



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
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12-FEB-2002

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12310

TITLE: Qualification of 6 Inch VHVIC Production Line in Aizu, Japan

EFFECTIVE DATE: 13-Apr-2002

AFFECTED CHANGE CATEGORY: Wafer Process

AFFECTED PRODUCT DIVISION: Analog Products

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office
or Rick Luevanos <R32737@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office
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FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Jack Cartwright <RWL070@onsemi.com>

DISCLAIMER:

Final Product/Process Change Notification (FPCN) -Final Notification completing the notification process. Distributed at least 60 days from the effective date 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:

MOS7 in Aizu, Japan, has been a qualified 4 inch production site for VHVIC(Very High Voltage Integrated Circuit) technology since 1999. MOS7A, ON Semiconductor's 6 inch VHVIC production site, has now successfully qualified the VHVIC process to meet additional capacity requirements. The 6 inch VHVIC process flow is very similar to the 4 inch VHVIC production process flow. However, new 6" production mask sets have been generated to accommodate minor process flow and equipment differences. There are no statistically significant electrical parameter differences as a result of this production transition to 6 inch wafers. Consequently, NO datasheet specification changes have been made as a result of the conversion. ON Semiconductor's application engineers have verified board level performance of each device based upon reference application designs. ON Semiconductor also recommends that our valued customers evaluate 6 inch material in their specific applications. ON Semiconductor will provide samples upon request based upon the schedule below.



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RELIABILITY DATA SUMMARY:

MC44608P75 was selected as the production process qualification vehicle for the affected devices listed below. In addition, each device design will complete 672 hours of HTBB (High Temperature Blocking Bias) reliability testing with 0 allowed failures.

Device List	Rel. Test	Conditions	Sample Results
TY72011P	HTBB	125DegC, 500V bias on HV pin, 672Hrs	80 due 3/11/02
[Other part numbers covered by this device qualification: TY72011P2]			

MC33260P	HTOL	125DegC, 672Hrs	80 due 3/18/02
[Other part numbers covered by this device qualification: MC33260DR2,MC33260D]			

NCP1200P60	HTBB	125DegC, 450V bias on HV pin, 672Hrs	80 due 4/3/02
[Other part numbers covered by this device qualification: NCP1200P40, NCP1200P60, NCP1200P100, NCP1200D60R2, NCP1200D40R2, NCP1200D100R2]			

MC33364D	HTBB	125DegC, 450V bias on HV pin, 672Hrs	80 due 4/3/02
[Other part numbers covered by this device qualification: MC33364D1R2, MC33364D2R2]			

MC33368P	HTBB	125DegC, 450V bias on HV pin, 672Hrs	80 due 5/22/02
[Other part numbers covered by this device qualification: MC33368DR2, MC33368D]			

Test conditions and results are as follows:

RELIABILITY DATA :

MC44608P75 has successfully passed the qualification tests below on 6inch process :

DEVICE MC44608P75

TEST	CONDITIONS	SS	Results
HTBB	125DegC, 400V bias on HV pin, 1000Hrs	240	0 failures
HAST	130DegC, 100%RH, 15 psi, 96Hrs	240	due 2/15/02
TC	-65DegC to 150DegC, 500 cycles	240	0 failures
ESD	+/- 2000V HBM	15	0 failures
ESD	+/- 200V MM	15	0 failures

[Other part numbers covered by this device qualification: MC44608P75, MC44608P100, MC44608P40]

ELECTRICAL CHARACTERISTIC SUMMARY:

All electrical parameters remain unchanged. Temperature characterization report is available upon request for each device at the time of sampling. Samples will be made available for customer qualification and application verification, in accordance with the following schedule:

Device List	Sample Date
MC44608P75	2/1/02
MC44608P40, MC44608P100	3/25/02
TY72011P, TY72011P2	2/22/02
MC33260P, MC33260DR2, MC33260D	2/29/02
NCP1200P60, NCP1200P40, NCP1200P100	4/8/02
NCP1200D60R2, NCP1200D40R2, NCP1200D100R2	
MC33364D, MC33364D1R2, MC33364D2R2	4/8/02
MC33368P, MC33368DR2, MC33368D	5/22/02



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CHANGED PART IDENTIFICATION:

Device marking is not affected by this change. All part numbers with date code of 0221 (Calendar year 2002, work week 21) or later could represent product sourced from the 6 inch production line.

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

MC33260D
MC33260DR2
MC33260P
MC33364D
MC33364D1R2
MC33364D2R2
MC33368D
MC33368DR2
MC33368P
MC44608P100
MC44608P40
MC44608P75
NCP1200D100R2
NCP1200D40R2
NCP1200D60R2
NCP1200P100
NCP1200P40
NCP1200P60
TY72011P
TY72011P2