



PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

07-MAY-2001

SUBJECT: Product/Process Change Notification #11391

TITLE: VHC1G Relayout & ESD Enhancement

EFFECTIVE DATE: 15-Aug-2001

AFFECTED CHANGE CATEGORY: Die Shrink and Design Change

AFFECTED PRODUCT DIVISION: Logic Products Div

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office.
or Ken Fergus <RRST50@onsemi.com >

SAMPLES: Contact Below
Contact your local ON Semiconductor Sales Office.
or Dianne Von Borstel <RPDR20@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Dianne Von Borstel <RPDR20@onsemi.com>

DISCLAIMER:
ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact your local ON Semiconductor sales office.

DESCRIPTION AND PURPOSE:
ON Semiconductor is pleased to announce a new layout for the MC74VHC1G04 series of devices. This new layout improves HBM ESD from 1500V to 4000V and MM from 100V to 300V. There is no change to the circuit design, functionality, or electrical parameters, however the die size did decrease. The existing J86S mask design will be discontinued when the K55W is released to production.

QUALIFICATION PLAN: N/A

RELIABILITY DATA SUMMARY:
The new design uses standard VHC design rules, process and assembly. No reliability qualification required.

ELECTRICAL CHARACTERISTIC SUMMARY:
ESD rating:
J86S mask set: HBM = 1500V, MM = 100V
K55W mask set: HBM = 4000V, MM = 300V
No significant difference in electrical data across temperature and power supplies was detected.
Complete electrical characterization data is available upon request.

**Product/Process Change Notification #11391****CHANGED PART IDENTIFICATION:**

All devices with a date code after WW30, 2001, may use the new design. There may be significant overlap of old and new design due to inventory.

AFFECTED DEVICE LIST:**PART**

MC74HC1G04DFT1
MC74HC1G04DFT2
MC74HC1G04DTT1
MC74HC1G14DFT1
MC74HC1G14DFT2
MC74HC1G14DTT1
MC74HC1GU04DFT1
MC74HC1GU04DFT2
MC74HC1GU04DTT1
MC74VHC1G04DFT1
MC74VHC1G04DFT2
MC74VHC1G04DTT1
MC74VHC1G14DFT1
MC74VHC1G14DFT2
MC74VHC1G14DTT1
MC74VHC1GT04DFT1
MC74VHC1GT04DFT2
MC74VHC1GT04DTT1
MC74VHC1GT14DFT1
MC74VHC1GT14DFT2
MC74VHC1GT14DTT1
MC74VHC1GT50DFT1
MC74VHC1GT50DFT2
MC74VHC1GT50DTT1
MC74VHC1GU04DFT1
MC74VHC1GU04DFT2
MC74VHC1GU04DTT1