



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

19-FEB-2004

SUBJECT: ON Semiconductor Final Product/Process Change Notification #13313

TITLE: Addition of Tower Semiconductor Fab for Minigate(TM) Logic Products

EFFECTIVE DATE: 19-Apr-2004

AFFECTED CHANGE CATEGORY: Subcontractor Fab Site

AFFECTED PRODUCT DIVISION: Logic Products

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

SAMPLES: Contact your local ON Semiconductor Sales Representative
or Nilda Lopez <R39140@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Representative or Nilda Lopez <R39140@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 60 days prior to implementation of the change.

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 expanded wafer capacity for MiniGate(TM) Logic products utilizing Tower Semiconductor. ON Semiconductor will implement this increase in capacity to support rapidly growing demand for these Logic products, and to assure our customers of ON Semiconductor's continued commitment to on time delivery and continuous quality improvement.

The products will be redesigned using Tower Semiconductor's 0.6um design rules for their double layer metal, single polysilicon gate standard CMOS process. No performance changes are expected for the MiniGate (TM) products. All product performance will meet the existing datasheet specifications.

Tower Semiconductor is a high volume Silicon supplier for flash memory, image sensors, mixed signal and standard CMOS products. They are located in Migdal Haemek, Israel, and are an ISO9001/QS9000 certified facility.



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

SC88A package, 1 lot ea. of 74VHC1GT00, 74VHC1G00, 74VHC1GT08:

Test:High Temp Op Life
Conditions:TA=150C for 504 hrs
Results(#fail/total SS): 0/77, 0/77, 0/77

Test:High Temp Bake
Conditions:150C for 504 hrs
Results(#fail/total SS):0/77, 0/77, 0/77

Test:RSH
Conditions:260C, 10 seconds
Results(#fail/total SS):0/30, 0/30, 0/30

Test:PC-Temp Cycle
Conditions:-65/+150C for 500 cyc
Results(#fail/total SS):0/77, 0/77, 0/77

Test:PC-Autoclave
Conditions:121C/100%RH/15psig for 96hrs
Results(#fail/total SS):0/77, 0/77, 0/77

Test:PC-HAST
Conditions:131C/80%RH for 96 hrs
Results(#fail/total SS):0/77, 0/77, 0/77

Test:PC
Conditions:168hrs 85C/85%, 3 IR at 260C
Results(#fail/total SS):0/231, 0/231, 0/231

ELECTRICAL CHARACTERISTIC SUMMARY:

All product performance meets existing datasheet specifications. Data is available upon request.

CHANGED PART IDENTIFICATION:

Devices shipped after WW15.

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART
ENGVHC1G08UTDDT
ENGVHC1G08UTDFT
M74VHC1GT125DF1G
M74VHC1GT125DF2G
MC74VHC1G00DFT1
MC74VHC1G00DFT1G
MC74VHC1G00DFT2
MC74VHC1G00DFT2G
MC74VHC1G00DTT1
MC74VHC1G02DFT1
MC74VHC1G02DFT1G
MC74VHC1G02DFT2
MC74VHC1G02DFT2G



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MC74VHC1G02DTT1
MC74VHC1G08DFT1
MC74VHC1G08DFT1G
MC74VHC1G08DFT2
MC74VHC1G08DFT2G
MC74VHC1G08DTT1
MC74VHC1G125DF1G
MC74VHC1G125DF2G
MC74VHC1G125DFT1
MC74VHC1G125DFT2
MC74VHC1G125DTT1
MC74VHC1G32DFT1
MC74VHC1G32DFT1G
MC74VHC1G32DFT2
MC74VHC1G32DFT2G
MC74VHC1G32DTT1
MC74VHC1G32DTT1G
MC74VHC1GT00DF1G
MC74VHC1GT00DF2G
MC74VHC1GT00DFT1
MC74VHC1GT00DFT2
MC74VHC1GT00DTT1
MC74VHC1GT02DF1G
MC74VHC1GT02DF2G
MC74VHC1GT02DFT1
MC74VHC1GT02DFT2
MC74VHC1GT02DTT1
MC74VHC1GT08DF1G
MC74VHC1GT08DF2G
MC74VHC1GT08DFT1
MC74VHC1GT08DFT2
MC74VHC1GT08DTT1
MC74VHC1GT125DF1
MC74VHC1GT125DF2
MC74VHC1GT125DT1
MC74VHC1GT32DF1G
MC74VHC1GT32DF2G
MC74VHC1GT32DFT1
MC74VHC1GT32DFT2
MC74VHC1GT32DTT1
NLVVHC1G08DFT2
NLVVHC1G32DFT1
NLVVHC1G32DFT2
NLVVHC1GT08DFT2
NLVVHC1GT125DF1
NLVVHC1GT125DF2
NLVVHC1GT32DFT1
NLWVHC1G125
NLWVHC1GT08