



Title of Change:	Minigates (3.3V) TPSCO Wafer Qualification with BOM change in US8 Package
Proposed First Ship date:	10 Dec 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or SiewWan.Shee@onsemi.com
PCN Samples Contact:	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. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com >
Marking of Parts/ Traceability of Change:	The CS code on the label will be changed from US to JP.
Change Category:	Test Change, Wafer Fab Change, Assembly Change
Change Sub-Category(s):	Manufacturing Site Transfer, Manufacturing Process Change, Material Change, Datasheet/Product Doc change, Shipping/Packaging/Marking

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
ON Semiconductor Maine, United States	HANA Semiconductor, Thailand
ON Semiconductor Seremban, Malaysia	STARS Microelectronics, Thailand
	Towerjazz Semiconductor, Japan (Toyama)

Description and Purpose:

Qualify new die source for Former Fairchild TinyLogic® and transfer to new assembly sites to increase capacity

Item to be changed	Before Change Description	After Change Description	
Lead Frame	LEAD FRAME 50X35 MILS	LF; PPF+ME2; US8; DAP 59x38	LF US8 μPPF RT-UPG 4-Tie Bars (PPF)
Die Attach	EPOXY ABLESTIK 84-1 LMIS	Non-Conductive DAF, HR-5140	DA AB 8006NS 10CC (non-conductive) (WBC)
Bond Wire	Au	PCC	PCC
Mold Compound	MC SUM EMEG600 HF	Molding Compound G600	MC SUMITOMO EME-G600FB (Halide Free)
Assembly Site	Subcon Thailand	Subcon Thailand	Onsemi Malaysia
Die Source	On South Portland	Subcon Japan	Subcon Japan
Plating	100% Sn	Preplated	Preplated



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

Datasheet Changes:

Provided here are comparison between the new and old datasheets regarding changing specifications and/or specification conditions.

- Areas of change are circled red.
- Items from the old datasheet that will be changed are highlighted red.
- The corresponding value on the new datasheet is highlighted in green.
- Please note that these changes are examples of changes to be made as a family specification. Changes to limits affecting individual part numbers will be noted as such.

There will be other changes that represent a cleanup and standardization to the datasheet to represent a family oriented specification format. These changes will include forms of the following:

- Correction of clerical errors such as spelling.
- Formatting to create family standards.
- Addition of new package types and possible removal of packages no longer available.
- Standardization of the switching waveforms test circuit figures.
- Formatting of the Device ordering information to provide more information to the customer regarding marking and Pin 1 orientation in tape or reel.

NC7WP/NP – Absolute Maximum Ratings :

Existing Datasheet

Absolute Maximum Ratings (Note 1)

Supply Voltage (V_{CC})	-0.5V to +4.6V
DC Input Voltage (V_{IN})	-0.5V to +4.6V
DC Output Voltage (V_{OUT})	-0.5V to $V_{CC} + 0.5V$
HIGH or LOW State (Note 2)	-0.5V to $V_{CC} + 0.5V$
$V_{CC} = 0V$	-0.5V to 4.6V

Symbol	Parameter	Rating
V_{CC}	Supply Voltage	-0.5V to +4.6V
V_{IN}	DC Input Voltage	-0.5V to +4.6V
V_{OUT}	DC Output Voltage	-0.5V to $V_{CC} + 0.5V$
	HIGH or LOW State ⁽¹⁾	-0.5V to $V_{CC} + 0.5V$
	$V_{CC} = 0V$	-0.5V to +4.6V

New

Maximum Ratings

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IN}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	-0.5 to $V_{CC} + 0.5$	V
	Active-Mode (High or Low State)	-0.5 to +4.3	
	Tri-State Mode (Note 1)	-0.5 to +4.3	
	Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3	

Maximum Ratings

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IN}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	-0.5 to $V_{CC} + 0.5$	V
	Active-Mode (High or Low State)	-0.5 to +4.3	
	Tri-State Mode (Note 1)	-0.5 to +4.3	
	Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3	



NC7WP/NP Except for NC7NP14 – DC Characteristics :

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions	
			Min.	Max.	Min.	Max.			
V _{IH}	HIGH Level Input Voltage	0.90	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}	0.65 x V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	1.6	1.6	1.6	1.6			
3.00 ≤ V _{CC} ≤ 3.60	2.61	2.61	2.61	2.61					
V _{IL}	LOW Level Input Voltage	0.90	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}	0.35 x V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	0.7	0.7	0.7	0.7			
3.00 ≤ V _{CC} ≤ 3.60	2.61	2.61	2.61	2.61					
V _{OH}	HIGH Level Output Voltage	0.90	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V	I _{OH} = -20 μA	
		1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.10 ≤ V _{CC} ≤ 1.30	0.75 x V _{CC}	0.70 x V _{CC}	0.70 x V _{CC}	0.70 x V _{CC}			I _{OH} = -0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	1.07	0.99	0.99	0.99			I _{OH} = -1.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	1.24	1.22	1.22	1.22			I _{OH} = -1.5 mA
		2.30 ≤ V _{CC} ≤ 2.70	1.95	1.87	1.87	1.87			I _{OH} = -2.1 mA
3.00 ≤ V _{CC} ≤ 3.60	2.61	2.55	2.55	2.55	I _{OH} = -2.6 mA				
V _{OL}	LOW Level Output Voltage	0.90	0.1	0.1	0.1	0.1	V	I _{OL} = 20 μA	
		1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	0.1	0.1			
		1.40 ≤ V _{CC} ≤ 1.60	0.1	0.1	0.1	0.1			
		1.65 ≤ V _{CC} ≤ 1.95	0.1	0.1	0.1	0.1			
		2.30 ≤ V _{CC} ≤ 2.70	0.1	0.1	0.1	0.1			
		3.00 ≤ V _{CC} ≤ 3.60	0.1	0.1	0.1	0.1			
		1.10 ≤ V _{CC} ≤ 1.30	0.30 x V _{CC}	0.30 x V _{CC}	0.30 x V _{CC}	0.30 x V _{CC}			I _{OL} = 0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.31	0.37	0.37	0.37			I _{OL} = 1.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	0.31	0.35	0.35	0.35			I _{OL} = 1.5 mA
		2.30 ≤ V _{CC} ≤ 2.70	0.31	0.33	0.33	0.33			I _{OL} = 2.1 mA
3.00 ≤ V _{CC} ≤ 3.60	0.31	0.33	0.33	0.33	I _{OL} = 2.6 mA				

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C		Unit	
				Min	Typ	Max	Min	Max		
V _{IH}	High-Level Input Voltage		0.9	-	0.5	-	-	-	V	
			1.1 to 1.3	0.65 x V _{CC}	-	-	0.65 x V _{CC}	-		
			1.4 to 1.6	0.65 x V _{CC}	-	-	0.65 x V _{CC}	-		
			1.65 to 1.95	0.65 x V _{CC}	-	-	0.65 x V _{CC}	-		
			2.3 to 2.7	1.6	-	-	1.6	-		
3.0 to 3.6	2.1	-	-	2.1	-					
V _{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	V	
			1.1 to 1.3	-	-	0.35 x V _{CC}	-	0.35 x V _{CC}		
			1.4 to 1.6	-	-	0.35 x V _{CC}	-	0.35 x V _{CC}		
			1.65 to 1.95	-	-	0.35 x V _{CC}	-	0.35 x V _{CC}		
			2.3 to 2.7	-	-	0.7	-	0.7		
3.0 to 3.6	-	-	0.9	-	0.9					
V _{OH}	High-Level Output Voltage	V _{IH} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V	
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.65 to 1.95	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			2.3 to 2.7	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			3.0 to 3.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			I _{OH} = -0.5 mA	1.1 to 1.3	0.75 x V _{CC}	-	-	0.70 x V _{CC}		-
			I _{OH} = -1.0 mA	1.4 to 1.6	1.07	-	-	0.99		-
			I _{OH} = -1.5 mA	1.65 to 1.95	1.24	-	-	1.22		-
			I _{OH} = -2.1 mA	2.3 to 2.7	1.95	-	-	1.87		-
I _{OH} = -2.6 mA	3.0 to 3.6	2.61	-	-	2.55	-				
V _{OL}	Low-Level Output Voltage	V _{IL} = V _{IH} or V _{IL} I _{OL} = 20 μA	0.9	-	0.1	-	-	-	V	
			1.1 to 1.3	-	-	0.1	-	0.1		
			1.4 to 1.6	-	-	0.1	-	0.1		
			1.65 to 1.95	-	-	0.1	-	0.1		
			2.3 to 2.7	-	-	0.1	-	0.1		
			3.0 to 3.6	-	-	0.1	-	0.1		
			I _{OL} = 0.5 mA	1.1 to 1.3	-	-	0.3 x V _{CC}	-		0.3 x V _{CC}
			I _{OL} = 1.0 mA	1.4 to 1.6	-	-	0.31	-		0.37
			I _{OL} = 1.5 mA	1.65 to 1.95	-	-	0.31	-		0.35
			I _{OL} = 2.1 mA	2.3 to 2.7	-	-	0.31	-		0.33
I _{OL} = 2.6 mA	3.0 to 3.6	-	-	0.31	-	0.33				

NC7NP14 – DC Characteristics :

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C		T _A = -40°C to +85°C		Units	
				Min.	Max.	Min.	Max.		
V _P	Positive Threshold Voltage	0.90		0.3	0.6	0.3	0.6	V	
		1.10		0.4	1.0	0.4	1.0		
		1.40		0.5	1.2	0.5	1.2		
		1.65		0.7	1.5	0.7	1.5		
		2.30		1.0	1.9	1.0	1.9		
3.00		1.6	2.6	1.6	2.6				
V _N	Negative Threshold Voltage	0.90		0.1	0.6	0.1	0.6	V	
		1.10		0.15	0.7	0.15	0.7		
		1.40		0.2	0.8	0.2	0.8		
		1.65		0.25	0.9	0.25	0.9		
		2.30		0.4	1.15	0.4	1.15		
3.00		0.6	1.8	0.6	1.8				
V _H	Hysteresis Voltage	0.90		0.07	0.5	0.07	0.5	V	
		1.10		0.08	0.6	0.08	0.6		
		1.40		0.09	0.8	0.09	0.8		
		1.65		0.10	1.0	0.10	1.0		
		2.30		0.25	1.1	0.25	1.1		
3.00		0.60	1.8	0.60	1.8				
V _{OH}	HIGH Level Output Voltage	I _{OH} = -20 μA	0.90		V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V
			1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.10 ≤ V _{CC} ≤ 1.30	I _{OH} = -0.5 mA	0.75 x V _{CC}	0.70 x V _{CC}	0.70 x V _{CC}	0.70 x V _{CC}	
			1.40 ≤ V _{CC} ≤ 1.60	I _{OH} = -1.0 mA	1.07	0.99	0.99	0.99	
			1.65 ≤ V _{CC} ≤ 1.95	I _{OH} = -1.5 mA	1.24	1.22	1.22	1.22	
			2.30 ≤ V _{CC} ≤ 2.70	I _{OH} = -2.1 mA	1.95	1.87	1.87	1.87	
3.00 ≤ V _{CC} ≤ 3.60	I _{OH} = -2.6 mA	2.61	2.55	2.55	2.55				
V _{OL}	LOW Level Output Voltage	I _{OL} = 20 μA	0.90		0.1	0.1	0.1	0.1	V
			1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	0.1	0.1		
			1.40 ≤ V _{CC} ≤ 1.60	0.1	0.1	0.1	0.1		
			1.65 ≤ V _{CC} ≤ 1.95	0.1	0.1	0.1	0.1		
			2.30 ≤ V _{CC} ≤ 2.70	0.1	0.1	0.1	0.1		
			3.00 ≤ V _{CC} ≤ 3.60	0.1	0.1	0.1	0.1		
			1.10 ≤ V _{CC} ≤ 1.30	I _{OL} = 0.5 mA	0.30 x V _{CC}	0.30 x V _{CC}	0.30 x V _{CC}	0.30 x V _{CC}	
			1.40 ≤ V _{CC} ≤ 1.60	I _{OL} = 1.0 mA	0.31	0.37	0.37	0.37	
			1.65 ≤ V _{CC} ≤ 1.95	I _{OL} = 1.5 mA	0.31	0.35	0.35	0.35	
			2.30 ≤ V _{CC} ≤ 2.70	I _{OL} = 2.1 mA	0.31	0.33	0.33	0.33	
3.00 ≤ V _{CC} ≤ 3.60	I _{OL} = 2.6 mA	0.31	0.33	0.33	0.33				

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C		Unit	
				Min	Typ	Max	Min	Max		
V _P	Positive Threshold Voltage		0.9	-	TBD	-	-	-	V	
			1.1	-	TBD	-	TBD	-		
			1.4	-	-	1.2	-	1.2		
			1.65	-	-	1.5	-	1.5		
			2.3	-	-	1.9	-	1.9		
3.0	-	-	2.6	-	2.6					
V _N	Negative Threshold Voltage		0.9	-	TBD	-	-	-	V	
			1.1	TBD	-	-	TBD	-		
			1.4	0.2	-	-	0.2	-		
			1.65	0.25	-	-	0.25	-		
			2.3	0.4	-	-	0.4	-		
3.0	0.6	-	-	0.6	-					
V _H	Hysteresis Voltage		0.9	-	TBD	-	-	-	V	
			1.1	TBD	-	-	TBD	-		
			1.4	0.09	-	-	0.8	0.99		
			1.65	0.1	-	-	0.9	1.0		
			2.3	0.25	-	-	1.1	1.1		
3.0	0.6	-	-	1.8	1.8					
V _{OH}	High-Level Output Voltage	V _{IH} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V	
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.65 to 1.95	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			2.3 to 2.7	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			3.0 to 3.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			I _{OH} = -0.5 mA	1.1 to 1.3	0.75 x V _{CC}	-	-	0.70 x V _{CC}		-
			I _{OH} = -1.0 mA	1.4 to 1.6	1.07	-	-	0.99		-



NC7WP/NP Except for NC7WP125 – AC Characteristics :

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C			T _A = -40°C to +85°C			Units	Figure Number
				Min.	Typ.	Max.	Min.	Max.			
t _{PHL} , t _{PLH}	Propagation Delay	0.90	C _L = 10pF, R _L = 1MΩ	66.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		3.5	24.0	34.5	3.0	41.6			
		1.40 ≤ V _{CC} ≤ 1.60		2.5	7.0	14.8	2.0	15.0			
		1.65 ≤ V _{CC} ≤ 1.95		2.0	6.0	12.0	1.5	12.2			
		2.30 ≤ V _{CC} < 2.70		1.5	5.0	9.4	1.0	9.9			
3.00 ≤ V _{CC} ≤ 3.60		1.0	4.0	8.3	1.0	9.0					
		0.90	C _L = 15pF, R _L = 1MΩ	71.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		4.0	28.0	37.3	3.5	46.3			
		1.40 ≤ V _{CC} ≤ 1.60		3.0	8.0	15.5	2.5	16.5			
		1.65 ≤ V _{CC} ≤ 1.95		2.5	6.0	12.6	2.0	13.6			
		2.30 ≤ V _{CC} < 2.70		2.0	5.0	9.9	1.5	10.8			
3.00 ≤ V _{CC} ≤ 3.60		1.5	4.0	8.7	1.0	9.5					
		0.90	C _L = 30pF, R _L = 1MΩ	76.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		5.0	31.0	39.3	4.0	49.7			
		1.40 ≤ V _{CC} ≤ 1.60		4.0	9.0	17.8	3.5	18.2			
		1.65 ≤ V _{CC} ≤ 1.95		3.0	7.0	14.4	2.0	15.9			
		2.30 ≤ V _{CC} < 2.70		2.0	6.0	11.3	1.5	12.8			
3.00 ≤ V _{CC} ≤ 3.60		1.5	5.0	9.2	1.0	10.7					

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	14.8	-	15.0		
			1.65 to 1.95	-	TBD	12.0	-	12.2		
			2.3 to 2.7	-	TBD	9.4	-	9.9		
3.0 to 3.6	-	TBD	8.3	-	9.0					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	15.5	-	16.5		
			1.65 to 1.95	-	TBD	12.6	-	13.6		
			2.3 to 2.7	-	TBD	9.9	-	10.8		
3.0 to 3.6	-	TBD	8.7	-	9.5					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	17.8	-	18.2		
			1.65 to 1.95	-	TBD	14.4	-	15.9		
			2.3 to 2.7	-	TBD	11.3	-	12.8		
3.0 to 3.6	-	TBD	9.2	-	10.7					

NC7WP125 – AC Characteristics :

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t _{PHL} , t _{PLH}	Propagation Delay	0.90		28.0					ns	C _L = 10 pF R _L = 1 MΩ	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	10.0	19.1	3.5	39.6				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	11.2	1.5	14.5				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	8.6	1.0	11.6				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	6.3	0.8	8.2				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	5.3	0.5	7.2						
t _{2H} , t _{2L}	Output Enable Time	0.90		28.0				ns	C _L = 10 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{2H} S ₁ = V _I for t _{2L}		
		1.10 ≤ V _{CC} ≤ 1.30	4.0	9.0	17.5	3.5	40.4				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	11.9	1.5	14.8				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	9.7	1.0	12.3				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	7.7	0.8	10.5				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	6.9	0.5	8.6						
t _{2H} , t _{2L}	Output Disable Time	0.90		28.0				ns	C _L = 10 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{2H} S ₁ = V _I for t _{2L}		
		1.10 ≤ V _{CC} ≤ 1.30	4.0	8.0	20.5	3.5	42.0				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	17.6	1.5	18.9				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	17.4	1.0	18.7				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	16.4	0.8	17.7				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	16.2	0.5	17.5						
t _{PHL} , t _{PLH}	Propagation Delay	0.90		28.0				ns	C _L = 15 pF R _L = 1 MΩ		
		1.10 ≤ V _{CC} ≤ 1.30	5.0	10.0	20.5	4.5	42.5				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	11.8	2.5	15.4				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	9.1	2.0	12.2				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	6.6	1.0	8.6				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	5.6	0.5	7.5						
t _{2H} , t _{2L}	Output Enable Time	0.90		31.0				ns	C _L = 10 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{2H} S ₁ = V _I for t _{2L}		
		1.10 ≤ V _{CC} ≤ 1.30	5.0	11.0	18.2	4.5	43.3				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	12.5	2.5	15.5				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	10.2	2.0	12.9				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	8.0	1.0	9.9				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	7.2	0.5	8.9						
t _{2H} , t _{2L}	Output Disable Time	0.90		30.0				ns	C _L = 10 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{2H} S ₁ = V _I for t _{2L}		
		1.10 ≤ V _{CC} ≤ 1.30	5.0	11.0	21.6	4.5	44.9				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	17.1	2.5	20.0				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	16.9	2.0	18.9				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	16.8	1.0	18.1				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	16.6	0.5	17.8						

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	39.6		
			1.4 to 1.6	-	TBD	11.2	-	14.8		
			1.65 to 1.95	-	TBD	8.6	-	11.6		
			2.3 to 2.7	-	TBD	6.3	-	8.2		
3.0 to 3.6	-	TBD	5.3	-	7.2					
t _{2H} , t _{2L}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	40.4		
			1.4 to 1.6	-	TBD	11.9	-	14.8		
			1.65 to 1.95	-	TBD	9.7	-	12.3		
			2.3 to 2.7	-	TBD	7.7	-	10.5		
3.0 to 3.6	-	TBD	6.9	-	8.6					
t _{2H} , t _{2L}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	42.0		
			1.4 to 1.6	-	TBD	15.3	-	18.0		
			1.65 to 1.95	-	TBD	14.7	-	17.8		
			2.3 to 2.7	-	TBD	13.7	-	15.0		
3.0 to 3.6	-	TBD	13.5	-	14.8					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	42.5		
			1.4 to 1.6	-	TBD	11.8	-	15.4		
			1.65 to 1.95	-	TBD	9.1	-	12.2		
			2.3 to 2.7	-	TBD	6.6	-	8.6		
3.0 to 3.6	-	TBD	5.6	-	7.5					
t _{2H} , t _{2L}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	43.3		
			1.4 to 1.6	-	TBD	12.5	-	15.5		
			1.65 to 1.95	-	TBD	10.2	-	12.9		
			2.3 to 2.7	-	TBD	8.0	-	9.9		
3.0 to 3.6	-	TBD	7.2	-	8.9					
t _{2H} , t _{2L}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	44.9		
			1.4 to 1.6	-	TBD	15.9	-	18.8		
			1.65 to 1.95	-	TBD	15.2	-	18.2		
			2.3 to 2.7	-	TBD	14.1	-	15.4		
3.0 to 3.6	-	TBD	13.9	-	15.1					



Existing Datasheet

AC Electrical Characteristics (Continued)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C		Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max			
t _{PHL} t _{PLH}	Propagation Delay	0.90		34.0					C _L = 30 pF R _L = 1MΩ	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30	5.5	12.0	23.4	5.0	51.1			
		1.40 ≤ V _{CC} ≤ 1.60	4.0	8.0	13.8	3.0	17.7			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	10.6	2.0	14.0			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	7.6	1.0	9.9			
3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	6.4	0.5	8.9					
t _{PDZ} t _{PZL}	Output Enable Time	0.90		37.0					C _L = 30 pF R _U = 5000Ω R _O = 5000Ω S ₁ = GND for t _{PDZ} S ₁ = V _I for t _{PZL}	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30	6.0	13.0	24.4	5.0	51.9			
		1.40 ≤ V _{CC} ≤ 1.60	4.0	8.0	14.5	3.0	17.9			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	11.7	2.0	14.7			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	9.1	1.0	11.1			
3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	8.1	0.5	10.1					
t _{PHZ} t _{PLZ}	Output Disable Time	0.90		36.0					C _L = 30 pF R _U = 5000Ω R _O = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30	6.0	13.0	24.8	5.0	53.5			
		1.40 ≤ V _{CC} ≤ 1.60	4.0	8.0	18.1	3.0	22.6			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	17.9	2.0	22.0			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	17.7	1.0	21.6			
3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	17.5	0.5	21.2					

New

AC Electrical Characteristics (continued)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
t _{PHL} t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	51.1	
			1.4 to 1.6	-	TBD	13.8	-	17.7	
			1.65 to 1.95	-	TBD	10.6	-	14.0	
			2.3 to 2.7	-	TBD	7.6	-	9.9	
3.0 to 3.6	-	TBD	6.4	-	8.9				
t _{PDZ} t _{PZL}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	51.9	
			1.4 to 1.6	-	TBD	14.5	-	17.9	
			1.65 to 1.95	-	TBD	11.7	-	14.7	
			2.3 to 2.7	-	TBD	9.1	-	11.1	
3.0 to 3.6	-	TBD	8.1	-	10.1				
t _{PHZ} t _{PLZ}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	53.5	
			1.4 to 1.6	-	TBD	20.5	-	21.1	
			1.65 to 1.95	-	TBD	19.5	-	20.5	
			2.3 to 2.7	-	TBD	18.5	-	19.5	
3.0 to 3.6	-	TBD	14.8	-	16.3				

NC7SP74 – Absolute Maximum Ratings :

Existing Datasheet

Absolute Maximum Ratings (Note 1)

Supply Voltage (V _{CC})	-0.5V to +4.6V
DC Input Voltage (V _{IN})	-0.5V to +4.6V
DC Output Voltage (V _{OUT})	-0.5V to +7.0V
HIGH or LOW State (Note 2)	-0.5V to V _{CC} + 0.5V
V _{CC} = 0V	-0.5V to 4.6V

New

Maximum Ratings

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +4.3	V
V _{IN}	DC Input Voltage	-0.5 to +4.3	V
V _{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to V _{CC} + 0.5
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode (V _{CC} = 0 V)	-0.5 to +4.3

NC7SP74 – DC Characteristics :

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = -25°C		T _A = -40°C to +85°C		Units	Conditions
			Min	Max	Min	Max		
V _{IH}	HIGH Level Input Voltage	0.90	0.65 × V _{CC}		0.65 × V _{CC}		V	
		1.10 ≤ V _{CC} ≤ 1.30	0.65 × V _{CC}		0.65 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.65 × V _{CC}		0.65 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.65 × V _{CC}		0.65 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	1.0		1.0			
3.00 ≤ V _{CC} ≤ 3.60	2.1		2.1					
V _{IL}	LOW Level Input Voltage	0.90	0.35 × V _{CC}		0.35 × V _{CC}		V	
		1.10 ≤ V _{CC} ≤ 1.30	0.35 × V _{CC}		0.35 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.35 × V _{CC}		0.35 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.35 × V _{CC}		0.35 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	0.7		0.7			
3.00 ≤ V _{CC} ≤ 3.60	0.9		0.9					
V _{OH}	HIGH Level Output Voltage	0.90	V _{CC} - 0.1		V _{CC} - 0.1		V	I _{OH} = -20 μA
		1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1		V _{CC} - 0.1			
		1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.1		V _{CC} - 0.1			
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1		V _{CC} - 0.1			
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1		V _{CC} - 0.1			
3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1		V _{CC} - 0.1					
V _{OL}	LOW Level Output Voltage	0.90	0.1		0.1		V	I _{OL} = 20 μA
		1.10 ≤ V _{CC} ≤ 1.30	0.1		0.1			
		1.40 ≤ V _{CC} ≤ 1.60	0.1		0.1			
		1.65 ≤ V _{CC} ≤ 1.95	0.1		0.1			
		2.30 ≤ V _{CC} ≤ 2.70	0.1		0.1			
3.00 ≤ V _{CC} ≤ 3.60	0.1		0.1					
I _{OH}	HIGH Level Output Current	1.10 ≤ V _{CC} ≤ 1.30	0.75 × V _{CC}		0.70 × V _{CC}		mA	I _{OH} = -0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	1.07		0.99			
		1.65 ≤ V _{CC} ≤ 1.95	1.24		1.22			
		2.30 ≤ V _{CC} ≤ 2.70	1.95		1.87			
		3.00 ≤ V _{CC} ≤ 3.60	2.61		2.56			
I _{OL}	LOW Level Output Current	1.10 ≤ V _{CC} ≤ 1.30	0.30 × V _{CC}		0.30 × V _{CC}		mA	I _{OL} = 0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.31		0.31			
		1.65 ≤ V _{CC} ≤ 1.95	0.31		0.35			
		2.30 ≤ V _{CC} ≤ 2.70	0.31		0.33			
		3.00 ≤ V _{CC} ≤ 3.60	0.31		0.33			

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
V _{IH}	High-Level Input Voltage		0.9	-	0.5	-	-	-	V
			1.1 to 1.3	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	
			1.4 to 1.6	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	
			1.65 to 1.95	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	
			2.3 to 2.7	1.6	-	-	1.6	-	
3.0 to 3.6	2.1	-	-	2.1	-				
V _{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	V
			1.1 to 1.3	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	
			1.4 to 1.6	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	
			1.65 to 1.95	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	
			2.3 to 2.7	-	-	0.7	-	0.7	
3.0 to 3.6	-	-	0.9	-	0.9				
V _{OH}	High-Level Output Voltage	V _{IN} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	
			1.65 to 1.95	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	
			2.3 to 2.7	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	
3.0 to 3.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-				
I _{OH}	HIGH Level Output Current	I _{OH} = -0.5 mA	1.1 to 1.3	0.75 × V _{CC}	-	-	0.70 × V _{CC}	-	
			1.4 to 1.6	1.07	-	-	0.99	-	
			1.65 to 1.95	1.24	-	-	1.22	-	
			2.3 to 2.7	1.95	-	-	1.87	-	
			3.0 to 3.6	2.61	-	-	2.56	-	
I _{OL}	LOW Level Output Current	I _{OL} = 20 μA	0.9	-	0.1	-	-	-	V
			1.1 to 1.3	-	-	0.1	-	0.1	
			1.4 to 1.6	-	-	0.1	-	0.1	
			1.65 to 1.95	-	-	0.1	-	0.1	
			2.3 to 2.7	-	-	0.1	-	0.1	
3.0 to 3.6	-	-	0.1	-	0.1				
I _{OH}	HIGH Level Output Current	I _{OH} = 0.5 mA	1.1 to 1.3	-	-	0.3 × V _{CC}	-	0.3 × V _{CC}	
			1.4 to 1.6	-	-	0.31	-	0.37	
			1.65 to 1.95	-	-	0.31	-	0.35	
			2.3 to 2.7	-	-	0.31	-	0.33	
			3.0 to 3.6	-	-	0.31	-	0.33	



NC7SP74 – AC Characteristics :

Existing Datasheet

AC Electrical Characteristics (10pF, 1MΩ)

Symbol	Parameter	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max			
f _{MAX}	Maximum Clock Frequency	0.9	-	40.0	-	-	-	MHz	C _L = 10 pF R _O = 1 MΩ	Figures 1, 5
		1.10 ≤ V _{CC} ≤ 1.30	50	-	50	-	-			
		1.40 ≤ V _{CC} ≤ 1.60	75	-	75	-	-			
		1.65 ≤ V _{CC} ≤ 1.95	100	-	100	-	-			
		2.30 ≤ V _{CC} ≤ 2.70	125	-	125	-	-			
3.00 ≤ V _{CC} ≤ 3.60	150	-	150	-	-					
t _{PLH} t _{PHL}	Propagation Delay CK to Q, Q̄	0.90	-	24.0	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	15.0	22.0	3.5				31.0
		1.40 ≤ V _{CC} ≤ 1.60	2.0	9.0	13.0	1.5				14.0
		1.65 ≤ V _{CC} ≤ 1.95	1.5	7.0	11.0	1.0				13.0
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	8.0	0.8				9.0
3.00 ≤ V _{CC} ≤ 3.60	1.0	4.0	7.0	0.5	8.0					
t _{PLH} t _{PHL}	Propagation Delay CLR, PR, to Q, Q̄	0.90	-	5.5	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	12.0	23.0	4.0				34.0
		1.40 ≤ V _{CC} ≤ 1.60	2.0	7.0	11.0	1.5				13.0
		1.65 ≤ V _{CC} ≤ 1.95	1.5	7.0	11.0	1.0				13.0
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	9.0	1.0				9.0
3.00 ≤ V _{CC} ≤ 3.60	1.0	4.0	7.0	1.0	8.0					
t _S	Setup Time, CK to D	0.90	-	10.0	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	7.0	-	7.0	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-				-
		1.65 ≤ V _{CC} ≤ 1.95	2.0	-	2.0	-				-
		2.30 ≤ V _{CC} ≤ 2.70	1.5	-	1.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	1.0	-	1.0	-	-					
t _H	Hold Time, CK to D	0.90	-	1.0	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	0.5	-	0.5	-				-
		1.40 ≤ V _{CC} ≤ 1.60	0.5	-	0.5	-				-
		1.65 ≤ V _{CC} ≤ 1.95	0.5	-	0.5	-				-
		2.30 ≤ V _{CC} ≤ 2.70	0.5	-	0.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	0.5	-	0.5	-	-					
t _{PW}	Pulse Width, CK, PR, CLR	0.90	-	5.0	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 5	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	-	5.0	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-				-
		1.65 ≤ V _{CC} ≤ 1.95	2.5	-	2.5	-				-
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	2.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-					
t _{REC}	Recover Time, CLR, PR to CK	0.90	-	12.0	-	-	ns	C _L = 10 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	8.5	-	8.5	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.5	-	3.5	-				-
		1.65 ≤ V _{CC} ≤ 1.95	3.0	-	3.0	-				-
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	2.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-					

New

AC Electrical Characteristics (R_L = 1 MΩ, C_L = 10 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
f _{MAX}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	MHz
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	75	-	-	75	-	
			1.65 to 1.95	100	-	-	100	-	
			2.3 to 2.7	125	-	-	125	-	
			3.0 to 3.6	150	-	-	150	-	
t _{PLH} t _{PHL}	Propagation Delay, CK to Q, Q̄ (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	31.0	
			1.4 to 1.6	-	TBD	13.0	-	14.0	
			1.65 to 1.95	-	TBD	11.0	-	13.0	
			2.3 to 2.7	-	TBD	8.0	-	9.0	
			3.0 to 3.6	-	TBD	7.0	-	8.0	
t _{PLH} t _{PHL}	Propagation Delay, CLR, PR to Q, Q̄ (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	34.0	
			1.4 to 1.6	-	TBD	12.0	-	14.0	
			1.65 to 1.95	-	TBD	11.0	-	13.0	
			2.3 to 2.7	-	TBD	9.0	-	9.0	
			3.0 to 3.6	-	TBD	7.0	-	8.0	
t _S	Setup Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.0	-	-	3.0	-	
			1.65 to 1.95	2.0	-	-	2.0	-	
			2.3 to 2.7	1.5	-	-	1.5	-	
			3.0 to 3.6	1.0	-	-	1.0	-	
t _H	Hold Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	0.5	-	-	0.5	-	
			1.65 to 1.95	0.5	-	-	0.5	-	
			2.3 to 2.7	0.5	-	-	0.5	-	
			3.0 to 3.6	0.5	-	-	0.5	-	
t _{PW}	Pulse Width, CK, CLR, PR (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.0	-	-	3.0	-	
			1.65 to 1.95	2.5	-	-	2.5	-	
			2.3 to 2.7	2.5	-	-	2.5	-	
			3.0 to 3.6	2.0	-	-	2.0	-	
t _{REC}	Recovery Time, CLR, PR to CK (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.5	-	-	3.5	-	
			1.65 to 1.95	3.0	-	-	3.0	-	
			2.3 to 2.7	2.5	-	-	2.5	-	
			3.0 to 3.6	2.0	-	-	2.0	-	

NC7SP74 – AC Characteristics (continued) :

Existing Datasheet

AC Electrical Characteristics (15pF, 1MΩ)

Symbol	Parameter	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max			
f _{MAX}	Maximum Clock Frequency	0.90	-	40.0	-	-	MHz	C _L = 15 pF R _O = 1 MΩ	Figures 1, 5	
		1.10 ≤ V _{CC} ≤ 1.30	50	-	150	-				-
		1.40 ≤ V _{CC} ≤ 1.60	75	-	200	-				-
		1.65 ≤ V _{CC} ≤ 1.95	100	-	250	-				-
		2.30 ≤ V _{CC} ≤ 2.70	125	-	175	-				-
3.00 ≤ V _{CC} ≤ 3.60	150	-	200	-	-					
t _{PLH} t _{PHL}	Propagation Delay CK to Q, Q̄	0.90	-	27.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	18.0	23.0	4.5				34.0
		1.40 ≤ V _{CC} ≤ 1.60	3.0	10.0	14.0	2.5				16.0
		1.65 ≤ V _{CC} ≤ 1.95	2.0	7.0	11.0	2.0				13.0
		2.30 ≤ V _{CC} ≤ 2.70	1.5	5.0	8.0	1.0				9.0
3.00 ≤ V _{CC} ≤ 3.60	1.0	4.0	7.0	0.5	8.0					
t _{PLH} t _{PHL}	Propagation Delay CLR, PR, to Q, Q̄	0.90	-	27.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	15.0	24.0	5.0				37.0
		1.40 ≤ V _{CC} ≤ 1.60	3.0	10.0	13.0	3.0				16.0
		1.65 ≤ V _{CC} ≤ 1.95	2.0	7.0	11.0	2.0				13.0
		2.30 ≤ V _{CC} ≤ 2.70	1.5	5.0	9.0	1.5				9.0
3.00 ≤ V _{CC} ≤ 3.60	1.0	4.0	7.0	1.0	8.0					
t _S	Setup Time, CK to D	0.90	-	10.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	7.0	-	7.0	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-				-
		1.65 ≤ V _{CC} ≤ 1.95	2.0	-	2.0	-				-
		2.30 ≤ V _{CC} ≤ 2.70	1.5	-	1.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	1.0	-	1.0	-	-					
t _H	Hold Time, CK to D	0.90	-	1.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	0.5	-	0.5	-				-
		1.40 ≤ V _{CC} ≤ 1.60	0.5	-	0.5	-				-
		1.65 ≤ V _{CC} ≤ 1.95	0.5	-	0.5	-				-
		2.30 ≤ V _{CC} ≤ 2.70	0.5	-	0.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	0.5	-	0.5	-	-					
t _{PW}	Pulse Width, CK, PR, CLR	0.90	-	5.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 5	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	-	5.0	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-				-
		1.65 ≤ V _{CC} ≤ 1.95	2.5	-	2.5	-				-
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	2.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-					
t _{REC}	Recover Time, CLR, PR to CK	0.90	-	12.0	-	-	ns	C _L = 15 pF R _O = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	8.5	-	8.5	-				-
		1.40 ≤ V _{CC} ≤ 1.60	3.5	-	3.5	-				-
		1.65 ≤ V _{CC} ≤ 1.95	3.0	-	3.0	-				-
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	2.5	-				-
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-					

New

AC Electrical Characteristics (R_L = 1 MΩ, C_L = 15 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
f _{MAX}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	MHz
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	75	-	-	TBD	-	
			1.65 to 1.95	100	-	-	TBD	-	
			2.3 to 2.7	125	-	-	TBD	-	
			3.0 to 3.6	150	-	-	TBD	-	
t _{PLH} t _{PHL}	Propagation Delay, CK to Q, Q̄ (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	34.0	
			1.4 to 1.6	-	TBD	14.0	-	16.0	
			1.65 to 1.95	-	TBD	11.0	-	13.0	
			2.3 to 2.7	-	TBD	8.0	-	9.0	
			3.0 to 3.6	-	TBD	7.0	-	8.0	
t _{PLH} t _{PHL}	Propagation Delay, CLR, PR to Q, Q̄ (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	37.0	
			1.4 to 1.6	-	TBD	13.0	-	16.0	
			1.65 to 1.95	-	TBD	11.0	-	13.0	
			2.						



NC7SP74 – AC Characteristics (continued) :

Existing Datasheet

AC Electrical Characteristics (30pF, 1M Ω)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
f _{max}	Maximum Clock Frequency	0.90	-	40.0	-	-	-	MHz	C _L = 30 pF R _D = 1 M Ω	Figures 1, 5	
		1.10 \leq V _{CC} \leq 1.30	50	18.0	150	-	-				
		1.40 \leq V _{CC} \leq 1.60	75	-	200	-	-				
		1.65 \leq V _{CC} \leq 1.95	100	-	250	-	-				
		2.30 \leq V _{CC} \leq 2.70	125	-	175	-	-				
3.00 \leq V _{CC} \leq 3.60	150	-	200	-	-						
t _{PHL}	Propagation Delay, CK to Q, \bar{Q}	0.90	-	34.0	-	-	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 3	
		1.10 \leq V _{CC} \leq 1.30	6.0	18.0	37.0	5.0	43.0				
		1.40 \leq V _{CC} \leq 1.60	4.0	11.0	17.0	3.0	18.0				
		1.65 \leq V _{CC} \leq 1.95	2.0	8.0	13.0	2.0	15.0				
		2.30 \leq V _{CC} \leq 2.70	1.0	6.0	10.0	1.0	11.0				
3.00 \leq V _{CC} \leq 3.60	0.8	5.0	8.0	0.5	10.0						
t _{PLH}	Propagation Delay, CLR, PR, to Q, \bar{Q}	0.90	-	34.0	-	-	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 3	
		1.10 \leq V _{CC} \leq 1.30	6.0	17.0	28.0	5.5	46.0				
		1.40 \leq V _{CC} \leq 1.60	4.0	11.0	16.0	3.5	18.0				
		1.65 \leq V _{CC} \leq 1.95	2.0	8.0	13.0	2.5	15.0				
		2.30 \leq V _{CC} \leq 2.70	1.0	6.0	9.0	1.5	11.0				
3.00 \leq V _{CC} \leq 3.60	0.8	5.0	8.0	1.0	10.0						
t ₀	Setup Time, CK to D	0.90	-	10.0	-	-	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 4	
		1.10 \leq V _{CC} \leq 1.30	7.0	7.0	7.0	-	-				
		1.40 \leq V _{CC} \leq 1.60	3.0	-	3.0	-	-				
		1.65 \leq V _{CC} \leq 1.95	2.0	-	2.0	-	-				
		2.30 \leq V _{CC} \leq 2.70	1.5	-	1.5	-	-				
3.00 \leq V _{CC} \leq 3.60	1.0	-	1.0	-	-						
t _H	Hold Time, CK to D	0.90	-	1.0	-	-	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 4	
		1.10 \leq V _{CC} \leq 1.30	0.5	-	0.5	-	-				
		1.40 \leq V _{CC} \leq 1.60	0.5	-	0.5	-	-				
		1.65 \leq V _{CC} \leq 1.95	0.5	-	0.5	-	-				
		2.30 \leq V _{CC} \leq 2.70	0.5	-	0.5	-	-				
3.00 \leq V _{CC} \leq 3.60	0.5	-	0.5	-	-						
t _w	Pulse Width, CK, PR, CLR	0.90	-	5.0	-	5.0	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 5	
		1.10 \leq V _{CC} \leq 1.30	7.0	-	4.0	-	-				
		1.40 \leq V _{CC} \leq 1.60	3.0	-	3.0	-	-				
		1.65 \leq V _{CC} \leq 1.95	2.5	-	2.0	-	-				
		2.30 \leq V _{CC} \leq 2.70	2.5	-	3.0	-	-				
3.00 \leq V _{CC} \leq 3.60	2.0	-	2.0	-	-						
t _{rec}	Recovery Time, CLR, PR to CK	0.90	-	12.0	-	-	-	ns	C _L = 30 pF R _D = 1 M Ω	Figures 1, 4	
		1.10 \leq V _{CC} \leq 1.30	9.5	-	8.5	-	-				
		1.40 \leq V _{CC} \leq 1.60	3.5	-	3.5	-	-				
		1.65 \leq V _{CC} \leq 1.95	3.0	-	3.0	-	-				
		2.30 \leq V _{CC} \leq 2.70	2.5	-	2.5	-	-				
3.00 \leq V _{CC} \leq 3.60	2.0	-	2.0	-	-						

New

AC Electrical Characteristics (R_L = 1 M Ω , C_L = 30 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
f _{max}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	MHz
			1.1 to 1.3	TBD	-	-	TBD	-	-	
			1.4 to 1.6	75	-	-	TBD	-	-	
			1.65 to 1.95	100	-	-	TBD	-	-	
			2.3 to 2.7	125	-	-	TBD	-	-	
			3.0 to 3.6	150	-	-	TBD	-	-	
t _{PHL}	Propagation Delay, CK to Q, \bar{Q} (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	-	43.0	
			1.4 to 1.6	-	TBD	17.0	-	-	18.0	
			1.65 to 1.95	-	TBD	13.0	-	-	15.0	
			2.3 to 2.7	-	TBD	10.0	-	-	11.0	
			3.0 to 3.6	-	TBD	8.0	-	-	10.0	
t _{PLH}	Propagation Delay, CLR, PR to Q, \bar{Q} (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	-	46.0	
			1.4 to 1.6	-	TBD	16.0	-	-	18.0	
			1.65 to 1.95	-	TBD	13.0	-	-	15.0	
			2.3 to 2.7	-	TBD	9.0	-	-	11.0	
			3.0 to 3.6	-	TBD	8.0	-	-	10.0	
t ₀	Setup Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	-	
			1.4 to 1.6	3.0	-	-	3.0	-	-	
			1.65 to 1.95	2.0	-	-	2.0	-	-	
			2.3 to 2.7	1.5	-	-	1.5	-	-	
			3.0 to 3.6	1.0	-	-	1.0	-	-	
t _H	Hold Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	-	
			1.4 to 1.6	0.5	-	-	0.5	-	-	
			1.65 to 1.95	0.5	-	-	0.5	-	-	
			2.3 to 2.7	0.5	-	-	0.5	-	-	
			3.0 to 3.6	0.5	-	-	0.5	-	-	
t _w	Pulse Width, CK, CLR, PR (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	-	
			1.4 to 1.6	3.0	-	-	3.0	-	-	
			1.65 to 1.95	2.5	-	-	2.5	-	-	
			2.3 to 2.7	2.5	-	-	2.5	-	-	
			3.0 to 3.6	2.0	-	-	2.0	-	-	
t _{rec}	Recovery Time, CLR, PR to CK (Figures 3 and 4)		0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	-	
			1.4 to 1.6	3.5	-	-	3.5	-	-	
			1.65 to 1.95	3.0	-	-	3.0	-	-	
			2.3 to 2.7	2.5	-	-	2.5	-	-	
			3.0 to 3.6	2.0	-	-	2.0	-	-	

NC7SV74 – Absolute Maximum Ratings :

Existing Datasheet

Absolute Maximum Ratings

Absolute Maximum Ratings: are those values beyond which the safety of the device cannot be guaranteed. The device should not be operated at these limits. The parametric values defined in the Electrical Characteristics tables are not guaranteed at the absolute maximum ratings. The "Recommended Operating Conditions" table will define the conditions for actual device operation. I_O Absolute Maximum Rating must be observed.

Supply Voltage (V _{CC})	-0.5V to +4.6V
DC Input Voltage (V _{IN})	-0.5V to +4.6V
DC Output Voltage (V _{OUT})	
HIGH or LOW State	-0.5V to V _{CC} + 0.5V
V _{CC} = 0V	-0.5V to +4.6V

New

Maximum Ratings

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +4.3	V
V _{IN}	DC Input Voltage	-0.5 to +4.3	V
V _{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to V _{CC} + 0.5
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode (V _{CC} = 0 V)	-0.5 to +4.3



NC7SV74 – DC Characteristics :

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions	
			Min.	Max.	Min.	Max.			
V _{IH}	High-Level Input Voltage	0.90	0.85 × V _{CC}	0.85 × V _{CC}	0.85 × V _{CC}	0.85 × V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	1.6	1.6	1.6	1.6			
2.70 ≤ V _{CC} ≤ 3.60	2.0	2.0	2.0	2.0					
V _{IL}	Low-Level Input Voltage	0.90	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	0.7	0.7	0.7	0.7			
2.70 ≤ V _{CC} ≤ 3.60	0.8	0.8	0.8	0.8					
V _{OH}	High-Level Output Voltage	0.90	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V	I _{OH} = -100 mA	
		1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2			
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2			
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2			
		2.70 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2	V _{CC} - 0.2			
		1.10 ≤ V _{CC} ≤ 1.30	0.75 × V _{CC}	0.75 × V _{CC}	0.75 × V _{CC}	0.75 × V _{CC}			I _{OH} = -2.0 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.75 × V _{CC}	0.75 × V _{CC}	0.75 × V _{CC}	0.75 × V _{CC}			I _{OH} = -4.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	1.25	1.25	1.25	1.25			I _{OH} = -6.0 mA
		2.30 ≤ V _{CC} ≤ 2.70	2.0	2.0	2.0	2.0			I _{OH} = -12.0 mA
		2.70 ≤ V _{CC} ≤ 3.60	1.8	1.8	1.8	1.8			I _{OH} = -18.0 mA
		1.10 ≤ V _{CC} ≤ 1.30	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}			I _{OH} = -2.0 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}			I _{OH} = -4.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	0.3	0.3	0.3	0.3			I _{OH} = -6.0 mA
		2.30 ≤ V _{CC} ≤ 2.70	0.4	0.4	0.4	0.4			I _{OH} = -12.0 mA
2.70 ≤ V _{CC} ≤ 3.60	0.6	0.6	0.6	0.6	I _{OH} = -18.0 mA				
2.70 ≤ V _{CC} ≤ 3.60	0.4	0.4	0.4	0.4	I _{OH} = -24.0 mA				
2.70 ≤ V _{CC} ≤ 3.60	0.55	0.55	0.55	0.55	I _{OH} = -24.0 mA				
V _{OL}	Low-Level Output Voltage	0.90	0.1	0.1	0.1	0.1	V	I _{OL} = 100 mA	
		1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	0.1	0.1			
		1.40 ≤ V _{CC} ≤ 1.60	0.2	0.2	0.2	0.2			
		1.65 ≤ V _{CC} ≤ 1.95	0.2	0.2	0.2	0.2			
		2.30 ≤ V _{CC} ≤ 2.70	0.2	0.2	0.2	0.2			
		2.70 ≤ V _{CC} ≤ 3.60	0.2	0.2	0.2	0.2			
		1.10 ≤ V _{CC} ≤ 1.30	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}			I _{OL} = 2.0 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}	0.25 × V _{CC}			I _{OL} = 4.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	0.3	0.3	0.3	0.3			I _{OL} = 6.0 mA
		2.30 ≤ V _{CC} ≤ 2.70	0.4	0.4	0.4	0.4			I _{OL} = 12.0 mA
		2.70 ≤ V _{CC} ≤ 3.60	0.6	0.6	0.6	0.6			I _{OL} = 18.0 mA
		2.70 ≤ V _{CC} ≤ 3.60	0.4	0.4	0.4	0.4			I _{OL} = 24.0 mA
		2.70 ≤ V _{CC} ≤ 3.60	0.55	0.55	0.55	0.55			I _{OL} = 24.0 mA

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	T _A = 25 °C			T _A = -40°C to +85°C		Unit	
			V _{CC} (V)	Min	Typ	Max	Min		Max
V _{IH}	High-Level Input Voltage		0.9	0.9	0.5	-	-	V	
			1.1 to 1.3	0.65 × V _{CC}	-	-	0.65 × V _{CC}		-
			1.4 to 1.6	0.65 × V _{CC}	-	-	0.65 × V _{CC}		-
			1.65 to 1.95	0.65 × V _{CC}	-	-	0.65 × V _{CC}		-
			2.3 to < 2.7	1.6	-	-	1.6		-
2.7 to 3.6	2.0	-	-	2.0	-				
V _{IL}	Low-Level Input Voltage		0.9	0.9	0.5	-	-	V	
			1.1 to 1.3	-	-	0.35 × V _{CC}	-		0.35 × V _{CC}
			1.4 to 1.6	-	-	0.35 × V _{CC}	-		0.35 × V _{CC}
			1.65 to 1.95	-	-	0.35 × V _{CC}	-		0.35 × V _{CC}
			2.3 to < 2.7	0.7	-	0.7	-		0.7
2.7 to 3.6	0.8	-	0.8	-	0.8				
V _{OH}	High-Level Output Voltage	V _{IH} = V _{IH} (V) I _{OH} = -100 μA	0.9	V _{CC} - 0.1	V _{CC} - 0.1	-	-	V	
			1.1 to 1.3	V _{CC} - 0.1	V _{CC} - 0.1	-	V _{CC} - 0.1		-
			1.4 to 1.6	V _{CC} - 0.2	V _{CC} - 0.2	-	V _{CC} - 0.2		-
			1.65 to 1.95	V _{CC} - 0.2	V _{CC} - 0.2	-	V _{CC} - 0.2		-
			2.3 to < 2.7	V _{CC} - 0.2	V _{CC} - 0.2	-	V _{CC} - 0.2		-
			2.7 to 3.6	V _{CC} - 0.2	V _{CC} - 0.2	-	V _{CC} - 0.2		-
			1.1 to 1.3	0.75 × V _{CC}	0.75 × V _{CC}	-	0.75 × V _{CC}		-
			1.4 to 1.6	0.75 × V _{CC}	0.75 × V _{CC}	-	0.75 × V _{CC}		-
			1.65 to 1.95	1.25	1.25	-	1.25		-
			2.3 to 2.7	2.0	2.0	-	2.0		-
			2.7 to 3.6	1.8	1.8	-	1.8		-
			2.7 to 3.6	2.2	2.2	-	2.2		-
			2.7 to 3.6	1.7	1.7	-	1.7		-
			2.7 to 3.6	2.4	2.4	-	2.4		-
			2.7 to 3.6	2.2	2.2	-	2.2		-
V _{OL}	Low-Level Output Voltage	V _{IH} = V _{IH} (V) I _{OL} = 100 μA	0.9	0.1	0.1	-	-	V	
			1.1 to 1.3	-	-	0.1	-		0.1
			1.4 to 1.6	-	-	0.2	-		0.2
			1.65 to 1.95	-	-	0.2	-		0.2
			2.3 to < 2.7	-	-	0.2	-		0.2
			2.7 to 3.6	-	-	0.2	-		0.2
			I _{OL} = 2 mA	-	-	0.25 × V _{CC}	-		0.25 × V _{CC}
			I _{OL} = 4 mA	-	-	0.25 × V _{CC}	-		0.25 × V _{CC}
			I _{OL} = 6 mA	-	-	0.3	-		0.3
			I _{OL} = 12 mA	-	-	0.4	-		0.4
			I _{OL} = 18 mA	-	-	0.6	-		0.6
			I _{OL} = 24 mA	-	-	0.4	-		0.4
			I _{OL} = 24 mA	-	-	0.55	-		0.55

NC7SV74 – AC Characteristics :

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Figure Number	
			Min.	Typ.	Max.	Min.			Max.
f _{MAX}	Maximum Clock Frequency	0.90	50	-	-	-	MHz	Figure 1 Figure 5	
		1.10 ≤ V _{CC} ≤ 1.30	150	-	150	-			
		1.40 ≤ V _{CC} ≤ 1.60	200	-	200	-			
		1.65 ≤ V _{CC} ≤ 1.95	200	-	200	-			
		2.30 ≤ V _{CC} ≤ 2.70	200	-	200	-			
2.70 ≤ V _{CC} ≤ 3.60	200	-	200	-					
t _{PLH}	Propagation Delay, CK to Q, Q̄	0.90	13.0	-	-	-	ns	Figure 1 Figure 3	
		1.10 ≤ V _{CC} ≤ 1.30	3.0	6.0	9.9	1.0			14.6
		1.40 ≤ V _{CC} ≤ 1.60	1.0	3.2	6.0	1.0			7.2
		1.65 ≤ V _{CC} ≤ 1.95	1.0	1.9	4.5	1.0			5.3
		2.30 ≤ V _{CC} ≤ 2.70	0.8	1.3	3.0	0.7			3.9
2.70 ≤ V _{CC} ≤ 3.60	0.7	1.0	2.8	0.6	3.2				
t _{PLH}	Propagation Delay, CLR, PR to Q, Q̄	0.90	14.0	-	-	-	ns	Figure 1 Figure 3	
		1.10 ≤ V _{CC} ≤ 1.30	3.0	6.5	10.5	1.0			15.1
		1.40 ≤ V _{CC} ≤ 1.60	1.0	3.2	6.0	1.0			7.2
		1.65 ≤ V _{CC} ≤ 1.95	1.0	1.9	4.5	1.0			5.3
		2.30 ≤ V _{CC} ≤ 2.70	0.8	1.2	3.0	0.7			3.7
2.70 ≤ V _{CC} ≤ 3.60	0.7	1.0	2.8	0.6	3.2				
t _S	Setup Time, CK to D	0.90	6.5	6.5	-	-	ns	Figure 1 Figure 4	
		1.10 ≤ V _{CC} ≤ 1.30	3.5	3.5	-	-			
		1.40 ≤ V _{CC} ≤ 1.60	2.0	2.0	-	-			
		1.65 ≤ V _{CC} ≤ 1.95	1.5	1.5	-	-			
		2.30 ≤ V _{CC} ≤ 2.70	2.0	2.0	-	-			
2.70 ≤ V _{CC} ≤ 3.60	1.5	1.5	-	-					
t _H	Hold Time, CK to D	0.90	0.5	0.5	-	-	ns	Figure 1 Figure 4	
		1.10 ≤ V _{CC} ≤ 1.30	0.5	0.5	-	-			
		1.40 ≤ V _{CC} ≤ 1.60	0.5	0.5	-	-			
		1.65 ≤ V _{CC} ≤ 1.95	0.5	0.5	-	-			
		2.30 ≤ V _{CC} ≤ 2.70	0.5	0.5	-	-			
2.70 ≤ V _{CC} ≤ 3.60	0.5	0.5	-	-					
t _{PW}	Pulse Width, CK, PR, CLR	0.90	7.0	7.0	-	-	ns	Figure 1 Figure 5	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	4.0	-	-			
		1.40 ≤ V _{CC} ≤ 1.60	3.0	3.0	-	-			
		1.65 ≤ V _{CC} ≤ 1.95	3.0	3.0	-	-			
		2.30 ≤ V _{CC} ≤ 2.70	3.0	3.0	-	-			
2.70 ≤ V _{CC} ≤ 3.60	3.0	3.0	-	-					
t _{REC}	Recover Time, CLR, PR to CK	0.90	6.0	6.0	-	-	ns	Figure 1 Figure 4	
		1.10 ≤ V _{CC} ≤ 1.30	4.5	4.5	-	-			
		1.40 ≤ V _{CC} ≤ 1.60	3.0	3.0	-	-			
		1.65 ≤ V _{CC} ≤ 1.95	3.0	3.0	-	-			
		2.30 ≤ V _{CC} ≤ 2.70	3.0	3.0	-	-			
2.70 ≤ V _{CC} ≤ 3.60	3.0	3.0	-	-					

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	T _A = 25 °C			T _A = -40°C to +85°C		Unit	
			V _{CC} (V)	Min	Typ	Max	Min		Max
f _{MAX}	Maximum Clock Frequency	R _L = 1 MΩ, C _L = 15 pF R _L = 2 kΩ, C _L = 15 pF (Figures 3 and 4)	0.9	TBD	TBD	-	TBD	MHz	
			1.1 to 1.3	TBD	-	-	TBD		
			1.4 to 1.6	200	-	-	200		
			1.65 to 1.95	200	-	-	200		
			2.3 to 2.7	200	-	-	200		
3.0 to 3.6	200	-	-	200					
t _{PLH}	Propagation Delay, CK to Q, Q̄	R _L = 1 MΩ, C _L = 15 pF R _L = 2 kΩ, C _L = 15 pF R _L = 500 Ω, C _L = 30 pF	0.9	TBD	TBD	-	-	ns	
			1.1 to 1.3	TBD	TBD	-	14.6		
			1.4 to 1.6	TBD	TBD	6.0	-		7.2
			1.65 to 1.95	TBD	TBD	4.5	-		5.3
			2.3 to 2.7						



NC7WV125 – Absolute Maximum Ratings :

Existing Datasheet

Absolute Maximum Ratings (Note 1)

Supply Voltage (V_{CC})	-0.5V to +4.6V
DC Input Voltage (V_{IN})	-0.5V to +4.6V
DC Output Voltage (V_{OUT})	-0.5V to +7.0V
HIGH or LOW State (Note 2)	-0.5V to $V_{CC} + 0.5V$
$V_{CC} = 0V$	-0.5V to 4.6V

Maximum Ratings

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IN}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to $V_{CC} + 0.5$
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3

NC7WV125 – DC Characteristics :

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V_{CC} (V)	$T_A = +25^\circ C$		$T_A = -40^\circ C$ to $+85^\circ C$		Units	Conditions	
			Min.	Max.	Min.	Max.			
V_{IH}	HIGH Level Input Voltage	0.90	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	V		
		$1.10 \leq V_{CC} \leq 1.30$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$			
		$1.40 \leq V_{CC} \leq 1.80$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$			
		$1.65 \leq V_{CC} \leq 1.95$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$	0.65 $\times V_{CC}$			
		$2.30 \leq V_{CC} \leq 2.70$	1.6	1.6	1.6	1.6			
V_{IL}	LOW Level Input Voltage	0.90	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	V		
		$1.10 \leq V_{CC} \leq 1.30$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$			
		$1.40 \leq V_{CC} \leq 1.80$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$			
		$1.65 \leq V_{CC} \leq 1.95$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$	0.35 $\times V_{CC}$			
		$2.30 \leq V_{CC} \leq 2.70$	0.7	0.7	0.7	0.7			
V_{OH}	HIGH Level Output Voltage	0.90	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	V	$I_{OH} = -100 \mu A$	
		$1.10 \leq V_{CC} \leq 1.30$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$			
		$1.40 \leq V_{CC} \leq 1.80$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$			
		$1.65 \leq V_{CC} \leq 1.95$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$			
		$2.30 \leq V_{CC} \leq 2.70$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$	$V_{CC} - 0.2$			
		$1.10 \leq V_{CC} \leq 1.30$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$			$I_{OH} = -2.0 \text{ mA}$
		$1.40 \leq V_{CC} \leq 1.80$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$	0.75 $\times V_{CC}$			$I_{OH} = -6.0 \text{ mA}$
		$1.65 \leq V_{CC} \leq 1.95$	1.25	2.0	1.25	2.0			$I_{OH} = -4.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	1.8	1.8	1.8	1.8			$I_{OH} = -12.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	2.2	2.2	2.2	2.2			$I_{OH} = -18.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	1.7	1.7	1.7	1.7			$I_{OH} = -18.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	2.4	2.4	2.4	2.4			$I_{OH} = -24.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	2.2	2.2	2.2	2.2			$I_{OH} = -24.0 \text{ mA}$
V_{OL}	LOW Level Output Voltage	0.90	0.1	0.1	0.1	0.1	V	$I_{OL} = 100 \mu A$	
		$1.10 \leq V_{CC} \leq 1.30$	0.2	0.2	0.2	0.2			
		$1.40 \leq V_{CC} \leq 1.80$	0.2	0.2	0.2	0.2			
		$1.65 \leq V_{CC} \leq 1.95$	0.2	0.2	0.2	0.2			
		$2.30 \leq V_{CC} \leq 2.70$	0.2	0.2	0.2	0.2			
		$1.10 \leq V_{CC} \leq 1.30$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$			$I_{OL} = 2.0 \text{ mA}$
		$1.40 \leq V_{CC} \leq 1.80$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$	0.25 $\times V_{CC}$			$I_{OL} = 4.0 \text{ mA}$
		$1.65 \leq V_{CC} \leq 1.95$	0.3	0.3	0.3	0.3			$I_{OL} = 6.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	0.4	0.4	0.4	0.4			$I_{OL} = 12.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	0.6	0.6	0.6	0.6			$I_{OL} = 18.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	0.4	0.4	0.4	0.4			$I_{OL} = 18.0 \text{ mA}$
		$2.30 \leq V_{CC} \leq 2.70$	0.55	0.55	0.55	0.55			$I_{OL} = 24.0 \text{ mA}$

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Unit	
				Min	Typ	Max	Min	Max			
V_{IH}	High-Level input Voltage		0.9	0.5	-	-	0.65 $\times V_{CC}$	-	-	V	
			1.1 to 1.3	0.65 $\times V_{CC}$	-	-	0.65 $\times V_{CC}$	-	-		
			1.4 to 1.6	0.65 $\times V_{CC}$	-	-	0.65 $\times V_{CC}$	-	-		
			1.65 to 1.95	0.65 $\times V_{CC}$	-	-	0.65 $\times V_{CC}$	-	-		
			2.3 to 2.7	1.6	-	-	1.6	-	-		
V_{IL}	Low-Level input Voltage		0.9	-	0.5	-	0.35 $\times V_{CC}$	-	0.35 $\times V_{CC}$	V	
			1.1 to 1.3	-	-	0.35 $\times V_{CC}$	-	0.35 $\times V_{CC}$			
			1.4 to 1.6	-	-	0.35 $\times V_{CC}$	-	0.35 $\times V_{CC}$			
			1.65 to 1.95	-	-	0.35 $\times V_{CC}$	-	0.35 $\times V_{CC}$			
			2.3 to 2.7	-	-	0.7	-	0.7			
V_{OH}	High-Level Output Voltage	$V_{IH} = V_{IH} \text{ or } V_{IL}$ $I_{OH} = -100 \mu A$	0.9	-	$V_{CC} - 0.1$	-	$V_{CC} - 0.1$	-	-	V	
			1.1 to 1.3	$V_{CC} - 0.1$	-	-	$V_{CC} - 0.1$	-	-		
			1.4 to 1.6	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-		
			1.65 to 1.95	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-		
			2.3 to 2.7	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-		
			1.1 to 1.3	0.75 $\times V_{CC}$	-	-	0.75 $\times V_{CC}$	-	-		$I_{OH} = -2.0 \text{ mA}$
			1.4 to 1.6	0.75 $\times V_{CC}$	-	-	0.75 $\times V_{CC}$	-	-		$I_{OH} = -6.0 \text{ mA}$
			1.65 to 1.95	1.25	-	-	1.25	-	-		$I_{OH} = -4.0 \text{ mA}$
			2.3 to 2.7	2.0	-	-	2.0	-	-		$I_{OH} = -12.0 \text{ mA}$
			2.3 to 2.7	1.8	-	-	1.8	-	-		$I_{OH} = -18.0 \text{ mA}$
			2.3 to 2.7	2.2	-	-	2.2	-	-		$I_{OH} = -18.0 \text{ mA}$
			2.3 to 2.7	1.7	-	-	1.7	-	-		$I_{OH} = -18.0 \text{ mA}$
			2.3 to 2.7	2.4	-	-	2.4	-	-		$I_{OH} = -24.0 \text{ mA}$
2.3 to 2.7	2.2	-	-	2.2	-	-	$I_{OH} = -24.0 \text{ mA}$				
V_{OL}	Low-Level Output Voltage	$V_{IH} = V_{IH} \text{ or } V_{IL}$ $I_{OL} = 100 \mu A$	0.9	-	0.1	-	-	-	0.1	V	
			1.1 to 1.3	-	-	0.1	-	-	0.1		
			1.4 to 1.6	-	-	0.2	-	-	0.2		
			1.65 to 1.95	-	-	0.2	-	-	0.2		
			2.3 to 2.7	-	-	0.2	-	-	0.2		
			1.1 to 1.3	-	-	0.25 $\times V_{CC}$	-	-	0.25 $\times V_{CC}$		$I_{OL} = 2.0 \text{ mA}$
			1.4 to 1.6	-	-	0.25 $\times V_{CC}$	-	-	0.25 $\times V_{CC}$		$I_{OL} = 4.0 \text{ mA}$
			1.65 to 1.95	-	-	0.3	-	-	0.3		$I_{OL} = 6.0 \text{ mA}$
			2.3 to 2.7	-	-	0.3	-	-	0.3		$I_{OL} = 12.0 \text{ mA}$
			2.3 to 2.7	-	-	0.4	-	-	0.4		$I_{OL} = 18.0 \text{ mA}$
			2.3 to 2.7	-	-	0.6	-	-	0.6		$I_{OL} = 18.0 \text{ mA}$
			2.3 to 2.7	-	-	0.4	-	-	0.4		$I_{OL} = 24.0 \text{ mA}$
			2.3 to 2.7	-	-	0.55	-	-	0.55		$I_{OL} = 24.0 \text{ mA}$

NC7WV125 – AC Characteristics :

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V_{CC} (V)	$T_A = +25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t_{PHL} t_{PLH}	Propagation Delay	0.90	13.0	-	-	-	-	ns	$C_L = 15 \text{ pF}, R_L = 1 \text{ k}\Omega$ $C_L = 15 \text{ pF}, R_L = 2 \text{ k}\Omega$	Figures 1, 2	
		$1.10 \leq V_{CC} \leq 1.30$	3.0	6.0	9.8	1.9	14.9				
		$1.40 \leq V_{CC} \leq 1.80$	1.0	3.5	5.3	0.8	5.7				
		$1.65 \leq V_{CC} \leq 1.95$	0.9	3.0	4.6	0.8	4.9				
		$2.30 \leq V_{CC} \leq 2.70$	0.8	2.0	3.3	0.7	3.5				
t_{PZH} t_{PZL}	Enable Time	0.90	14.0	-	-	-	-	ns	$C_L = 30 \text{ pF}$ $R_D = 1 \text{ k}\Omega$ $S_1 = \text{GND for } t_{PZH}$ $S_1 = V_I \text{ for } t_{PZL}$ $V_I = 2 \times V_{CC}$	Figures 1, 2	
		$1.10 \leq V_{CC} \leq 1.30$	3.0	6.0	9.7	2.0	16.4				
		$1.40 \leq V_{CC} \leq 1.80$	1.2	4.0	6.0	1.0	7.5				
		$1.65 \leq V_{CC} \leq 1.95$	1.0	3.0	4.7	0.9	5.2				
		$2.30 \leq V_{CC} \leq 2.70$	0.8	2.0	3.5	0.7	3.7				
t_{PHZ} t_{PLZ}	Disable Time	0.90	14.0	-	-	-	-	ns	$C_L = 30 \text{ pF}$ $R_D = 1 \text{ k}\Omega$ $S_1 = \text{GND for } t_{PHZ}$ $S_1 = V_I \text{ for } t_{PLZ}$ $V_I = 2 \times V_{CC}$	Figures 1, 2	
		$1.10 \leq V_{CC} \leq 1.30$	2.0	5.0	9.5	2.0	14.0				
		$1.40 \leq V_{CC} \leq 1.80$	1.2	3.0	5.9	1.1	7.1				
		$1.65 \leq V_{CC} \leq 1.95$	1.0	2.0	6.3	0.8	6.5				
		$2.30 \leq V_{CC} \leq 2.70$	0.8	1.5	5.3	0.5	5.5				

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Unit
				Min	Typ	Max	Min	Max		
t_{bu} t_{bu}	Propagation Delay, A to Y (Figures 3 and 4)	$R_L = 1 \text{ M}\Omega, C_L = 15 \text{ pF}$ $R_L = 2 \text{ k}\Omega, C_L = 15 \text{ pF}$ $R_L = 500 \Omega, C_L = 30 \text{ pF}$	0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	5.3	-	5.7		
			1.65 to 1.95	-	TBD	4.3	-	4.6		
			2.3 to 2.7	-	TBD	2.8	-	3.0		
t_{bu} t_{bu}	Output Enable Time, OE to Y (Figures 3 and 4)	$R_L = R_L = 1 \text{ k}\Omega$ $C_L = 30 \text{ pF}$	0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	6.0	-	7.5		
			1.65 to 1.95	-	TBD	4.5	-	5.0		
			2.3 to 2.7	-	TBD	3.0	-	3.4		
t_{bu} t_{bu}	Output Disable Time, OE to Y (Figures 3 and 4)	$R_L = R_L = 1 \text{ k}\Omega$ $C_L = 30 \text{ pF}$	0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	5.5	-	7.0		
			1.65 to 1.95	-	TBD	5.6	-	5.8		
			2.3 to 2.7	-	TBD	4.2	-	5.0		

**Qualification Plan:**

QV DEVICE NAME: NC7SV74K8X

RMS: S60403

PACKAGE : US8

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 120 % max rated Vcc	2016 hours
HTSL	JESD22-A103	Ta= 150°C	2016 hours
TC + PC	JESD22-A104	Ta= -65°C to +150°C	1000 cycles
HAST + PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hours
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-

Estimated date for qualification completion: 30 July 2020

List of Affected 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](#).

Part Number	Qualification Vehicle
NC7SP74K8X	NC7SV74K8X
NC7NP14K8X	NC7SV74K8X
NC7WP125K8X	NC7SV74K8X
NC7SV74K8X	NC7SV74K8X
NC7WP00K8X	NC7SV74K8X
NC7WP02K8X	NC7SV74K8X
NC7WP08K8X	NC7SV74K8X
NC7WP32K8X	NC7SV74K8X
NC7WV125K8X	NC7SV74K8X
NC7NP34K8X	NC7SV74K8X

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。



初回製品 / プロセス変更通知

文書番号 : IPCN23161X

発行日 : 05 Aug 2020

変更件名:	US8 パッケージにおける BOM 変更を伴う Minigates (3.3V) TPSCO ウェハの認定		
初回出荷予定日:	10 Dec 2020 またはお客様からの承認が得られた場合はそれ以前		
連絡先情報:	現地のオン・セミコンダクター営業所または < SiewWan.Shee@onsemi.com > にお問い合わせください。		
サンプル:	現地のオン・セミコンダクター営業所または < PCN.Samples@onsemi.com > にお問い合わせください。 サンプルは、この変更の初回通知、初回 PCN の日付から 30 日以内に要求してください。 サンプル納入時は、依頼日、数量、特別梱包材/ラベル条件によって異なります。		
通知種別:	これは、お客様宛の初回製品 / プロセス変更通知 (IPCN) です。IPCN は、近日中に実施される変更に関する事前通知であり、変更の詳細および影響を受けるデバイスについての一般情報が記載されます。また、暫定的な信頼性認証計画も記載されます。 最終的な認定データおよび特性データは最終製品 / プロセス変更通知 (FPCN) に含まれます。この IPCN は、変更実施から少なくとも 90 日前に発行される最終製品 / プロセス変更通知 (FPCN) に先だつて通知されます。ご不明な点がありましたら、< PCN.Support@onsemi.com > にお問い合わせください。		
部品のマーキング/変更のトレーサビリティ:	ラベルの CS コードは US から JP に変更されます。		
変更カテゴリ:	テストの変更、ウェハ製造拠点の変更、組立の変更		
変更サブカテゴリ:	製造拠点の移管、製造プロセスの変更、材料の変更、データシート/製品資料の変更、出荷/梱包/マーキング		
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:		
ON Semiconductor Maine, United States	HANA Semiconductor, Thailand		
ON Semiconductor Seremban, Malaysia	STARS Microelectronics, Thailand		
	Towerjazz Semiconductor, Japan (Toyama)		
説明および目的:	生産能力を拡大するために、旧 Fairchild の TinyLogic® の新しいダイ供給元と、新しい組立拠点への移転を認定します。		
変更される項目	変更前の表記	変更後の表記	
リードフレーム	リードフレーム 50X35 MILS	LF、PPF+ME2、US8、DAP 59x38	LF US8 μPPF RT-UPG 4-タイパー (PPF)
ダイ接着剤	エポキシ ABLESTIK 84-1 LMIS	非導電 DAF、HR-5140	DA AB 8006NS 10CC (非導電) (WBC)
ボンドワイヤ	Au	PCC	PCC
モールド・コンパウンド	MC SUM EMEG600 HF	モールドコンパウンド G600	MC SUMITOMO EME-G600FB (ハロゲンフリー)
組立拠点	外注工場 タイ	外注工場 タイ	オン・セミコンダクター マレーシア
ダイ供給	オン・セミコンダクター サウスポートランド	外注工場 日本	外注工場 日本
めっき	100% Sn	めっき事前処理済み	めっき事前処理済み



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

データシートの変更:

仕様や仕様条件の変更に関する新旧データシート間での比較を以下に示します。

- 変更箇所は赤色の丸で囲まれています。
- 旧データシートから変更される項目は赤色でハイライトされています。
- 新データシートで対応する値は緑色でハイライトされています。
- これらの変更はファミリー仕様として加えられる変更例であることにご注意ください。個々の製品番号に影響を及ぼす規格への変更にもご注意ください。

他にもファミリーに合わせて仕様フォーマットを表現するためにデータシートの整理と標準化をしたことによる変更があります。これらの変更は、以下のような形で行われます。

- スペルなどの事務的なミス訂正。
- ファミリーの標準化を作成するための書式設定。
- 新しいパッケージタイプの追加、および入手できなくなったパッケージの削除見込み。
- スイッチング波形試験回路図の標準化。
- マーキング、およびテープまたはリールでのピン 1 の向きに関して、お客様にさらに情報を提供するための、製品注文情報の書式設定。

NC7WP/NP- 絶対最大定格:

Existing Datasheet

Absolute Maximum Ratings (Note 1)	
Supply Voltage (V_{CC})	-0.5V to +4.6V
DC Input Voltage (V_{IN})	-0.5V to +4.6V
DC Output Voltage (V_{OUT})	-0.5V to $V_{CC} + 0.5V$
HIGH or LOW State (Note 2)	-0.5V to $V_{CC} + 0.5V$
$V_{CC} = 0V$	-0.5V to +4.6V

Symbol	Parameter	Rating
V_{CC}	Supply Voltage	-0.5V to +4.6V
V_{IN}	DC Input Voltage	-0.5V to +4.6V
V_{OUT}	DC Output Voltage	-0.5V to $V_{CC} + 0.5V$
	HIGH or LOW State ⁽¹⁾	-0.5V to +4.6V
	$V_{CC} = 0V$	-0.5V to +4.6V

New

Maximum Ratings			
Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IN}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to $V_{CC} + 0.5$
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3

Maximum Ratings			
Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IN}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to $V_{CC} + 0.5$
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3

NC7NP14 を除く NC7WP/NP - DC 特性:



Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions	
			Min	Max	Min	Max			
V _{IH}	HIGH Level Input Voltage	0.90	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	1.6	1.6	1.6	1.6			
		3.00 ≤ V _{CC} ≤ 3.60	2.1	2.1	2.1	2.1			
V _{IL}	LOW Level Input Voltage	0.90	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	V		
		1.10 ≤ V _{CC} ≤ 1.30	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		1.40 ≤ V _{CC} ≤ 1.60	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		1.65 ≤ V _{CC} ≤ 1.95	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}			
		2.30 ≤ V _{CC} ≤ 2.70	0.7	0.7	0.7	0.7			
		3.00 ≤ V _{CC} ≤ 3.60	0.7	0.7	0.7	0.7			
V _{OH}	HIGH Level Output Voltage	0.90	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V	I _{OH} = -20 μA	
		1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1			
		1.10 ≤ V _{CC} ≤ 1.30	0.75 × V _{CC}	0.70 × V _{CC}	0.70 × V _{CC}	0.70 × V _{CC}			I _{OH} = -0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	1.07	0.99	0.99	0.99			I _{OH} = -1.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	1.24	1.22	1.22	1.22			I _{OH} = -1.5 mA
		2.30 ≤ V _{CC} ≤ 2.70	1.95	1.87	1.87	1.87			I _{OH} = -2.1 mA
		3.00 ≤ V _{CC} ≤ 3.60	2.61	2.55	2.55	2.55			I _{OH} = -2.6 mA
		3.00 ≤ V _{CC} ≤ 3.60	0.31	0.33	0.33	0.33			I _{OH} = -2.6 mA
V _{OL}	LOW Level Output Voltage	0.90	0.1	0.1	0.1	0.1	V	I _{OL} = 20 μA	
		1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	0.1	0.1			
		1.40 ≤ V _{CC} ≤ 1.60	0.1	0.1	0.1	0.1			
		1.65 ≤ V _{CC} ≤ 1.95	0.1	0.1	0.1	0.1			
		2.30 ≤ V _{CC} ≤ 2.70	0.1	0.1	0.1	0.1			
		3.00 ≤ V _{CC} ≤ 3.60	0.1	0.1	0.1	0.1			
		1.10 ≤ V _{CC} ≤ 1.30	0.30 × V _{CC}	0.30 × V _{CC}	0.30 × V _{CC}	0.30 × V _{CC}			I _{OL} = 0.5 mA
		1.40 ≤ V _{CC} ≤ 1.60	0.31	0.37	0.37	0.37			I _{OL} = 1.0 mA
		1.65 ≤ V _{CC} ≤ 1.95	0.31	0.35	0.35	0.35			I _{OL} = 1.5 mA
		2.30 ≤ V _{CC} ≤ 2.70	0.31	0.33	0.33	0.33			I _{OL} = 2.1 mA
		3.00 ≤ V _{CC} ≤ 3.60	0.31	0.33	0.33	0.33			I _{OL} = 2.6 mA
		3.00 ≤ V _{CC} ≤ 3.60	0.31	0.33	0.33	0.33			I _{OL} = 2.6 mA

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit	
				Min	Typ	Max	Min	Max		
V _{IH}	High-Level Input Voltage		0.9	-	0.5	-	-	-	V	
			1.1 to 1.3	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			1.4 to 1.6	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			1.65 to 1.95	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			2.3 to 2.7	1.6	-	-	1.6	-		
			3.0 to 3.6	2.1	-	-	2.1	-		
V _{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	V	
			1.1 to 1.3	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			1.4 to 1.6	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			1.65 to 1.95	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			2.3 to 2.7	-	-	0.7	-	0.7		
			3.0 to 3.6	-	-	0.9	-	0.9		
V _{OH}	High-Level Output Voltage	V _{IH} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V	
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.65 to 1.95	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			2.3 to 2.7	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			3.0 to 3.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			I _{OH} = -0.5 mA	1.1 to 1.3	0.75 × V _{CC}	-	-	0.70 × V _{CC}		-
			I _{OH} = -1 mA	1.4 to 1.6	1.07	-	-	0.99		-
			I _{OH} = -1.5 mA	1.65 to 1.95	1.24	-	-	1.22		-
			I _{OH} = -2.1 mA	2.3 to 2.7	1.95	-	-	1.87		-
			I _{OH} = -2.6 mA	3.0 to 3.6	2.61	-	-	2.55		-
			3.0 to 3.6	2.61	-	-	2.55	-		
V _{OL}	Low-Level Output Voltage	V _{IH} = V _{IH} or V _{IL} I _{OL} = 20 μA	0.9	-	0.1	-	-	-	V	
			1.1 to 1.3	-	-	0.1	-	0.1		
			1.4 to 1.6	-	-	0.1	-	0.1		
			1.65 to 1.95	-	-	0.1	-	0.1		
			2.3 to 2.7	-	-	0.1	-	0.1		
			3.0 to 3.6	-	-	0.1	-	0.1		
			I _{OL} = 0.5 mA	1.1 to 1.3	-	-	0.3 × V _{CC}	-		0.3 × V _{CC}
			I _{OL} = 1 mA	1.4 to 1.6	-	-	0.31	-		0.37
			I _{OL} = 1.5 mA	1.65 to 1.95	-	-	0.31	-		0.35
			I _{OL} = 2.1 mA	2.3 to 2.7	-	-	0.31	-		0.33
			I _{OL} = 2.6 mA	3.0 to 3.6	-	-	0.31	-		0.33
			3.0 to 3.6	0.31	-	-	0.31	-		

NC7NP14- DC 特性:

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C		T _A = -40°C to +85°C		Units	
				Min	Max	Min	Max		
V _P	Positive Threshold Voltage	0.90		0.3	0.5	0.3	0.5	V	
		1.10		0.4	1.0	0.4	1.0		
		1.40		0.5	1.2	0.5	1.2		
		1.65		0.7	1.5	0.7	1.5		
		2.30		1.0	1.9	1.0	1.9		
		3.00		1.5	2.6	1.5	2.6		
V _N	Negative Threshold Voltage	0.90		0.1	0.6	0.1	0.6	V	
		1.10		0.15	0.7	0.15	0.7		
		1.40		0.2	0.8	0.2	0.8		
		1.65		0.25	0.9	0.25	0.9		
		2.30		0.4	1.0	0.4	1.0		
		3.00		0.6	1.5	0.6	1.5		
V _H	Hysteresis Voltage	0.90		0.07	0.5	0.07	0.5	V	
		1.10		0.08	0.6	0.08	0.6		
		1.40		0.09	0.8	0.09	0.8		
		1.65		0.10	1.0	0.10	1.0		
		2.30		0.25	1.1	0.25	1.1		
		3.00		0.60	1.8	0.60	1.8		
V _{OH}	HIGH Level Output Voltage	I _{OH} = -20 μA	0.90	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V	
			1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
			1.10 ≤ V _{CC} ≤ 1.30	I _{OH} = -0.5 mA	0.75 × V _{CC}	0.70 × V _{CC}	0.70 × V _{CC}		0.70 × V _{CC}
			1.40 ≤ V _{CC} ≤ 1.60	I _{OH} = -1.0 mA	1.07	0.99	0.99		0.99
			1.65 ≤ V _{CC} ≤ 1.95	I _{OH} = -1.5 mA	1.24	1.22	1.22		1.22
			2.30 ≤ V _{CC} ≤ 2.70	I _{OH} = -2.1 mA	1.95	1.87	1.87		1.87
			3.00 ≤ V _{CC} ≤ 3.60	I _{OH} = -2.6 mA	2.61	2.55	2.55		2.55
			3.00 ≤ V _{CC} ≤ 3.60	I _{OH} = -2.6 mA	2.61	2.55	2.55		2.55
V _{OL}	LOW Level Output Voltage	I _{OL} = 20 μA	0.90	0.1	0.1	0.1	0.1	V	
			1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	0.1	0.1		
			1.40 ≤ V _{CC} ≤ 1.60	0.1	0.1	0.1	0.1		
			1.65 ≤ V _{CC} ≤ 1.95	0.1	0.1	0.1	0.1		
			2.30 ≤ V _{CC} ≤ 2.70	0.1	0.1	0.1	0.1		
			3.00 ≤ V _{CC} ≤ 3.60	0.1	0.1	0.1	0.1		
			1.10 ≤ V _{CC} ≤ 1.30	I _{OL} = 0.5 mA	0.30 × V _{CC}	0.30 × V _{CC}	0.30 × V _{CC}		0.30 × V _{CC}
			1.40 ≤ V _{CC} ≤ 1.60	I _{OL} = 1.0 mA	0.31	0.37	0.37		0.37
			1.65 ≤ V _{CC} ≤ 1.95	I _{OL} = 1.5 mA	0.31	0.35	0.35		0.35
			2.30 ≤ V _{CC} ≤ 2.70	I _{OL} = 2.1 mA	0.31	0.33	0.33		0.33
			3.00 ≤ V _{CC} ≤ 3.60	I _{OL} = 2.6 mA	0.31	0.33	0.33		0.33
			3.00 ≤ V _{CC} ≤ 3.60	I _{OL} = 2.6 mA	0.31	0.33	0.33		0.33

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
V _P	Positive Threshold Voltage		0.9	-	-	-	-	-	V
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	-	-	-	1.2	-	
			1.65 to 1.95	-	-	-	1.5	-	
			2.3 to 2.7	-	-	-	1.9	-	
			3.0 to 3.6	-	-	-	2.6	-	
V _N	Negative Threshold Voltage		0.9	-	TBD	-	-	-	V
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	-	-	-	0.2	-	
			1.65 to 1.95	-	-	-	0.25	-	
			2.3 to 2.7	-	-	-	0.4	-	
			3.0 to 3.6	-	-	-	0.6	-	
V _H	Hysteresis Voltage		0.9	-	TBD	-	-	-	V
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	0.09	-	-	0.8	0.09	
			1.65 to 1.95	0.1	-	-	1.0	0.1	
			2.3 to 2.7	0.25	-	-	1.1	0.25	
			3.0 to 3.6	0.6	-	-	1.8	0.6	
V _{OH}	High-Level Output Voltage	V _{IH} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	



Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C			T _A = -40°C to +85°C			Units	Figure Number
				Min.	Typ.	Max.	Min.	Max.			
t _{PHL} , t _{PLH}	Propagation Delay	0.90	C _L = 10pF, R _L = 1MΩ	66.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		3.5	24.0	34.5	3.0	41.6			
		1.40 ≤ V _{CC} ≤ 1.60		2.5	7.0	14.8	2.0	15.0			
		1.65 ≤ V _{CC} ≤ 1.95		2.0	6.0	12.0	1.5	12.2			
		2.30 ≤ V _{CC} < 2.70		1.5	5.0	9.4	1.0	9.9			
3.00 ≤ V _{CC} ≤ 3.60	1.0	4.0	8.3	1.0	9.0						
		0.90	C _L = 15pF, R _L = 1MΩ	71.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		4.0	28.0	37.3	3.5	46.3			
		1.40 ≤ V _{CC} ≤ 1.60		3.0	8.0	15.5	2.5	16.5			
		1.65 ≤ V _{CC} ≤ 1.95		2.5	6.0	12.6	2.0	13.6			
		2.30 ≤ V _{CC} < 2.70		2.0	5.0	9.9	1.5	10.8			
3.00 ≤ V _{CC} ≤ 3.60	1.5	4.0	8.7	1.0	9.5						
		0.90	C _L = 30pF, R _L = 1MΩ	76.0					ns	Figure 1 Figure 2	
		1.10 ≤ V _{CC} ≤ 1.30		5.0	31.0	39.3	4.0	49.7			
		1.40 ≤ V _{CC} ≤ 1.60		4.0	9.0	17.8	3.5	18.2			
		1.65 ≤ V _{CC} ≤ 1.95		3.0	7.0	14.4	2.0	15.9			
		2.30 ≤ V _{CC} < 2.70		2.0	6.0	11.3	1.5	12.8			
3.00 ≤ V _{CC} ≤ 3.60	1.5	5.0	9.2	1.0	10.7						

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	14.8	-	15.0		
			1.65 to 1.95	-	TBD	12.0	-	12.2		
			2.3 to 2.7	-	TBD	9.4	-	9.9		
3.0 to 3.6	-	TBD	8.3	-	9.0					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	15.5	-	16.5		
			1.65 to 1.95	-	TBD	12.6	-	13.6		
			2.3 to 2.7	-	TBD	9.9	-	10.8		
3.0 to 3.6	-	TBD	8.7	-	9.5					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	TBD		
			1.4 to 1.6	-	TBD	17.8	-	18.2		
			1.65 to 1.95	-	TBD	14.4	-	15.9		
			2.3 to 2.7	-	TBD	11.3	-	12.8		
3.0 to 3.6	-	TBD	9.2	-	10.7					

NC7WP125- AC 特性:

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t _{PHL} , t _{PLH}	Propagation Delay	0.90	25.0						ns	C _L = 10 pF R _L = 1 MΩ	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	10.0	19.1	3.5	39.6				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	11.2	1.5	14.5				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	8.6	1.0	11.6				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	6.3	0.8	8.2				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	5.3	0.5	7.2						
t _{PHZ} , t _{PLZ}	Output Enable Time	0.90	25.0						ns	C _L = 10 pF R _U = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	8.0	17.5	3.5	40.4				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	11.9	1.5	14.8				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	9.7	1.0	12.3				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	7.7	0.8	10.5				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	6.9	0.5	8.6						
t _{PHZ} , t _{PLZ}	Output Disable Time	0.90	25.0						ns	C _L = 10 pF R _U = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	
		1.10 ≤ V _{CC} ≤ 1.30	4.0	8.0	20.5	3.5	42.0				
		1.40 ≤ V _{CC} ≤ 1.60	2.0	6.0	17.6	1.5	18.9				
		1.65 ≤ V _{CC} ≤ 1.95	1.5	5.0	17.4	1.0	18.7				
		2.30 ≤ V _{CC} < 2.70	1.0	4.0	16.4	0.8	17.7				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	16.2	0.5	17.5						
t _{PHL} , t _{PLH}	Propagation Delay	0.90	25.0						ns	C _L = 15 pF R _L = 1 MΩ	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	10.0	20.5	4.5	42.5				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	11.8	2.5	15.4				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	9.1	2.0	12.2				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	6.6	1.0	8.6				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	5.6	0.5	7.5						
t _{PHZ} , t _{PLZ}	Output Enable Time	0.90	31.0						ns	C _L = 10 pF R _U = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	11.0	18.2	4.5	43.3				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	12.5	2.5	15.5				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	10.2	2.0	12.9				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	8.0	1.0	9.9				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	7.2	0.5	8.9						
t _{PHZ} , t _{PLZ}	Output Disable Time	0.90	30.0						ns	C _L = 10 pF R _U = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	11.0	21.6	4.5	44.9				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	7.0	17.1	2.5	20.0				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	5.0	16.9	2.0	19.9				
		2.30 ≤ V _{CC} < 2.70	1.5	4.0	16.8	1.0	18.1				
3.00 ≤ V _{CC} ≤ 3.60	1.0	3.0	16.6	0.5	17.8						

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	39.6		
			1.4 to 1.6	-	TBD	11.2	-	14.8		
			1.65 to 1.95	-	TBD	8.6	-	11.6		
			2.3 to 2.7	-	TBD	6.3	-	8.2		
3.0 to 3.6	-	TBD	5.3	-	7.2					
t _{PHZ} , t _{PLZ}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	40.4		
			1.4 to 1.6	-	TBD	11.9	-	14.8		
			1.65 to 1.95	-	TBD	9.7	-	12.3		
			2.3 to 2.7	-	TBD	7.7	-	10.5		
3.0 to 3.6	-	TBD	6.9	-	8.6					
t _{PHZ} , t _{PLZ}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 10 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	42.0		
			1.4 to 1.6	-	TBD	15.3	-	18.0		
			1.65 to 1.95	-	TBD	14.7	-	17.8		
			2.3 to 2.7	-	TBD	13.7	-	15.0		
3.0 to 3.6	-	TBD	13.5	-	14.8					
t _{PHL} , t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	42.5		
			1.4 to 1.6	-	TBD	11.8	-	15.4		
			1.65 to 1.95	-	TBD	9.1	-	12.2		
			2.3 to 2.7	-	TBD	6.6	-	8.6		
3.0 to 3.6	-	TBD	5.6	-	7.5					
t _{PHZ} , t _{PLZ}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	43.3		
			1.4 to 1.6	-	TBD	12.5	-	15.5		
			1.65 to 1.95	-	TBD	10.2	-	12.9		
			2.3 to 2.7	-	TBD	8.0	-	9.9		
3.0 to 3.6	-	TBD	7.2	-	8.9					
t _{PHZ} , t _{PLZ}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _U = 5 kΩ, C _L = 15 pF	0.9	-	TBD	-	-	-	ns	
			1.1 to 1.3	-	TBD	TBD	-	44.9		
			1.4 to 1.6	-	TBD	15.9	-	18.8		
			1.65 to 1.95	-	TBD	15.2	-	18.2		
			2.3 to 2.7	-	TBD	14.1	-	15.4		
3.0 to 3.6	-	TBD	13.9	-	15.1					



Existing Datasheet

AC Electrical Characteristics (Continued)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C		Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max			
t _{PHL} t _{PLH}	Propagation Delay	0.90	5.5	12.0	23.4	5.0	51.1	ns	C _L = 30 pF R _L = 1MΩ	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30								
		1.40 ≤ V _{CC} ≤ 1.80	4.0	8.0	13.8	3.0	17.7			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	10.6	2.0	14.0			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	7.8	1.0	9.9			
		3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	6.4	0.5	8.9			
t _{PHZ} t _{PLZ}	Output Enable Time	0.90	6.0	13.0	24.4	5.0	51.9	ns	C _L = 30 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30								
		1.40 ≤ V _{CC} ≤ 1.80	4.0	8.0	14.5	3.0	17.9			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	11.7	2.0	14.7			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	9.1	1.0	11.1			
		3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	8.1	0.5	10.1			
t _{PHZ} t _{PLZ}	Output Disable Time	0.90	6.0	13.0	24.8	5.0	53.5	ns	C _L = 30 pF R _O = 5000Ω R _D = 5000Ω S ₁ = GND for t _{PHZ} S ₁ = V _I for t _{PLZ}	Figures 1, 2
		1.10 ≤ V _{CC} ≤ 1.30								
		1.40 ≤ V _{CC} ≤ 1.80	4.0	8.0	18.1	3.0	22.8			
		1.65 ≤ V _{CC} ≤ 1.95	2.0	6.0	17.9	2.0	22.0			
		2.30 ≤ V _{CC} ≤ 2.70	1.0	5.0	17.7	1.0	21.6			
		3.00 ≤ V _{CC} ≤ 3.60	0.8	4.0	17.5	0.5	21.2			

New

AC Electrical Characteristics (continued)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = 40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
t _{PHL} t _{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	R _L = 1 MΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	-	-	-	51.1
			1.4 to 1.6	-	TBD	13.8	-	-	17.7
			1.65 to 1.95	-	TBD	10.6	-	-	14.0
			2.3 to 2.7	-	TBD	7.6	-	-	9.9
			3.0 to 3.6	-	TBD	6.4	-	-	8.9
t _{PHZ} t _{PLZ}	Output Enable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	-	51.9
			1.4 to 1.6	-	TBD	14.5	-	-	17.9
			1.65 to 1.95	-	TBD	11.7	-	-	14.7
			2.3 to 2.7	-	TBD	9.1	-	-	11.1
			3.0 to 3.6	-	TBD	8.1	-	-	10.1
t _{PHZ} t _{PLZ}	Output Disable Time, OE to Y (Figures 3 and 4)	R _L = R _D = 5 kΩ, C _L = 30 pF	0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	-	53.5
			1.4 to 1.6	-	TBD	20.5	-	-	21.1
			1.65 to 1.95	-	TBD	19.5	-	-	20.5
			2.3 to 2.7	-	TBD	18.5	-	-	19.5
			3.0 to 3.6	-	TBD	14.8	-	-	16.3

NC7SP74 – 絶対最大定格:

Existing Datasheet

Absolute Maximum Ratings (Note 1)

Supply Voltage (V _{CC})	-0.5V to +4.6V
DC Input Voltage (V _{IN})	-0.5V to +4.6V
DC Output Voltage (V _{OUT})	-0.5V to +7.0V
HIGH or LOW State (Note 2)	-0.5V to V _{CC} + 0.5V
V _{CC} = 0V	-0.5V to 4.6V

New

Maximum Ratings

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +4.3	V
V _{IN}	DC Input Voltage	-0.5 to +4.3	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 +4.3 -0.5 to +4.3

NC7SP74– DC 特性:

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions
			Min	Max	Min	Max		
V _{IH}	HIGH Level Input Voltage	0.90	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	V	
		1.10 ≤ V _{CC} ≤ 1.30						
		1.40 ≤ V _{CC} ≤ 1.80	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}		
		1.65 ≤ V _{CC} ≤ 1.95	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}		
		2.30 ≤ V _{CC} ≤ 2.70	1.6	1.6	1.6	1.6		
		3.00 ≤ V _{CC} ≤ 3.60	2.1	2.1	2.1	2.1		
V _{IL}	LOW Level Input Voltage	0.90	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	V	
		1.10 ≤ V _{CC} ≤ 1.30						
		1.40 ≤ V _{CC} ≤ 1.80	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}		
		1.65 ≤ V _{CC} ≤ 1.95	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}		
		2.30 ≤ V _{CC} ≤ 2.70	0.7	0.7	0.7	0.7		
		3.00 ≤ V _{CC} ≤ 3.60	0.9	0.9	0.9	0.9		
V _{OH}	HIGH Level Output Voltage	0.90	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V	I _{OH} = -20 μA I _{OH} = -0.5 mA I _{OH} = -1.0 mA I _{OH} = -1.5 mA I _{OH} = -2.1 mA I _{OH} = -2.6 mA
		1.10 ≤ V _{CC} ≤ 1.30						
		1.40 ≤ V _{CC} ≤ 1.80	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
		3.00 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1	V _{CC} - 0.1		
		1.10 ≤ V _{CC} ≤ 1.30	0.75 × V _{CC}	0.70 × V _{CC}	0.70 × V _{CC}	0.70 × V _{CC}		
		1.40 ≤ V _{CC} ≤ 1.80	1.07	0.99	0.99	0.99		
		1.65 ≤ V _{CC} ≤ 1.95	1.24	1.22	1.22	1.22		
		2.30 ≤ V _{CC} ≤ 2.70	1.95	1.87	1.87	1.87		
		3.00 ≤ V _{CC} ≤ 3.60	2.61	2.55	2.55	2.55		
V _{OL}	LOW Level Output Voltage	0.90	0.1	0.1	0.1	0.1	V	I _{OL} = 20 μA I _{OL} = 0.5 mA I _{OL} = 1.0 mA I _{OL} = 1.5 mA I _{OL} = 2.1 mA I _{OL} = 2.6 mA
		1.10 ≤ V _{CC} ≤ 1.30						
		1.40 ≤ V _{CC} ≤ 1.80	0.1	0.1	0.1	0.1		
		1.65 ≤ V _{CC} ≤ 1.95	0.1	0.1	0.1	0.1		
		2.30 ≤ V _{CC} ≤ 2.70	0.1	0.1	0.1	0.1		
		3.00 ≤ V _{CC} ≤ 3.60	0.1	0.1	0.1	0.1		
		1.10 ≤ V _{CC} ≤ 1.30	0.30 × V _{CC}	0.30 × V _{CC}	0.30 × V _{CC}	0.30 × V _{CC}		
		1.40 ≤ V _{CC} ≤ 1.80	0.31	0.37	0.37	0.37		
		1.65 ≤ V _{CC} ≤ 1.95	0.31	0.35	0.35	0.35		
		2.30 ≤ V _{CC} ≤ 2.70	0.31	0.33	0.33	0.33		
		3.00 ≤ V _{CC} ≤ 3.60	0.31	0.33	0.33	0.33		

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = 40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
V _{IH}	High-Level Input Voltage		0.9	0.9	0.9	0.9	-	-	V
			1.1 to 1.3	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	-
			1.4 to 1.6	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	-
			1.65 to 1.95	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-	-
			2.3 to 2.7	1.6	-	-	1.6	-	-
			3.0 to 3.6	2.1	-	-	2.1	-	-
V _{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	V
			1.1 to 1.3	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	-
			1.4 to 1.6	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	-
			1.65 to 1.95	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}	-
			2.3 to 2.7	-	-	0.7	-	0.7	-
			3.0 to 3.6	-	-	0.9	-	0.9	-
V _{OH}	High-Level Output Voltage	V _{IN} = V _{IH} or V _{IL} I _{OH} = -20 μA	0.9	-	V _{CC} - 0.1	-	-	-	V
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	-
			1.4 to 1.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	-
			1.65 to 1.95	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	-
			2.3 to 2.7	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	-
			3.0 to 3.6	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-	-
			1.1 to 1.3	0.75 × V _{CC}	-	-	0.70 × V _{CC}	-	-
			1.4 to 1.6	1.07	-	-	0.99	-	-
			1.65 to 1.95	1.24	-	-	1.22	-	-
			2.3 to 2.7	1.95	-	-	1.87	-	-
			3.0 to 3.6	2.61	-	-	2.55	-	-
V _{OL}	Low-Level Output Voltage	V _{IN} = V _{IH} or V _{IL} I _{OL} = 20 μA	0.9	-	0.1	-	-	-	V
			1.1 to 1.3	-	-	0.1	-	0.1	-
			1.4 to 1.6	-	-	0.1	-	0.1	-
			1.65 to 1.95	-	-	0.1	-	0.1	-
			2.3 to 2.7	-	-	0.1	-	0.1	-
			3.0 to 3.6	-	-	0.1	-	0.1	-
			1.1 to 1.3	0.3 × V _{CC}	-	-	0.3 × V _{CC}	-	-
			1.4 to 1.6	-	-	0.31	-	0.37	-
			1.65 to 1.95	-	-	0.31	-	0.35	-
			2.3 to 2.7	-	-	0.31	-	0.33	-
			3.0 to 3.6	-	-	0.31	-	0.33	-



NC7SP74- AC 特性:

Existing Datasheet

AC Electrical Characteristics (10pF, 1MΩ)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
f _{max}	Maximum Clock Frequency	0.90	50	40.0	50			MHz	C _L = 10 pF R _D = 1 MΩ	Figures 1, 5	
t _{PLH} t _{PLL}	Propagation Delay CK to Q, \bar{Q}	0.90	4.0	15.0	22.0	3.5	31.0	ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 3	
t _{PLH} t _{PLL}	Propagation Delay CLR, PR, to Q, \bar{Q}	0.90	4.0	12.0	23.0	4.0	34.0	ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 3	
t _S	Setup Time, CK to D	0.90	7.0	10.0	7.0			ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 4	
t _H	Hold Time, CK to D	0.90	0.5	1.0	0.5			ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 4	
t _{PW}	Pulse Width, CK, CLR, PR	0.90	5.0	5.0	5.0			ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 5	
t _{REC}	Recovery Time CLR, PR to CK	0.90	8.5	12.0	8.5			ns	C _L = 10 pF R _D = 1 MΩ	Figures 1, 4	

New

AC Electrical Characteristics (R_L = 1 MΩ, C_L = 10 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
f _{max}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	MHz
t _{PLH} t _{PLL}	Propagation Delay, CK to Q, \bar{Q} (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{PLH} t _{PLL}	Propagation Delay, CLR, PR to Q, \bar{Q} (Figures 3 and 4)		1.1 to 1.3	-	TBD	TBD	-	-	ns
t _S	Setup Time, CK to D (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _H	Hold Time, CK to D (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{PW}	Pulse Width, CK, CLR, PR (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{REC}	Recovery Time, CLR, PR to CK (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns

NC7SP74 - AC 特性 (続き):

Existing Datasheet

AC Electrical Characteristics (15pF, 1MΩ)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
f _{max}	Maximum Clock Frequency	0.90	50	40.0	150			MHz	C _L = 15 pF R _D = 1 MΩ	Figures 1, 5	
t _{PLH} t _{PLL}	Propagation Delay CK to Q, \bar{Q}	0.90	5.0	16.0	23.0	4.5	34.0	ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 3	
t _{PLH} t _{PLL}	Propagation Delay CLR, PR, to Q, \bar{Q}	0.90	5.0	15.0	24.0	5.0	37.0	ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 3	
t _S	Setup Time, CK to D	0.90	7.0	10.0	7.0			ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 4	
t _H	Hold Time, CK to D	0.90	0.5	1.0	0.5			ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 4	
t _{PW}	Pulse Width, CK, CLR, PR	0.90	5.0	5.0	5.0			ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 5	
t _{REC}	Recovery Time CLR, PR to CK	0.90	8.5	12.0	8.5			ns	C _L = 15 pF R _D = 1 MΩ	Figures 1, 4	

New

AC Electrical Characteristics (R_L = 1 MΩ, C_L = 15 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
f _{max}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	MHz
t _{PLH} t _{PLL}	Propagation Delay, CK to Q, \bar{Q} (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{PLH} t _{PLL}	Propagation Delay, CLR, PR to Q, \bar{Q} (Figures 3 and 4)		1.1 to 1.3	-	TBD	TBD	-	-	ns
t _S	Setup Time, CK to D (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _H	Hold Time, CK to D (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{PW}	Pulse Width, CK, CLR, PR (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns
t _{REC}	Recovery Time, CLR, PR to CK (Figures 3 and 4)		1.1 to 1.3	TBD	-	-	TBD	-	ns



NC7SP74 – AC 特性 (続き):

Existing Datasheet

AC Electrical Characteristics (30pF, 1MΩ)

Symbol	Parameter	V _{CC} (V)	T _A = +25°C			T _A = -40°C to +85°C			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
f _{max}	Maximum Clock Frequency	0.90	-	40.0	-	-	-	-	MHz	Figures 1, 5	
		1.10 ≤ V _{CC} ≤ 1.30	50	-	150	-	-				
		1.40 ≤ V _{CC} ≤ 1.60	75	-	200	-	-				
		1.65 ≤ V _{CC} ≤ 1.95	100	-	250	-	-				
		2.30 ≤ V _{CC} ≤ 2.70	125	-	175	-	-				
3.00 ≤ V _{CC} ≤ 3.60	150	-	200	-	-						
t _{PLH} t _{PLL}	Propagation Delay CK to Q, \bar{Q}	0.90	-	34.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	6.0	18.0	27.0	5.0	43.0				
		1.40 ≤ V _{CC} ≤ 1.60	4.0	11.0	17.0	3.0	18.0				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	8.0	13.0	2.0	15.0				
		2.30 ≤ V _{CC} ≤ 2.70	1.0	6.0	10.0	1.0	11.0				
3.00 ≤ V _{CC} ≤ 3.60	0.8	5.0	9.0	0.5	10.0						
t _{PLH} t _{PLL}	Propagation Delay CLR, PR, to Q, \bar{Q}	0.90	-	34.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 3	
		1.10 ≤ V _{CC} ≤ 1.30	6.0	17.0	26.0	5.5	46.0				
		1.40 ≤ V _{CC} ≤ 1.60	4.0	11.0	16.0	3.5	18.0				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	8.0	13.0	2.5	15.0				
		2.30 ≤ V _{CC} ≤ 2.70	1.0	6.0	9.0	1.5	11.0				
3.00 ≤ V _{CC} ≤ 3.60	0.8	5.0	8.0	1.0	10.0						
t _S	Setup Time, CK to D	0.90	-	10.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	7.0	-	7.0	-	-				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-	-				
		1.65 ≤ V _{CC} ≤ 1.95	2.0	-	2.0	-	-				
		2.30 ≤ V _{CC} ≤ 2.70	1.5	-	1.5	-	-				
3.00 ≤ V _{CC} ≤ 3.60	1.0	-	1.0	-	-						
t _H	Hold Time, CK to D	0.90	-	1.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	0.5	-	0.5	-	-				
		1.40 ≤ V _{CC} ≤ 1.60	0.5	-	0.5	-	-				
		1.65 ≤ V _{CC} ≤ 1.95	0.5	-	0.5	-	-				
		2.30 ≤ V _{CC} ≤ 2.70	0.5	-	0.5	-	-				
3.00 ≤ V _{CC} ≤ 3.60	0.5	-	0.5	-	-						
t _{PW}	Pulse Width, CK, PR, CLR	0.90	-	5.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 5	
		1.10 ≤ V _{CC} ≤ 1.30	5.0	-	4.0	-	-				
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-	-				
		1.65 ≤ V _{CC} ≤ 1.95	2.5	-	2.0	-	-				
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	3.0	-	-				
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-						
t _{rec}	Recovery Time CLR, PR to CK	0.90	-	12.0	-	-	-	ns	C _L = 30 pF R _D = 1 MΩ	Figures 1, 4	
		1.10 ≤ V _{CC} ≤ 1.30	8.5	-	8.5	-	-				
		1.40 ≤ V _{CC} ≤ 1.60	3.5	-	3.5	-	-				
		1.65 ≤ V _{CC} ≤ 1.95	3.0	-	3.0	-	-				
		2.30 ≤ V _{CC} ≤ 2.70	2.5	-	2.5	-	-				
3.00 ≤ V _{CC} ≤ 3.60	2.0	-	2.0	-	-						

New

AC Electrical Characteristics (R_L = 1 MΩ, C_L = 30 pF)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25°C			T _A = -40°C to +85°C		Unit
				Min	Typ	Max	Min	Max	
f _{max}	Maximum Clock Frequency (Figures 3 and 4)		0.9	-	TBD	-	-	-	MHz
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	75	-	-	TBD	-	
			1.65 to 1.95	100	-	-	TBD	-	
			2.3 to 2.7	125	-	-	TBD	-	
			3.0 to 3.6	150	-	-	TBD	-	
t _{PLH} t _{PLL}	Propagation Delay, CK to Q, \bar{Q} (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	43.0	
			1.4 to 1.6	-	TBD	17.0	-	18.0	
			1.65 to 1.95	-	TBD	13.0	-	15.0	
			2.3 to 2.7	-	TBD	10.0	-	11.0	
			3.0 to 3.6	-	TBD	8.0	-	10.0	
t _{PLH} t _{PLL}	Propagation Delay, CLR, PR to Q, \bar{Q} (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	46.0	
			1.4 to 1.6	-	TBD	16.0	-	18.0	
			1.65 to 1.95	-	TBD	13.0	-	15.0	
			2.3 to 2.7	-	TBD	9.0	-	11.0	
			3.0 to 3.6	-	TBD	8.0	-	10.0	
t _S	Setup Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.0	-	-	3.0	-	
			1.65 to 1.95	2.0	-	-	2.0	-	
			2.3 to 2.7	1.5	-	-	1.5	-	
			3.0 to 3.6	1.0	-	-	1.0	-	
t _H	Hold Time, CK to D (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	0.5	-	-	0.5	-	
			1.65 to 1.95	0.5	-	-	0.5	-	
			2.3 to 2.7	0.5	-	-	0.5	-	
			3.0 to 3.6	0.5	-	-	0.5	-	
t _{PW}	Pulse Width, CK, CLR, PR (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.0	-	-	3.0	-	
			1.65 to 1.95	2.5	-	-	2.5	-	
			2.3 to 2.7	2.5	-	-	2.5	-	
			3.0 to 3.6	2.0	-	-	2.0	-	
t _{rec}	Recovery Time, CLR, PR to CK (Figures 3 and 4)		0.9	-	TBD	-	-	-	ns
			1.1 to 1.3	TBD	-	-	TBD	-	
			1.4 to 1.6	3.5	-	-	3.5	-	
			1.65 to 1.95	3.0	-	-	3.0	-	
			2.3 to 2.7	2.5	-	-	2.5	-	
			3.0 to 3.6	2.0	-	-	2.0	-	

NC7SV74 – 絶対最大定格:

Existing Datasheet

Absolute Maximum Ratings

Absolute Maximum Ratings: are those values beyond which the safety of the device cannot be guaranteed. The device should not be operated at these limits. The parametric values defined in the Electrical Characteristics tables are not guaranteed at the absolute maximum ratings. The "Recommended Operating Conditions" table will define the conditions for actual device operation. I_O Absolute Maximum Rating must be observed.

Supply Voltage (V _{CC})	-0.5V to +4.6V
DC Input Voltage (V _{IN})	-0.5V to +4.6V
DC Output Voltage (V _{OUT})	
HIGH or LOW State	-0.5V to V _{CC} +0.5V
V _{CC} = 0V	-0.5V to +4.6V

New

Maximum Ratings

Symbol	Parameter	Value	Unit
V _{CC}	DC Supply Voltage	-0.5 to +4.3	V
V _{IN}	DC Input Voltage	-0.5 to +4.3	V
V _{OUT}	DC Output Voltage	Active-Mode (High or Low State)	-0.5 to V _{CC} + 0.5
		Tri-State Mode (Note 1)	-0.5 to +4.3
		Power-Down Mode (V _{CC} = 0 V)	-0.5 to +4.3



NC7SV74 – DC 特性:

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions
			Min.	Max.	Min.	Max.		
V _{IH}	HIGH Level Input Voltage	0.90	0.65 × V _{CC}	0.65 × V _{CC}	-	-	V	
		1.10 ≤ V _{CC} ≤ 1.30	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	-		
		1.40 ≤ V _{CC} ≤ 1.60	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	-		
		1.65 ≤ V _{CC} ≤ 1.95	0.65 × V _{CC}	0.65 × V _{CC}	0.65 × V _{CC}	-		
		2.30 ≤ V _{CC} ≤ 2.70	1.6	1.6	-	-		
2.70 ≤ V _{CC} ≤ 3.60	2.0	2.0	-	-				
V _{IL}	LOW Level Input Voltage	0.90	0.35 × V _{CC}	0.35 × V _{CC}	-	-	V	
		1.10 ≤ V _{CC} ≤ 1.30	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	-		
		1.40 ≤ V _{CC} ≤ 1.60	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	-		
		1.65 ≤ V _{CC} ≤ 1.95	0.35 × V _{CC}	0.35 × V _{CC}	0.35 × V _{CC}	-		
		2.30 ≤ V _{CC} ≤ 2.70	0.7	0.7	-	-		
2.70 ≤ V _{CC} ≤ 3.60	0.8	0.8	-	-				
V _{OH}	HIGH Level Output Voltage	0.90	V _{CC} - 0.1	V _{CC} - 0.1	-	-	V	I _{OH} = -100 mA
		1.10 ≤ V _{CC} ≤ 1.30	V _{CC} - 0.1	V _{CC} - 0.1	-	-		
		1.40 ≤ V _{CC} ≤ 1.60	V _{CC} - 0.2	V _{CC} - 0.2	-	-		
		1.65 ≤ V _{CC} ≤ 1.95	V _{CC} - 0.2	V _{CC} - 0.2	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	V _{CC} - 0.2	V _{CC} - 0.2	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	V _{CC} - 0.2	V _{CC} - 0.2	-	-		
		1.10 ≤ V _{CC} ≤ 1.30	0.75 × V _{CC}	0.75 × V _{CC}	-	-		
		1.40 ≤ V _{CC} ≤ 1.60	0.75 × V _{CC}	0.75 × V _{CC}	-	-		
		1.65 ≤ V _{CC} ≤ 1.95	1.25	1.25	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	2.0	2.0	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	1.8	1.8	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	2.2	2.2	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	1.7	1.7	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	2.4	2.4	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	2.2	2.2	-	-		
V _{OL}	LOW Level Output Voltage	0.90	0.1	0.1	-	-	V	I _{OL} = 100 mA
		1.10 ≤ V _{CC} ≤ 1.30	0.1	0.1	-	-		
		1.40 ≤ V _{CC} ≤ 1.60	0.2	0.2	-	-		
		1.65 ≤ V _{CC} ≤ 1.95	0.2	0.2	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	0.2	0.2	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	0.2	0.2	-	-		
		1.10 ≤ V _{CC} ≤ 1.30	0.25 × V _{CC}	0.25 × V _{CC}	-	-		
		1.40 ≤ V _{CC} ≤ 1.60	0.25 × V _{CC}	0.25 × V _{CC}	-	-		
		1.65 ≤ V _{CC} ≤ 1.95	0.3	0.3	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	0.4	0.4	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	0.4	0.4	-	-		
		2.30 ≤ V _{CC} ≤ 2.70	0.6	0.6	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	0.4	0.4	-	-		
		2.70 ≤ V _{CC} ≤ 3.60	0.55	0.55	-	-		

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
V _{IH}	High-Level Input Voltage		0.9	-	0.5	-	-	-	-	V
			1.1 to 1.3	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			1.4 to 1.6	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			1.65 to 1.95	0.65 × V _{CC}	-	-	0.65 × V _{CC}	-		
			2.3 to < 2.7	1.6	-	-	1.6	-		
2.7 to 3.6	2.0	-	-	2.0	-					
V _{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	-	V
			1.1 to 1.3	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			1.4 to 1.6	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			1.65 to 1.95	-	-	0.35 × V _{CC}	-	0.35 × V _{CC}		
			2.3 to < 2.7	-	-	0.7	-	0.7		
2.7 to 3.6	2.0	-	-	2.0	-					
V _{OH}	HIGH Level Output Voltage	V _{IH} = V _{IH} V _L I _{OH} = -100 μA	0.9	-	V _{CC} - 0.1	-	-	-	-	V
			1.1 to 1.3	V _{CC} - 0.1	-	-	V _{CC} - 0.1	-		
			1.4 to 1.6	V _{CC} - 0.2	-	-	V _{CC} - 0.2	-		
			1.65 to 1.95	V _{CC} - 0.2	-	-	V _{CC} - 0.2	-		
			2.3 to < 2.7	V _{CC} - 0.2	-	-	V _{CC} - 0.2	-		
			2.7 to 3.6	V _{CC} - 0.2	-	-	V _{CC} - 0.2	-		
			I _{OH} = -2 mA	1.1 to 1.3	0.75 × V _{CC}	-	-	0.75 × V _{CC}	-	
			I _{OH} = -4 mA	1.4 to 1.6	0.75 × V _{CC}	-	-	0.75 × V _{CC}	-	
			I _{OH} = -6 mA	1.65 to 1.95	1.25	-	-	1.25	-	
			I _{OH} = -12 mA	2.3 to 2.7	2.0	-	-	2.0	-	
			I _{OH} = -18 mA	2.7 to 3.6	1.8	-	-	1.8	-	
			I _{OH} = -18 mA	2.3 to 2.7	1.7	-	-	1.7	-	
			I _{OH} = -24 mA	2.7 to 3.6	2.4	-	-	2.4	-	
			I _{OH} = -24 mA	2.7 to 3.6	2.2	-	-	2.2	-	
			V _{OL}	LOW Level Output Voltage	V _{IH} = V _{IH} V _L I _{OL} = 100 μA	0.9	-	0.1	-	
1.1 to 1.3	-	-				0.1	-	0.1		
1.4 to 1.6	-	-				0.2	-	0.2		
1.65 to 1.95	-	-				0.2	-	0.2		
2.3 to < 2.7	-	-				0.2	-	0.2		
2.7 to 3.6	-	-				0.2	-	0.2		
I _{OL} = 2 mA	1.1 to 1.3	-				-	0.25 × V _{CC}	-	0.25 × V _{CC}	
I _{OL} = 4 mA	1.4 to 1.6	-				-	0.25 × V _{CC}	-	0.25 × V _{CC}	
I _{OL} = 6 mA	1.65 to 1.95	-				-	0.3	-	0.3	
I _{OL} = 12 mA	2.3 to 2.7	-				-	0.3	-	0.3	
I _{OL} = 12 mA	2.3 to 2.7	-				-	0.4	-	0.4	
I _{OL} = 18 mA	2.7 to 3.6	-				-	0.6	-	0.6	
I _{OL} = 18 mA	2.7 to 3.6	-				-	0.4	-	0.4	
I _{OL} = 24 mA	2.7 to 3.6	-				-	0.55	-	0.55	

NC7SV74– AC 特性:

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V _{CC} (V)	T _A = +25°C		T _A = -40°C to +85°C		Units	Conditions	Figure Number
			Min.	Typ.	Min.	Max.			
f _{MAX}	Maximum Clock Frequency	0.90	50	-	-	-	MHz	C _L = 15 pF, R _L = 1 MΩ	Figure 1
		1.10 ≤ V _{CC} ≤ 1.30	150	-	150	-			
		1.40 ≤ V _{CC} ≤ 1.60	200	-	200	-			
		1.65 ≤ V _{CC} ≤ 1.95	200	-	200	-			
		2.30 ≤ V _{CC} ≤ 2.70	200	-	200	-			
2.70 ≤ V _{CC} ≤ 3.60	200	-	200	-					
t _{PLH}	Propagation Delay, CK to Q, Q̄	0.90	13.0	-	-	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 3
		1.10 ≤ V _{CC} ≤ 1.30	3.0	6.0	9.0	10.0			
		1.40 ≤ V _{CC} ≤ 1.60	1.0	3.2	6.0	1.0			
		1.65 ≤ V _{CC} ≤ 1.95	1.0	1.9	4.5	1.0			
		2.30 ≤ V _{CC} ≤ 2.70	0.8	1.2	3.0	0.7			
2.70 ≤ V _{CC} ≤ 3.60	0.7	1.0	2.8	0.6					
t _{PLH}	Propagation Delay, CLR, PR to Q, Q̄	0.90	14.0	-	-	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 3
		1.10 ≤ V _{CC} ≤ 1.30	3.0	6.5	10.5	1.0			
		1.40 ≤ V _{CC} ≤ 1.60	1.0	3.2	6.0	1.0			
		1.65 ≤ V _{CC} ≤ 1.95	1.0	1.9	4.5	1.0			
		2.30 ≤ V _{CC} ≤ 2.70	0.8	1.3	3.0	0.7			
2.70 ≤ V _{CC} ≤ 3.60	0.7	1.0	2.8	0.6					
t _S	Setup Time, CK to D	0.90	6.5	-	6.5	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 4
		1.10 ≤ V _{CC} ≤ 1.30	3.5	-	3.5	-			
		1.40 ≤ V _{CC} ≤ 1.60	2.0	-	2.0	-			
		1.65 ≤ V _{CC} ≤ 1.95	1.5	-	1.5	-			
		2.30 ≤ V _{CC} ≤ 2.70	2.0	-	2.0	-			
2.70 ≤ V _{CC} ≤ 3.60	1.5	-	1.5	-					
t _H	Hold Time, CK to D	0.90	0.5	-	0.5	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 4
		1.10 ≤ V _{CC} ≤ 1.30	0.5	-	0.5	-			
		1.40 ≤ V _{CC} ≤ 1.60	0.5	-	0.5	-			
		1.65 ≤ V _{CC} ≤ 1.95	0.5	-	0.5	-			
		2.30 ≤ V _{CC} ≤ 2.70	0.5	-	0.5	-			
2.70 ≤ V _{CC} ≤ 3.60	0.5	-	0.5	-					
t _W	Pulse Width, CK, CLR, PR	0.90	7.0	-	7.0	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 5
		1.10 ≤ V _{CC} ≤ 1.30	4.0	-	4.0	-			
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-			
		1.65 ≤ V _{CC} ≤ 1.95	3.0	-	3.0	-			
		2.30 ≤ V _{CC} ≤ 2.70	3.0	-	3.0	-			
2.70 ≤ V _{CC} ≤ 3.60	3.0	-	3.0	-					
t _{REC}	Recover Time, CLR, PR to CK	0.90	8.0	-	8.0	-	ns	C _L = 15 pF, R _L = 1 MΩ	Figure 4
		1.10 ≤ V _{CC} ≤ 1.30	4.5	-	4.5	-			
		1.40 ≤ V _{CC} ≤ 1.60	3.0	-	3.0	-			
		1.65 ≤ V _{CC} ≤ 1.95	3.0	-	3.0	-			
		2.30 ≤ V _{CC} ≤ 2.70	3.0	-	3.0	-			
2.70 ≤ V _{CC} ≤ 3.60	3.0	-	3.0	-					

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = 25 °C			T _A = -40°C to +85°C			Unit
				Min	Typ	Max	Min	Max		
f _{MAX}	Maximum Clock Frequency (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF R _L = 2 kΩ, C _L = 15 pF R _L = 500 Ω, C _L = 30 pF	0.9	-	TBD	-	-	-	-	MHz
			1.1 to 1.3	TBD	-	-	TBD	-		
			1.4 to 1.6	200	-	-	200	-		
			1.65 to 1.95	200	-	-	200	-		
			2.3 to 2.7	200	-	-	200	-		
2.7 to 3.6	200	-	-	200	-					
t _{PLH}	Propagation Delay, CK to Q, Q̄ (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF R _L = 2 kΩ, C _L = 15 pF R _L = 500 Ω, C _L = 30 pF	0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	14.6		
			1.4 to 1.6	-	TBD	6.0	-	7.2		
			1.65 to 1.95	-	TBD	4.5	-	5.3		
			2.3 to 2.7	-	TBD	3.0	-	3.7		
2.7 to 3.6	-	TBD	2.8	-	3.2					
t _{PLH}	Propagation Delay, CLR, PR to Q, Q̄ (Figures 3 and 4)	R _L = 1 MΩ, C _L = 15 pF R _L = 2 kΩ, C _L = 15 pF R _L = 500 Ω, C _L = 30 pF	0.9	-	TBD	-	-	-	-	ns
			1.1 to 1.3	-	TBD	TBD	-	34.0		
			1.4 to 1.6	-	TBD	6.0	-	7.2		
			1.65 to 1.95	-	TBD	4.5	-	5.3		
			2.3 to 2.7	-	TBD	3.0	-	3.7		
2.7 to 3.6	-	TBD	2.8	-	3.2					
t _S										



NC7WV125 – 絶対最大定格:

Existing Datasheet

Absolute Maximum Ratings (Note 1)

Supply Voltage (V_{CC})	-0.5V to +4.6V
DC Input Voltage (V_{IH})	-0.5V to +4.6V
DC Output Voltage (V_{OUT})	-0.5V to +7.0V
HIGH or LOW State (Note 2)	-0.5V to $V_{CC} + 0.5V$
$V_{CC} = 0V$	-0.5V to 4.6V

Maximum Ratings

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +4.3	V
V_{IH}	DC Input Voltage	-0.5 to +4.3	V
V_{OUT}	DC Output Voltage	-0.5 to $V_{CC} + 0.5$	V
	Active-Mode (High or Low State)	-0.5 to $V_{CC} + 0.5$	V
	Tri-State Mode (Note 1)	-0.5 to +4.3	V
	Power-Down Mode ($V_{CC} = 0V$)	-0.5 to +4.3	V

NC7WV125– DC 特性:

Existing Datasheet

DC Electrical Characteristics

Symbol	Parameter	V_{CC} (V)	$T_A = +25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Units	Conditions
			Min.	Typ.	Max.	Min.	Typ.	Max.		
V_{IH}	HIGH Level Input Voltage	0.90	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	V	
		1.10 ≤ V_{CC} ≤ 1.30	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}		
		1.40 ≤ V_{CC} ≤ 1.60	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}		
		1.65 ≤ V_{CC} ≤ 1.95	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}	0.65 × V_{CC}		
		2.30 ≤ V_{CC} ≤ 2.70	1.6	1.6	1.6	1.6	1.6	1.6		
V_{IL}	LOW Level Input Voltage	0.90	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	V	
		1.10 ≤ V_{CC} ≤ 1.30	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}		
		1.40 ≤ V_{CC} ≤ 1.60	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}		
		1.65 ≤ V_{CC} ≤ 1.95	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}		
		2.30 ≤ V_{CC} ≤ 2.70	0.7	0.7	0.7	0.7	0.7	0.7		
V_{OH}	HIGH Level Output Voltage	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	$V_{CC} - 0.1$	V	$I_{OH} = -100\text{ mA}$
		1.10 ≤ V_{CC} ≤ 1.30	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}		$I_{OH} = -3.0\text{ mA}$
		1.40 ≤ V_{CC} ≤ 1.60	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}	0.35 × V_{CC}		$I_{OH} = -4.0\text{ mA}$
		1.65 ≤ V_{CC} ≤ 1.95	1.25	1.25	1.25	1.25	1.25	1.25		$I_{OH} = -6.0\text{ mA}$
		2.30 ≤ V_{CC} ≤ 2.70	1.6	1.6	1.6	1.6	1.6	1.6		$I_{OH} = -12.0\text{ mA}$
V_{OL}	LOW Level Output Voltage	0.1	0.1	0.1	0.1	0.1	0.1	0.1	V	$I_{OL} = 100\text{ mA}$
		1.10 ≤ V_{CC} ≤ 1.30	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}		$I_{OL} = 2.0\text{ mA}$
		1.40 ≤ V_{CC} ≤ 1.60	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}	0.25 × V_{CC}		$I_{OL} = 3.0\text{ mA}$
		1.65 ≤ V_{CC} ≤ 1.95	0.3	0.3	0.3	0.3	0.3	0.3		$I_{OL} = 6.0\text{ mA}$
		2.30 ≤ V_{CC} ≤ 2.70	0.4	0.4	0.4	0.4	0.4	0.4		$I_{OL} = 12.0\text{ mA}$

New

DC Electrical Characteristics

Symbol	Parameter	Conditions	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Unit	
				Min	Typ	Max	Min	Max			
V_{IH}	High-Level Input Voltage		0.9	-	0.5	-	-	-	-	V	
			1.1 to 1.3	0.65 × V_{CC}	-	-	0.65 × V_{CC}	-	-	-	
			1.4 to 1.6	0.65 × V_{CC}	-	-	0.65 × V_{CC}	-	-	-	
			1.65 to 1.95	0.65 × V_{CC}	-	-	0.65 × V_{CC}	-	-	-	
			2.3 to < 2.7	1.6	-	-	1.6	-	-	-	
V_{IL}	Low-Level Input Voltage		0.9	-	0.5	-	-	-	-	V	
			1.1 to 1.3	-	-	0.35 × V_{CC}	-	-	0.35 × V_{CC}	-	
			1.4 to 1.6	-	-	0.35 × V_{CC}	-	-	0.35 × V_{CC}	-	
			1.65 to 1.95	-	-	0.35 × V_{CC}	-	-	0.35 × V_{CC}	-	
			2.3 to < 2.7	0.7	-	-	0.7	-	-	0.7	
V_{OH}	High-Level Output Voltage	$V_{IH} = V_{IH(UL)}$ $I_{OH} = -100\text{ }\mu A$	0.9	-	$V_{CC} - 0.1$	-	-	$V_{CC} - 0.1$	-	V	
			1.1 to 1.3	$V_{CC} - 0.1$	-	-	$V_{CC} - 0.1$	-	-	-	
			1.4 to 1.6	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-	-	
			1.65 to 1.95	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	
			2.3 to < 2.7	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	-	-	$V_{CC} - 0.2$	
			1.1 to 1.3	0.75 × V_{CC}	-	-	0.75 × V_{CC}	-	-	0.75 × V_{CC}	
			1.4 to 1.6	0.75 × V_{CC}	-	-	0.75 × V_{CC}	-	-	0.75 × V_{CC}	
			1.65 to 1.95	1.25	-	-	1.25	-	-	1.25	
			2.3 to 2.7	2.0	-	-	2.0	-	-	2.0	
			1.1 to 1.3	1.8	-	-	1.8	-	-	1.8	
			1.4 to 1.6	2.2	-	-	2.2	-	-	2.2	
			1.65 to 1.95	1.7	-	-	1.7	-	-	1.7	
			2.3 to 2.7	2.4	-	-	2.4	-	-	2.4	
V_{OL}	Low-Level Output Voltage	$V_{IH} = V_{IH(UL)}$ $I_{OL} = 100\text{ }\mu A$	0.9	-	0.1	-	-	0.1	-	V	
			1.1 to 1.3	-	-	0.1	-	-	0.1	-	
			1.4 to 1.6	-	-	0.2	-	-	0.2	-	
			1.65 to 1.95	-	-	0.2	-	-	0.2	-	
			2.3 to < 2.7	-	-	0.2	-	-	0.2	-	
			1.1 to 1.3	0.25 × V_{CC}	-	-	0.25 × V_{CC}	-	-	0.25 × V_{CC}	
			1.4 to 1.6	0.25 × V_{CC}	-	-	0.25 × V_{CC}	-	-	0.25 × V_{CC}	
			1.65 to 1.95	0.3	-	-	0.3	-	-	0.3	
			2.3 to 2.7	0.4	-	-	0.4	-	-	0.4	
			1.1 to 1.3	0.3	-	-	0.3	-	-	0.3	
			1.4 to 1.6	0.4	-	-	0.4	-	-	0.4	
			1.65 to 1.95	0.4	-	-	0.4	-	-	0.4	
			2.3 to 2.7	0.6	-	-	0.6	-	-	0.6	
2.7 to 3.6	0.4	-	-	0.4	-	-	0.4				
2.7 to 3.6	0.55	-	-	0.55	-	-	0.55				

NC7WV125 – AC 特性:

Existing Datasheet

AC Electrical Characteristics

Symbol	Parameter	V_{CC} (V)	$T_A = +25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Units	Conditions	Figure Number
			Min	Typ	Max	Min	Max				
t_{PHL} t_{PLH}	Propagation Delay	0.90	13.0	-	-	-	-	-	ns	$C_L = 15\text{ pF}, R_L = 1\text{ k}\Omega$ $C_L = 15\text{ pF}, R_L = 2\text{ k}\Omega$	Figures 1, 2
		1.10 ≤ V_{CC} ≤ 1.30	3.0	6.0	9.8	1.9	14.9				
		1.40 ≤ V_{CC} ≤ 1.60	1.0	3.5	5.3	0.8	5.7				
		1.65 ≤ V_{CC} ≤ 1.95	0.9	3.0	4.8	0.8	4.9				
		2.30 ≤ V_{CC} ≤ 2.70	0.8	2.0	3.3	0.7	3.5				
t_{ENH} t_{ENL}	Enable Time	0.90	14.0	-	-	-	-	-	ns	$C_L = 30\text{ pF}$ $R_U = 1\text{ k}\Omega$ $R_O = 1\text{ k}\Omega$ $S_1 = GND$ for t_{ENH} $S_1 = V_I$ for t_{ENL} $V_I = 2 \times V_{CC}$	Figures 1, 2
		1.10 ≤ V_{CC} ≤ 1.30	3.0	6.0	9.7	2.0	16.4				
		1.40 ≤ V_{CC} ≤ 1.60	1.2	4.0	6.0	1.0	7.5				
		1.65 ≤ V_{CC} ≤ 1.95	1.0	3.0	4.7	0.9	5.2				
		2.30 ≤ V_{CC} ≤ 2.70	0.8	2.0	3.5	0.7	3.7				
t_{FZH} t_{FZL}	Disable Time	0.90	14.0	-	-	-	-	-	ns	$C_L = 30\text{ pF}$ $R_U = 1\text{ k}\Omega$ $R_O = 1\text{ k}\Omega$ $S_1 = GND$ for t_{FZH} $S_1 = V_I$ for t_{FZL} $V_I = 2 \times V_{CC}$	Figures 1, 2
		1.10 ≤ V_{CC} ≤ 1.30	2.0	5.0	9.5	2.0	14.0				
		1.40 ≤ V_{CC} ≤ 1.60	1.2	3.0	5.9	1.1	7.1				
		1.65 ≤ V_{CC} ≤ 1.95	1.0	2.0	6.3	0.8	6.5				
		2.30 ≤ V_{CC} ≤ 2.70	0.8	1.5	5.3	0.5	5.5				

New

AC Electrical Characteristics

Symbol	Parameter	Test Condition	V_{CC} (V)	$T_A = 25^\circ C$			$T_A = -40^\circ C$ to $+85^\circ C$			Unit
				Min	Typ	Max	Min	Max		
t_{PHL} t_{PLH}	Propagation Delay, A to Y (Figures 3 and 4)	$R_L = 1\text{ k}\Omega, C_L = 15\text{ pF}$ $R_L = 2\text{ k}\Omega, C_L = 15\text{ pF}$	0.9	-	TBD	-	-	TBD	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD	-	
			1.4 to 1.6	-	TBD	5.3	-	5.7	-	
			1.65 to 1.95	-	TBD	4.3	-	4.6	-	
			2.3 to 2.7	-	TBD	2.8	-	3.0	-	
t_{ENH} t_{ENL}	Output Enable Time, OE to Y (Figures 3 and 4)	$R_I = R_L = 1\text{ k}\Omega$ $C_L = 30\text{ pF}$	0.9	-	TBD	-	-	TBD	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD	-	
			1.4 to 1.6	-	TBD	6.0	-	7.5	-	
			1.65 to 1.95	-	TBD	4.5	-	5.0	-	
			2.3 to 2.7	-	TBD	3.0	-	3.4	-	
t_{FZH} t_{FZL}	Output Disable Time, OE to Y (Figures 3 and 4)	$R_I = R_L = 1\text{ k}\Omega$ $C_L = 30\text{ pF}$	0.9	-	TBD	-	-	TBD	-	ns
			1.1 to 1.3	-	TBD	TBD	-	TBD	-	
			1.4 to 1.6	-	TBD	5.5	-	7.0	-	
			1.65 to 1.95	-	TBD	5.6	-	5.8	-	
			2.3 to 2.7	-	TBD	4.2	-	5.0	-	
2.7 to 3.6	-	TBD	3.9	-	4.2	-				



認定計画:

デバイス名: NC7SV74K8X

RMS: S60403

パッケージ: US8

テスト	規格	条件	間隔
HTOL	JESD22-A108	Ta=125°C, 120 % max rated Vcc	2016 hours
HTSL	JESD22-A103	Ta= 150°C	2016 hours
TC + PC	JESD22-A104	Ta= -65°C to +150°C	1000 cycles
HAST + PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hours
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-
RSH	JESD22- B106	Ta = 265C, 10 sec	-

認定完了予定日 : 30 July 2020

影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

部品番号	認定試験用ピークル
NC7SP74K8X	NC7SV74K8X
NC7NP14K8X	NC7SV74K8X
NC7WP125K8X	NC7SV74K8X
NC7SV74K8X	NC7SV74K8X
NC7WP00K8X	NC7SV74K8X
NC7WP02K8X	NC7SV74K8X
NC7WP08K8X	NC7SV74K8X
NC7WP32K8X	NC7SV74K8X
NC7WV125K8X	NC7SV74K8X
NC7NP34K8X	NC7SV74K8X