



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
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20-JUN-2003

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12967

TITLE: Wafer Fabrication Site Transfer of the 10EL16 Product Family to the COM1 Facility

EFFECTIVE DATE: 20-Aug-2003

AFFECTED CHANGE CATEGORY:

**Subcontractor Fab Site
Wafer Process**

AFFECTED PRODUCT DIVISION: Broadband Products Div

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Representative
or Keith Stapley <RXNN90@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Representative

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Representative or Tim Gurnett <R13617@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:

This is the Final PCN to notify customers that the changes described in Initial PCN# 12874, located at www.onsemi.com, have been completed for the 10EL16 product family.

ON Semiconductor is pleased to announce the Qualification and Process Certification of MOSAIC 35 process in their internal factory COM 1, located on the ON Semiconductor site in Phoenix, AZ. to manufacture MOSAIC 3 Bipolar Technology products. COM1 is an ISO9001 certified facility and currently manufactures the MOSAIC 5 product family. MOSAIC 3 products were previously fabricated in the Motorola Bipolar Manufacturing Center (BMC) in Mesa, Arizona.

This is the Final PCN only for the 10EL16 product family. Additional notifications will be issued separately for subsequent products when they have completed all qualification testing.

Device parameters will continue to meet all Data Book specifications, and reliability will continue to meet or exceed ON Semiconductor standards.



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

Below is a summary of the interim reliability results for the MC10EL16D.

Test	Conditions	Results
High Temp Op Life (HTOL)	Tj =150DegC for 504 hours for 2016 hours	0/317 0/77
High Temp Bake (HTB)	150DegC for 504 hours for 1512 hours	0/237 0/77
	175DegC for 504 hours	0/160
Preconditioning	IR at 235DegC	0/231
for MSL-1 (PC)	IR at 260DegC	0/480
PC-HAST	130DegC/85% RH/18.8 PSIG for 192 Hrs	0/77
PC-Autoclave (AC)	121DegC/100% RH/15 PSIG for 192 hours	0/77
PC-Temp Cycling (TC)	-65DegC to +150DegC; for 250 cycles for 1000 cycles	0/237 0/77
ESD per JEDEC Standard	Human Body Model(HBM) Machine Model (MM) Charge Device Model(CDM)	MEETS OR EXCEEDS CRITERIA
Intrinsic Reliability (IR)	Compare to BMC results for: Electromigration Hot Carrier Injection	PASS PASS
Construction Analysis (CA)	TACL Report LIMS# 6270A	COMPLETE
Parameter	Electrical Characterization/distribution	AVAIL
Verification	summary of Critical Parameters	

Reliability Test Conclusions:

Reliability test data is consistent with passing ON Semiconductor requirements.

ELECTRICAL CHARACTERISTIC SUMMARY: Available on request.

CHANGED PART IDENTIFICATION:

Products marked after WW27, 2003 may contain COM1 die.

Customers are encouraged to contact ON Semiconductor to order samples.

After the PCN expiration date, customers may receive products manufactured with die from either the COM1 or BMC FAB.

AFFECTED DEVICE LIST(WITHOUT SPECIALS):

PART

- MC10EL16D
- MC10EL16DR2
- MC10EL16DT
- MC10EL16DTR2
- MCW10EL16