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**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION**

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**02 Jun 2009**

**SUBJECT: ON Semiconductor Final Product/Process Change Notification #16271**

**TITLE: Final Notification for Transfer of Products from MOS9 Wafer Fab (East Kilbride, Scotland) to CZ4 Wafer Fab (Roznov, Czech Republic)**

**PROPOSED FIRST SHIP DATE: 31 Aug 2009**

**AFFECTED CHANGE CATEGORY(S): ON Semiconductor Wafer Fab site**

**AFFECTED PRODUCT DIVISION(S): Emitter-Coupled Logic (ECL) E-Plus Translators**

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact Sales Office or Eric Rupnow <[e.rupnow@onsemi.com](mailto:e.rupnow@onsemi.com)>

**SAMPLES:** Samples will be available at the beginning of July 2009

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or Matt Kas <[Matt.Kas@onsemi.com](mailto:Matt.Kas@onsemi.com)>

**NOTIFICATION TYPE:**

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 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 FPCN to IPCN16242 available at [www.onsemi.com](http://www.onsemi.com).

MOS9 wafer fab will no longer support the fabrication of the E-Plus ECL translators. In order to continue to support our customer's requirements for E-Plus ECL Translator products, the fabrication of these devices is being moved from current wafer fab, MOS9 in East Kilbride Scotland, to ON Semiconductor's wafer fab, CZ4 in Roznov Czech Republic.

Due to slight increase in circuit current observed on CZ4 material, ICCH and ICCL upper specification limits are being changed.

For MC100EPT23 and MC100LVELT23:

Change ICCH Limits at all temperatures from (10mA, 25mA) to (10mA, 30mA)

Change ICCL Limits at all temperatures from (15mA, 36mA) to (15mA, 40mA)

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For NB100ELT23L:

Change ICCH Limits at all temperatures from (10mA, 20mA) to (10mA, 25mA)

Change ICCL Limits at all temperatures from (15mA, 25mA) to (15mA, 30mA)

For MC100EPT21:

Change ICCH Limits at all temperatures from (5mA, 20mA) to (5mA, 25mA)

Change ICCL Limits at all temperatures from (8mA, 26mA) to (8mA, 30mA)

For MC100EPT26:

Change ICCH Limits at all temperatures from (10mA, 18mA) to (10mA, 25mA)

Change ICCL Limits at all temperatures from (15mA, 35mA) to (15mA, 40mA)

**QUALIFICATION PLAN:**

Reliability testing will be performed on the MC100EPT23DG qualification vehicle chosen based on die size, voltage rating, and run rates.

**RELIABILITY TEST RESULTS:**

<b>Reliability Test</b>	<b>Conditions</b>	<b>Results</b>
1. High Temp Op Life	1008 hrs. (FIT < 1000)	0/80
2. High Temp Storage (150 °C)	504 hrs.	0/80
3. Pre-Conditioning MSL1 260		0/80
4. HAST (130°C/85%RH)	96 hrs.	0/80
5. Autoclave (121°C/100%RH/15PSIG)	96 hrs.	0/80
6. Temp Cycling (-65 °C to +150 °C)	500 cycles	0/80
8. ESD - Human Body Model	2000 V Minimum	4000V
9. ESD - Machine Model	200 V Minimum	200V
10. Latch-Up	JESD78 Minimum	Passed
11. SAT (Pre-condition 260 C, MSL 1		Passed

**ELECTRICAL CHARACTERISTIC SUMMARY:**

DC, AC, ESD, and Latch-up testing has been performed on representative qualification vehicle and compared to historical data. Characterization results on all qualification device matched historical data. Characterization results are available for review upon request.

**CHANGED PART IDENTIFICATION:** N/A



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**AFFECTED DEVICE LIST**

MC100EPT21D  
MC100EPT21DG  
MC100EPT21DR2  
MC100EPT21DR2G  
MC100EPT21DT  
MC100EPT21DTG  
MC100EPT21DTR2  
MC100EPT21DTR2G  
MC100EPT21MNR4  
MC100EPT21MNR4G  
MC100EPT23D  
MC100EPT23DG  
MC100EPT23DR2  
MC100EPT23DR2G  
MC100EPT23DT  
MC100EPT23DTG  
MC100EPT23DTR2  
MC100EPT23DTR2G  
MC100EPT23MNR4  
MC100EPT23MNR4G  
MC100EPT26D  
MC100EPT26DG  
MC100EPT26DR2  
MC100EPT26DR2G  
MC100EPT26DT  
MC100EPT26DTG  
MC100EPT26DTR2  
MC100EPT26DTR2G  
MC100EPT26MNR4  
MC100EPT26MNR4G  
MC100LVELT23D  
MC100LVELT23DG  
MC100LVELT23DR2  
MC100LVELT23DR2G  
MC100LVELT23DT  
MC100LVELT23DTG  
MC100LVELT23DTR2  
MC100LVELT23DTRG  
MC100LVELT23MNRG  
NB100ELT23LD  
NB100ELT23LDG  
NB100ELT23LDR2  
NB100ELT23LDR2G  
NB100ELT23LDT  
NB100ELT23LDTG  
NB100ELT23LDTR2  
NB100ELT23LDTR2G