

Title of Change:	Datasheet Adjustment for MC74VHC1G14 to correct Positive Threshold Voltage and Negative Threshold Voltage.
Effective date:	6 June 2017
Contact information:	Contact your local ON Semiconductor Sales Office or <Rich.Field@onsemi.com>
Type of notification:	ON Semiconductor will consider this change accepted.
Change category:	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Datasheet</u>

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

Sites Affected:	<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_{CC}@3.0V **1.20** = 0.90 + 0.30
 V_{CC}@4.5V **1.75** = 1.35 + 0.40
 V_{CC}@5.5V **2.15** = 1.65 + 0.50

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

V_{CC}@3.0V **1.90** = 2.20 - 0.30
 V_{CC}@4.5V **2.75** = 3.15 - 0.40
 V_{CC}@5.5V **3.35** = 3.85 - 0.50

MC74VHC1G14

DC ELECTRICAL CHARACTERISTICS

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

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

List of affected Standard Parts:

- MC74VHC1G14DFT1G
- MC74VHC1G14DFT2G
- MC74VHC1G14DTT1G
- NLJHC1G14DFT2G