



<b>Title of Change:</b>	Datasheet Adjustment for MC74VHC1G14 to correct Positive Threshold Voltage and Negative Threshold Voltage.
<b>Effective date:</b>	9 June 2017
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Rich.Field@onsemi.com>
<b>Type of notification:</b>	ON Semiconductor will consider this change accepted.
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Datasheet</u>

<b>Change Sub-Category(s):</b>		<input checked="" type="checkbox"/> Datasheet/Product Doc change
<input type="checkbox"/> Manufacturing Site Change/Addition	<input type="checkbox"/> Material Change	<input type="checkbox"/> Shipping/Packaging/Marking
<input type="checkbox"/> Manufacturing Process Change	<input checked="" type="checkbox"/> Product specific change	<input type="checkbox"/> Other: _____

<b>Sites Affected:</b>		<input type="checkbox"/> All site(s)	<input checked="" type="checkbox"/> not applicable	<input type="checkbox"/> ON Semiconductor site(s) :	<input type="checkbox"/> External Foundry/Subcon site(s)
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**Description and Purpose:**

The VT+ and VT- data points given in the datasheet are misleading and should be corrected.

The Min for VT+ and the Max for VT- are calculated values and the values entered are incorrect.

**Min VT+ = Min VT- + Min VH**

**Max VT- = Max VT+ - Min VH**

## MC74VHC1G14 Datsheet Adjustment

**Min VT+ = Min VT- + Min VH**  
Correct Min VT+

V<sub>CC</sub>@3.0V **1.20** = 0.90 + 0.30  
 V<sub>CC</sub>@4.5V **1.75** = 1.35 + 0.40  
 V<sub>CC</sub>@5.5V **2.15** = 1.65 + 0.50

**Max VT- = Max VT+ - Min VH**  
Correct Max VT-

V<sub>CC</sub>@3.0V **1.90** = 2.20 - 0.30  
 V<sub>CC</sub>@4.5V **2.75** = 3.15 - 0.40  
 V<sub>CC</sub>@5.5V **3.35** = 3.85 - 0.50

**MC74VHC1G14**

**DC ELECTRICAL CHARACTERISTICS**

Symbol	Parameter	Test Conditions	V <sub>CC</sub> (V)	T <sub>A</sub> = 25°C			T <sub>A</sub> ≤ 85°C		-55 ≤ T <sub>A</sub> ≤ 125°C		Unit
				Min	Typ	Max	Min	Max	Min	Max	
VT+	Positive Threshold Voltage		3.0	1.85	2.0	2.20	2.20	3.15	3.85	2.20	V
			4.5	2.86	3.0	3.15					
			5.5	3.50	3.6	3.85					
VT-	Negative Threshold Voltage		3.0	0.9	1.5	1.65	0.9	1.35	1.65	0.9	V
			4.5	1.35	2.3	2.46					
			5.5	1.65	2.9	3.05					

The change will not impact form, fit, or function of product(s)

**List of affected Standard Parts:**

- NLVVHC1G14DFT1G
- NLVVHC1G14DFT2G
- NLVVHC1G14DFT1G