ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

04-DEC-2003

SUBJECT: ON Semiconductor Final Product/Process Change Notification #13212

TITLE: Assembly/Test Site Capacity Addition for Clock and Data Management Products in the 16 Lead SOIC Narrow Body Package

EFFECTIVE DATE: 04-Feb-2004

AFFECTED CHANGE CATEGORY: On Semiconductor Assembly/Test Site

AFFECTED PRODUCT DIVISION: ECL Products

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Keith Stapley <RXNN90@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or
Prescott Sakai <FFNWHF@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or John Veto <RRTD61@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 that it has successfully completed qualification of the ON Semiconductor Philippines Incorporated (OSPI) facility located in Carmona, Philippines to assemble and test the listed Clock and Data Management products in 16 lead narrow body SOIC packages. OSPI is a TS16949 and ISO9001:2000 certified facility. ON Semiconductor's OSPI facililty has been producing high quality SOIC, TSSOP and PLCC products for over 10 years.

Currently the listed devices are manufactured and tested at Advanced Semiconductor Engineering (ASE-CL)in ChungLi, Taiwan.

There will be no changes in device functionality. Reliability will continue to meet or exceed ON Semiconductor's highest standards.

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RELIABILITY DATA SUMMARY:

Test	Conditions	Results
High Temp Op Life (HTOL)	Tj =150DegC for 2016 hours	0/319
	Tj =150DegC for 504 hours	0/385
High Temp Bake (HTB)	150DegC for 1008 hours	0/704
	175DegC for 504 hours	0/320
Preconditioning for MSL-1 (PC)	IR at 235DegC	0/693
	IR at 260DegC	0/1422
PC-HAST	130DegC/85% RH/18.8 PSIG for 96 Hrs	0/701
PC-Autoclave (AC)	121DegC/100% RH/15 PSIG for 192 Hrs	0/705
PC-Temp Cycling (TC)	-65DegC to +150DegC for 1000 cycles	0/703
ESD per JEDEC Standard	Human Body Model(HBM) Machine Model (MM) Charge Device Model(CDM)	MEETS OR EXCEEDS CRITERIA
Destructive Physical Analysis (DPA)	Analysis done after PC-Temp Cycling	MEETS OR EXCEEDS CRITERIA
Parameter Verification	Electrical Characterization/ distribution summary of Critical Parameters	AVAIL

Qualification Vehicle Justification

Technology	**Qualification Device**	**Reason Chosen**
MOSAIC35	MC10EL16D	CDMBU Product, OSPI SOIC-8 package
STD LINEAR	MC1413BD	APMD Product, OSPI SOIC-16 package
STD CMOS	MC14572UBD	Logic Product, OSPI SOIC-16 package
0.6u CMOS	MC74LVX4052D	Logic Product, OSPI SOIC-16 package

Reliability will continue to meet or exceed ON Semiconductor's highest standards.

ELECTRICAL CHARACTERISTIC SUMMARY:
There will be no changes in device functionality. Data sheet specifications will remain the same.

CHANGED PART IDENTIFICATION:
AWLYWW date code: A (location) will now be represented by a "P" for OSPI (ASECL was "X")

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AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART
MC100EL15D
MC100EL15DR2
MC100EL34D
MC100EL34DR2
MC100EL57D
MC100EL57DR2
MC100LVEL34D
MC100LVEL34DR2
MC100LVEP34D
MC100LVEP34DR2
MC10EL15D
MC10EL15DR2
MC10EL34D
MC10EL34DR2
MC10EL57D
MC10EL57DR2
MC10SX1189D
MC10SX1189DR2