



<b>Title of Change:</b>	Former Fairchild TinyLogic® US8 Die and Back End Material Change and Datasheet Change					
<b>Proposed first ship date:</b>	10 January 2019 or earlier upon customer approval					
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or < logic.fpcn@onsemi.com >					
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change.					
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <ChangKit.Mok@onsemi.com>					
<b>Type of notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>					
<b>Change Part Identification:</b>	Affected product will be marked with new marking style per below.					
<b>Change Category:</b>	<input checked="" type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____					
<b>Change Sub-Category(s):</b>	<input checked="" type="checkbox"/> Manufacturing Site Addition <input checked="" type="checkbox"/> Material Change <input checked="" type="checkbox"/> Datasheet/Product Doc change <input checked="" type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input checked="" type="checkbox"/> Shipping/Packaging/Marking <input checked="" type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____					
<b>Sites Affected:</b>	ON Semiconductor Sites: ON S. Portland, Maine ON Seremban, Malaysia			External Foundry/Subcon Sites: Subcon Thailand External Foundry Japan		
<b>Description and Purpose:</b>						
Qualify new die source for Former Fairchild TinyLogic® and adding additional subcon site to increase capacity.						
Material to be changed	Before Change (Existing flow)	After 90 day expiration and before January 1st, 2019			After 1st Jan, 2019 (New flow only)	
		(Existing flow)	(New flow)	(New flow)		
Assy Site	Subcon Thailand	Subcon Thailand	Subcon Thailand	Onsemi Malaysia	Subcon Thailand	Onsemi Malaysia
Wire	Au	Au	PCC	PCC	PCC	PCC
Mold Compound	MC SUM EMEG600 HF	MC SUM EMEG600 HF	Molding Compound G600	MC SUMITOMO EME-G600FB (Halide Free)	Molding Compound G600	MC SUMITOMO EME-G600FB (Halide Free)
Lead frame	LEAD FRAME 50X35 MILS	LEAD FRAME 50X35 MILS	LF; PPF+ME2; US8; DAP 59x38	LF US8 μPPF RT-UPG 4-Tie Bars (PPF)	LF; PPF+ME2; US8; DAP 59x38	LF US8 μPPF RT-UPG 4-Tie Bars (PPF)
Die Attach	EPOXY ABLESTIK 84-1 LMIS	EPOXY ABLESTIK 84-1 LMIS	Non-Conductive DAF, HR-5140	DA AB 8006NS 10CC (non-conductive) (WBC)	Non-Conductive DAF, HR-5140	DA AB 8006NS 10CC (non-conductive) (WBC)
Plating	100% Sn	100% Sn	Preplated	Preplated	Preplated	Preplated
Die Source	On South Portland	On South Portland	Subcon Japan	Subcon Japan	Subcon Japan	Subcon Japan



	From	To
	Subcon Thailand	New Flow
<i>Product marking change</i>	<p>Y=Year Code, W=Week Code, KK=Lot Run Code, DDDD=Device Code, f=ON logo, B=Plant Code</p>	<p><b>MARKING DIAGRAM</b></p> <p>XXXX=Device Code, A= Assy location, L= Lot Code, Y=Year Code, W=Week Code</p>

Datasheet change: The original datasheet will be left active on the www.onsemi.com customer web site for comparison purposes until the FPCN expires. The new datasheet will become visible on the web site on that FPCN expiration.”

**Existing datasheet**

- Power Down High-Impedance Inputs/Outputs
- Over-Voltage Tolerance Inputs Facilitate 5V to 3V Translation
- Proprietary Noise/EMI Reduction Circuitry
- Ultra-Small MicroPak™ Package
- Space-Saving USB Surface Mount Package

1.65V to 5.5V V<sub>CC</sub>. The inputs and outputs are high impedance when V<sub>CC</sub> is 0V. Inputs tolerate voltages up to 7V, independent of V<sub>CC</sub> operating voltage.

The signal level applied to the D input is transferred to the Q output during the positive-going transition of the CLK pulse.

**New**

- Power Down High-Impedance Inputs/Outputs
- Over-Voltage Tolerance Inputs Facilitate 5V to 3V Translation
- Proprietary Noise/EMI Reduction Circuitry

1.65V to 5.5V V<sub>CC</sub>. The inputs and outputs are high impedance when V<sub>CC</sub> is 0V. Inputs tolerate voltages up to 5.5V, independent of V<sub>CC</sub> operating voltage.

The signal level applied to the D input is transferred to the Q output during the positive-going transition of the CLK pulse.

Symbol	Parameter	Min.	Max.	Unit
V <sub>CC</sub>	Supply Voltage	-0.5	7.0	V
V <sub>IN</sub>	DC Input Voltage	-0.5	7.0	V
V <sub>OUT</sub>	DC Output Voltage	-0.5	7.0	V

Symbol	Parameter	Min.	Max.	Unit
V <sub>CC</sub>	Supply Voltage	-0.5	6.5	V
V <sub>IN</sub>	DC Input Voltage	-0.5	6.5	V
V <sub>OUT</sub>	DC Output Voltage	-0.5	6.5	V

I <sub>IN</sub>	Input Leakage Current	0 to 5.5	0 ≤ V <sub>IN</sub> ≤ 5.5V		±0.1	±1.0	µA

I <sub>IN</sub>	Input Leakage Current	1.65 to 5.5	0 ≤ V <sub>IN</sub> ≤ 5.5V		±0.1	±1.0	µA

**Existing datasheet**

Symbol	Parameter	V <sub>CC</sub> (V)	Conditions	T <sub>A</sub> =+25°C			T <sub>A</sub> =-40 to +85°C			Units
				Min.	Typ.	Max.	Min.	Max.		
V <sub>P</sub>	Positive Threshold Voltage	1.65		0.60	1.00	1.40	0.60	1.40	V	
		1.80		0.70	1.10	1.50	0.70	1.50		
		2.30		1.00	1.40	1.80	1.00	1.80		
		3.00		1.30	1.75	2.20	1.30	2.20		
		4.50		1.90	2.45	3.10	1.90	3.10		
		5.50		2.20	2.90	3.60	2.20	3.60		
V <sub>N</sub>	Negative Threshold Voltage	1.65		0.20	0.50	0.80	0.20	0.80	V	
		1.80		0.25	0.55	0.90	0.25	0.90		
		2.30		0.40	0.75	1.15	0.40	1.15		
		3.00		0.60	1.00	1.50	0.60	1.50		
		4.50		1.00	1.43	2.00	1.00	2.00		
		5.50		1.20	1.70	2.30	1.20	2.30		

**New**

Symbol	Parameter	V <sub>CC</sub> (V)	Conditions	T <sub>A</sub> =+25°C			T <sub>A</sub> =-40 to +85°C			Units
				Min.	Typ.	Max.	Min.	Max.		
V <sub>P</sub>	Positive Threshold Voltage	1.65		0.60	1.00	1.40	0.60	1.40	V	
		1.80		0.70	1.10	1.50	0.70	1.50		
		2.30		1.00	1.40	1.80	1.00	1.80		
		3.00		1.30	1.75	2.20	1.30	2.20		
		4.50		1.90	2.45	3.10	1.90	3.10		
		5.50		2.20	2.90	3.60	2.20	3.60		
V <sub>N</sub>	Negative Threshold Voltage	1.65		0.20	0.50	0.80	0.20	0.80	V	
		1.80		0.25	0.55	0.90	0.25	0.90		
		2.30		0.40	0.75	1.15	0.40	1.15		
		3.00		0.60	1.00	1.50	0.60	1.50		
		4.50		1.00	1.43	2.00	1.00	2.00		
		5.50		1.20	1.70	2.30	1.20	2.30		

Symbol	Parameter	V <sub>CC</sub> (V)	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>N</sub> to Y <sub>N</sub>	1.8±0.15	2.0	12.0	2.0	13.0	ns	C <sub>L</sub> = 15 pF R <sub>D</sub> = 1 MΩ S1 = Open	ns	Figures 1, 3	
		2.5±0.2	1.0	7.5	1.0	8.0					
		3.3±0.3	0.8	5.2	0.8	5.5					
		5.0±0.5	0.5	4.5	0.5	4.8					
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>N</sub> to Y <sub>N</sub>	3.3±0.3	1.2	5.7	1.2	6.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	ns	Figures 1, 3	
		5.0±0.5	0.8	5.0	0.8	5.3					
t <sub>OSLH</sub> , t <sub>OSHL</sub>	Output to Output Skew (Note 5)	3.3±0.3		1.0		1.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	ns	Figures 1, 3	
		5.0±0.5		0.8		0.8					
t <sub>PLZ</sub> , t <sub>PZH</sub>	Output Enable Time	1.8±0.15	3.0	14.0	3.0	15.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500Ω S1 = GND for t <sub>PZH</sub> S1 = V <sub>I</sub> for t <sub>PLZ</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	ns	Figures 1, 3	
		2.5±0.2	1.8	8.5	1.8	9.0					
		3.3±0.3	1.2	6.2	1.2	6.5					
		5.5±0.5	0.8	5.5	0.8	5.8					
t <sub>PLZ</sub> , t <sub>PZH</sub>	Output Disable Time	1.8±0.15	2.5	12.0	2.5	13.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500Ω S1 = GND for t <sub>PZH</sub> S1 = V <sub>I</sub> for t <sub>PLZ</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	ns	Figures 1, 3	
		2.5±0.2	1.5	8.0	1.5	8.5					
		3.3±0.3	0.8	5.7	0.8	6.0					
		5.0±0.5	0.3	4.7	0.3	5.0					

Symbol	Parameter	V <sub>CC</sub> (V)	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>N</sub> to Y <sub>N</sub>	1.8±0.15		12.0		13.0	ns	C <sub>L</sub> = 15 pF R <sub>D</sub> = 1 MΩ S1 = Open	ns	Figures 1, 3	
		2.5±0.2		7.5		8.0					
		3.3±0.3		5.2		5.5					
		5.0±0.5		4.5		4.8					
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>N</sub> to Y <sub>N</sub>	3.3±0.3		5.7		6.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	ns	Figures 1, 3	
		5.0±0.5		5.0		5.3					
t <sub>OSLH</sub> , t <sub>OSHL</sub>	Output to Output Skew (Note 5)	3.3±0.3		1.0		1.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	ns	Figures 1, 3	
		5.0±0.5		0.8		0.8					
t <sub>PLZ</sub> , t <sub>PZH</sub>	Output Enable Time	1.8±0.15		14.0		15.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500Ω S1 = GND for t <sub>PZH</sub> S1 = V <sub>I</sub> for t <sub>PLZ</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	ns	Figures 1, 3	
		2.5±0.2		8.5		9.0					
		3.3±0.3		6.2		6.5					
		5.5±0.5		5.5		5.8					
t <sub>PLZ</sub> , t <sub>PZH</sub>	Output Disable Time	1.8±0.15		12.0		13.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500Ω S1 = GND for t <sub>PZH</sub> S1 = V <sub>I</sub> for t <sub>PLZ</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	ns	Figures 1, 3	
		2.5±0.2		8.0		8.5					
		3.3±0.3		5.7		6.0					
		5.0±0.5		4.7		5.0					

**Reliability Data Summary:**

**QV DEVICE NAME: NLV37WZ14USG**  
**RMS S44271**  
**PACKAGE US8 STARS**

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/258
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/324
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/828
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JTSD002	Ta = 245C, 10 sec		0/45



QV DEVICE NAME : NLV37WZ14USG  
 RMS S43802  
 PACKAGE US8 SBN

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/258
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/324
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/828
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JTSD002	Ta = 245C, 10 sec		0/45

**Electrical Characteristic Summary:**

Electrical characteristics Available upon request.

**List of Affected Parts:**

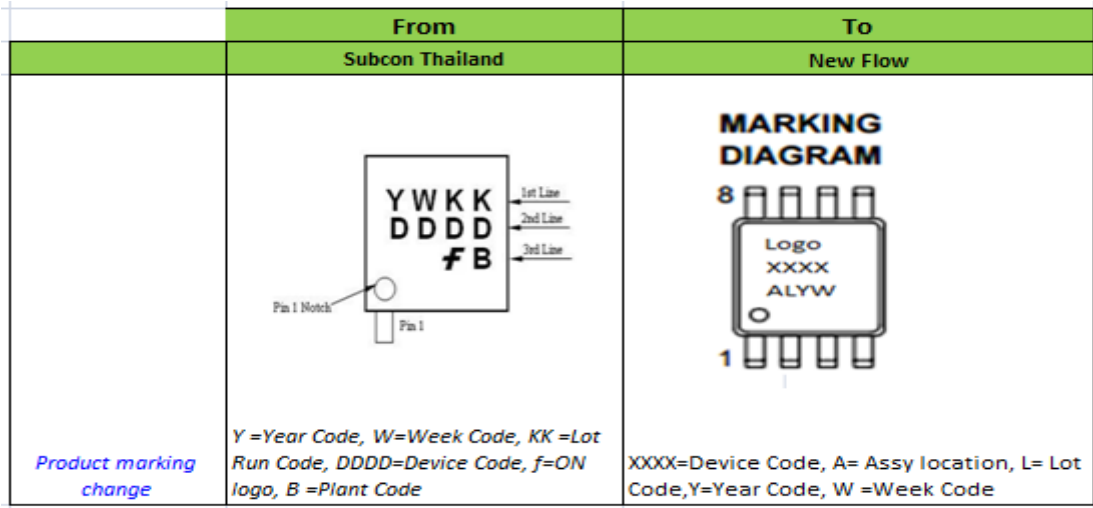
Part Number	Qualification Vehicle
NC7NZ04K8X	NLV37WZ14USG
NC7NZ14K8X	NLV37WZ14USG
NC7NZ17K8X	NLV37WZ14USG
NC7NZ34K8X	NLV37WZ14USG
NC7SZ74K8X	NLV37WZ14USG
NC7WZ00K8X	NLV37WZ14USG
NC7WZ02K8X	NLV37WZ14USG
NC7WZ08K8X	NLV37WZ14USG
NC7WZ125K8X	NLV37WZ14USG
NC7WZ126K8X	NLV37WZ14USG
NC7WZ132K8X	NLV37WZ14USG
NC7WZ240K8X	NLV37WZ14USG
NC7WZ241K8X	NLV37WZ14USG
NC7WZ32K8X	NLV37WZ14USG
NC7WZ38K8X	NLV37WZ14USG
NC7WZ86K8X	NLV37WZ14USG

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。





データシート変更: 元のデータシートは FPCN が終了するまで、比較目的のために [www.onsemi.com](http://www.onsemi.com) のお客様 Web サイトに有効なまま残ります。新規データシートは、その FPCN 満了時に Web サイトで見られるようになります。

既存データシート

- Power Down High-Impedance Inputs/Outputs
- Over-Voltage Tolerance Inputs Facilitate 5V to 3V Translation
- Proprietary Noise/EMI Reduction Circuitry
- Ultra-Small MicroPak™ Package
- Space-Saving USB Surface Mount Package

1.65V to 5.5V V<sub>CC</sub>. The inputs and outputs are high impedance when V<sub>CC</sub> is 0V. Inputs tolerate voltages up to 7V, independent of V<sub>CC</sub> operating voltage. The signal level applied to the D input is transferred to the Q output during the positive-going transition of the CLK pulse.

新規

- Power Down High-Impedance Inputs/Outputs
- Over-Voltage Tolerance Inputs Facilitate 5V to 3V Translation
- Proprietary Noise/EMI Reduction Circuitry

1.65V to 5.5V V<sub>CC</sub>. The inputs and outputs are high impedance when V<sub>CC</sub> is 0V. Inputs tolerate voltages up to 5.5V, independent of V<sub>CC</sub> operating voltage. The signal level applied to the D input is transferred to the Q output during the positive-going transition of the CLK pulse.

Symbol	Parameter	Min.	Max.	Unit
V <sub>CC</sub>	Supply Voltage	-0.5	7.0	V
V <sub>IN</sub>	DC Input Voltage	-0.5	7.0	V
V <sub>OUT</sub>	DC Output Voltage	-0.5	7.0	V

Symbol	Parameter	Min.	Max.	Unit
V <sub>CC</sub>	Supply Voltage	-0.5	6.5	V
V <sub>IN</sub>	DC Input Voltage	-0.5	6.5	V
V <sub>OUT</sub>	DC Output Voltage	-0.5	6.5	V

I <sub>IN</sub>	Input Leakage Current	0 to 5.5	0 ≤ V <sub>IN</sub> ≤ 5.5V	±0.1	±1.0	µA
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I <sub>IN</sub>	Input Leakage Current	1.65 to 5.5	0 ≤ V <sub>IN</sub> ≤ 5.5V	±0.1	±1.0	µA
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既存データシート

Symbol	Parameter	V <sub>CC</sub> (V)	Conditions	T <sub>A</sub> =+25°C			T <sub>A</sub> = -40 to +85°C			Units
				Min.	Typ.	Max.	Min.	Max.		
V <sub>P</sub>	Positive Threshold Voltage	1.65		0.60	1.00	1.40	0.60	1.40	V	
		1.80		0.70	1.10	1.50	0.70	1.50		
		2.30		1.00	1.40	1.80	1.00	1.80		
		3.00		1.30	1.75	2.20	1.30	2.20		
		4.50		1.90	2.45	3.10	1.90	3.10		
		5.50		2.20	2.90	3.60	2.20	3.60		
V <sub>N</sub>	Negative Threshold Voltage	1.65		0.20	0.50	0.80	0.20	0.80	V	
		1.80		0.25	0.55	0.90	0.25	0.90		
		2.30		0.40	0.75	1.15	0.40	1.15		
		3.00		0.60	1.00	1.50	0.60	1.50		
		4.50		1.00	1.43	2.00	1.00	2.00		
		5.50		1.20	1.70	2.30	1.20	2.30		

新規

Symbol	Parameter	V <sub>CC</sub> (V)	Conditions	T <sub>A</sub> =+25°C			T <sub>A</sub> = -40 to +85°C			Units
				Min.	Typ.	Max.	Min.	Max.		
V <sub>P</sub>	Positive Threshold Voltage	1.65		0.60	1.00	1.40	0.60	1.40	V	
		1.80		0.70	1.10	1.50	0.70	1.50		
		2.30		1.00	1.40	1.80	1.00	1.80		
		3.00		1.30	1.75	2.20	1.30	2.20		
		4.50		1.90	2.45	3.10	1.90	3.10		
		5.50		2.20	2.90	3.60	2.20	3.60		
V <sub>N</sub>	Negative Threshold Voltage	1.65		0.20	0.50	0.80	0.20	0.80	V	
		1.80		0.25	0.55	0.90	0.25	0.90		
		2.30		0.40	0.75	1.15	0.40	1.15		
		3.00		0.60	1.00	1.50	0.60	1.50		
		4.50		1.00	1.43	2.00	1.00	2.00		
		5.50		1.20	1.70	2.30	1.20	2.30		

Symbol	Parameter	V <sub>CC</sub> (V)	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>n</sub> to Y <sub>n</sub>	1.8 ± 0.15	2.0	12.0	2.0	13.0	ns	C <sub>L</sub> = 15 pF R <sub>D</sub> = 1 MΩ S1 = Open	Figures 1, 3		
		2.5 ± 0.2	1.0	7.5	1.0	8.0					
		3.3 ± 0.3	0.8	5.2	0.8	5.5					
		5.0 ± 0.5	0.5	4.5	0.5	4.8					
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>n</sub> to Y <sub>n</sub>	3.3 ± 0.3	1.2	5.7	1.2	6.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	Figures 1, 3		
		5.0 ± 0.5	0.8	5.0	0.8	5.3					
t <sub>OSLH</sub> , t <sub>OSHL</sub>	Output to Output Skew (Note 5)	3.3 ± 0.3		1.0		1.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	Figures 1, 3		
		5.0 ± 0.5		0.8		0.8					
t <sub>EZL</sub> , t <sub>EZH</sub>	Output Enable Time	1.8 ± 0.15	3.0	14.0	3.0	15.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500 Ω S1 = GND for t <sub>EZH</sub> S1 = V <sub>I</sub> for t <sub>EZL</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	Figures 1, 3		
		2.5 ± 0.2	1.8	8.5	1.8	9.0					
		3.3 ± 0.3	1.2	6.2	1.2	6.5					
		5.5 ± 0.5	0.8	5.5	0.8	5.8					
t <sub>FZL</sub> , t <sub>FZH</sub>	Output Disable Time	1.8 ± 0.15	2.5	12.0	2.5	13.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500 Ω S1 = GND for t <sub>FZH</sub> S1 = V <sub>I</sub> for t <sub>FZL</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	Figures 1, 3		
		2.5 ± 0.2	1.5	8.0	1.5	8.5					
		3.3 ± 0.3	0.8	5.7	0.8	6.0					
		5.0 ± 0.5	0.3	4.7	0.3	5.0					

Symbol	Parameter	V <sub>CC</sub> (V)	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>n</sub> to Y <sub>n</sub>	1.8 ± 0.15		12.0		13.0	ns	C <sub>L</sub> = 15 pF R <sub>D</sub> = 1 MΩ S1 = Open	Figures 1, 3		
		2.5 ± 0.2		7.5		8.0					
		3.3 ± 0.3		5.2		5.5					
		5.0 ± 0.5		4.5		4.8					
t <sub>PLH</sub> , t <sub>PHL</sub>	Propagation Delay A <sub>n</sub> to Y <sub>n</sub>	3.3 ± 0.3		5.7		6.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	Figures 1, 3		
		5.0 ± 0.5		5.0		5.3					
t <sub>OSLH</sub> , t <sub>OSHL</sub>	Output to Output Skew (Note 5)	3.3 ± 0.3		1.0		1.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> = 500Ω S1 = Open	Figures 1, 3		
		5.0 ± 0.5		0.8		0.8					
t <sub>EZL</sub> , t <sub>EZH</sub>	Output Enable Time	1.8 ± 0.15		14.0		15.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500 Ω S1 = GND for t <sub>EZH</sub> S1 = V <sub>I</sub> for t <sub>EZL</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	Figures 1, 3		
		2.5 ± 0.2		8.5		9.0					
		3.3 ± 0.3		6.2		6.5					
		5.5 ± 0.5		5.5		5.8					
t <sub>FZL</sub> , t <sub>FZH</sub>	Output Disable Time	1.8 ± 0.15		12.0		13.0	ns	C <sub>L</sub> = 50 pF R <sub>D</sub> , R <sub>U</sub> = 500 Ω S1 = GND for t <sub>FZH</sub> S1 = V <sub>I</sub> for t <sub>FZL</sub> V <sub>I</sub> = 2 × V <sub>CC</sub>	Figures 1, 3		
		2.5 ± 0.2		8.0		8.5					
		3.3 ± 0.3		5.7		6.0					
		5.0 ± 0.5		4.7		5.0					

信頼性データの要約:

QV 素子名: NLV37WZ14USG  
RMS S44271  
パッケージ US8 STARs

テスト	仕様	条件	間隔	結果
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/258
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/324
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/828
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JTSD002	Ta = 245C, 10 sec		0/45





QV 素子名: NLV37WZ14USG

RMS S43802

パッケージ US8 SBN

テスト	仕様	条件	間隔	結果
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/258
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/324
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/828
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JTSD002	Ta = 245C, 10 sec		0/45

**電気的特性の要約:**

電気的特性は要求に応じて利用可能です。

**影響を受ける部品の一覧:**

部品番号	認証車両
NC7NZ04K8X	NLV37WZ14USG
NC7NZ14K8X	NLV37WZ14USG
NC7NZ17K8X	NLV37WZ14USG
NC7NZ34K8X	NLV37WZ14USG
NC7SZ74K8X	NLV37WZ14USG
NC7WZ00K8X	NLV37WZ14USG
NC7WZ02K8X	NLV37WZ14USG
NC7WZ08K8X	NLV37WZ14USG
NC7WZ125K8X	NLV37WZ14USG
NC7WZ126K8X	NLV37WZ14USG
NC7WZ132K8X	NLV37WZ14USG
NC7WZ240K8X	NLV37WZ14USG
NC7WZ241K8X	NLV37WZ14USG
NC7WZ32K8X	NLV37WZ14USG
NC7WZ38K8X	NLV37WZ14USG
NC7WZ86K8X	NLV37WZ14USG



**Appendix A: Changed Products**

Product	Customer Part Number	Qualification Vehicle
NC7NZ04K8X		NLV37WZ14USG
NC7NZ14K8X		NLV37WZ14USG
NC7NZ17K8X		NLV37WZ14USG
NC7NZ34K8X		NLV37WZ14USG
NC7SZ74K8X		NLV37WZ14USG
NC7WZ00K8X		NLV37WZ14USG
NC7WZ02K8X		NLV37WZ14USG
NC7WZ08K8X		NLV37WZ14USG
NC7WZ125K8X		NLV37WZ14USG
NC7WZ126K8X		NLV37WZ14USG
NC7WZ132K8X		NLV37WZ14USG
NC7WZ240K8X		NLV37WZ14USG
NC7WZ241K8X		NLV37WZ14USG
NC7WZ32K8X		NLV37WZ14USG
NC7WZ38K8X		NLV37WZ14USG
NC7WZ86K8X		NLV37WZ14USG