{JA}	Thermal Resistance (Note 2)	659	°C/W
P_D	Power Dissipation in Still Air at 85°C	190	mW
MSL	Moisture Sensitivity	Level 1	
F_R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	
V_{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model	2000 1000
$I_{LATCHUP}$	Latchup Performance (Note 4)	±100	mA

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. Applicable to devices with output that may be tri-stated.
2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow.
3. HBM tested to EIA/JESD22-A114-A, CDM tested to JESD22-C101-A, JEDEC recommends that ESD qualification to EIA/JESD22-A115A (Machine Model) be discontinued.
4. Tested to EIA/JESD78 Class II.

修正後

θ_{JA}	Thermal Resistance (Note 1)	377	°C/W
P_D	Power Dissipation in Still Air	332	mW

2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow per JESD51-7.

修正前

7 ページ

Table 4. AC ELECTRICAL CHARACTERISTICS ($t_R = t_F = 3.0$ ns)

Symbol	Parameter	Condition	V _{CC} (V)	T _A = 25°C			-55°C ≤ T _A ≤ 125°C		Units
				Min	Typ	Max	Min	Max	

Table 5. CAPACITIVE CHARACTERISTICS ($t_R = t_F = 3.0$ ns)

Symbol	Parameter	Condition	Typical	Units
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Table 4. AC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Condition	V _{CC} (V)	T _A = 25 °C			-55°C ≤ T _A ≤ 125°C		Unit
				Min	Typ	Max	Min	Max	

Table 5. CAPACITIVE CHARACTERISTICS

Symbol	Parameter	Condition	Typical	Unit
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8 ページ

V_{CC}, V	V_{OH}, V	V_{OL}, V	V_{OH}, V	V_{OL}, V
1.65 to 1.95	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3

V_{CC}, V	V_{OH}, V	V_{OL}, V	V_{OH}, V	V_{OL}, V
1.65 to 1.95	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3

NLV18SZ74

修正前

2 ページ

MAXIMUM RATINGS

Symbol	Characteristic	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage	Active-Mode (High or Low State) Tri-State Mode (Note 1) Power-Down Mode ($V_{CC} = 0$ V)	-0.5 to $V_{CC} + 0.5$ -0.5 to +6.5 -0.5 to +6.5
I_{IK}	DC Input Diode Current	$V_{IN} < \text{GND}$	-50
I_{OK}	DC Output Diode Current	$V_{OUT} < \text{GND}$	-50
I_{OUT}	DC Output Source/Sink Current		±50
I_{CC} or I_{GND}	DC Supply Current per Supply Pin or Ground Pin		±100
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_L	Lead Temperature, 1 mm from Case for 10 secs	260	°C
T_J	Junction Temperature Under Bias	+150	°C
θ_{JA}	Thermal Resistance (Note 2)	250	°C/W
P_D	Power Dissipation in Still Air	250	mW
MSL	Moisture Sensitivity	Level 1	-
F_R	Flammability Rating	Oxygen Index: 28 to 34 UL 94 V-0 @ 0.125 in	-
V_{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model	2000 1000
$I_{LATCHUP}$	Latchup Performance (Note 4)		±100

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. Applicable to devices with outputs that may be tri-stated.
2. Measured with minimum pad spacing on an FR4 board, using 10mm-by-1inch, 2 ounce copper trace no air flow.
3. HBM tested to ANSI/JESD22-A114-A115-A, CDM tested to JEDEC JESD22-C101-A, JEDEC recommends that ESD qualification to EIA/JESD22-A115-A (Machine Model) be discontinued per JEDEC JESD172A.
4. Tested to EIA/JESD78 Class II.

修正後

P_D	Power Dissipation in Still Air	500	mW
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2. Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 20 ounce copper trace with no air flow per JESD51-7.

製品速報

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4 ページ

AC ELECTRICAL CHARACTERISTICS (Input $t_r = t_f = 3.0$ ns)

Symbol	Parameter	V _{CC} (V)	Test Conditions	T _A = 25°C			T _A = -55 to 125°C		Units
				Min	Typ	Max	Min	Max	

AC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Condition	V _{CC} (V)	T _A = 25 °C			T _A = -55°C to 125°C		Unit
				Min	Typ	Max	Min	Max	

5 ページ

CAPACITIVE CHARACTERISTICS ($t_{tr} = t_f = 3.0$ ns)

Symbol	Parameter	Condition	Typical	Units
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CAPACITIVE CHARACTERISTICS

Symbol	Parameter	Condition	Typical	Unit
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6 ページ

V_{CC}, V	V_{min}, V	V_{DDQ}, V		V_{IL}, V
		t_{PLH}, t_{PHL}	$t_{PZL}, t_{PLZ}, t_{PZH}, t_{PHZ}$	
1.65 to 1.95	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$(V_{OH} - V_{OL})/2$	$V_{CC}/2$	0.3

V_{CC}, V	V_{min}, V	V_{DDQ}, V		V_{IL}, V
		t_{tr}, t_{fsw}	$t_{tr}, t_{fsw}, t_{tr}, t_{fsw}$	
1.65 to 1.95	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
2.3 to 2.7	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.15
3.0 to 3.6	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3
4.5 to 5.5	$V_{CC}/2$	$V_{CC}/2$	$V_{CC}/2$	0.3

これらの変更はいずれも、製品の形状、適合性、または機能には影響しません。

影響を受ける部品の一覧:

注: 標準の部品番号(既製品)のみが部品一覧に記載されます。 本 PCN に影響を受けるカスタム 部品は、PCN メールの顧客の特定の PCN の付属文書、または PCN カスタマイズポータルに記載されています。

NLV18SZ02DFT2G	NLV18SZ04DFT2G	NLV18SZ07DFT2G
NLV18SZ125DFT2G	NLV28WZ16DFT2G	NLV28WZU04DFT2G
NLV18SZ74USG	NLV18VHC1G00DFT2G	NLV18VHC1G04DFT2G
NLV18VHC1G09DFT2G	NLV18VHC1G125DFT2G	NLV18VHC1G132DFT2G
NLV18VHC1G14DFT2G	NLV18VHC1G32DFT1G	NLV18VHC1G32DFT2G
NLV18VHC1GT04DFT2G	NLV18VHC1GT08DFT2G	NLV18VHC1GT125DFT2G
NLV18VHC1GT50DFT2G	NLV18HC1G08DFT2G	NLV18HC1G32DFT2G
NLV18SG08DFT2G	NLV18SZ00DFT2G	NLV18SZ08DFT2G
NLV18SZ14DFT2G	NLV18SZ17DFT2G	NLV18SZ32DFT2G
NLV18VHC1G02DFT2G	NLV18VHC1G08DFT2G	