



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
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28-FEB-2003

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #12671

TITLE: Initial Notification for Transfer of MOSAIC 1 & 1.5 Devices from Motorola BMC to Tesla

EFFECTIVE DATE: 28-Jun-2003

AFFECTED CHANGE CATEGORY: ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION:

ANALOG PRODUCTS DIV
LOGIC PRODUCTS DIV
BROADBAND PRODUCTS DIV

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 Tom Bruner <RPP920@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Tom Bruner <RPP920@onsemi.com>

DISCLAIMER:

Initial Product/Process Change Notification (IPCN) -First Notification distributed to customers.
Distributed at least 120 days from the effective date of the change.

This is an 'early warning' about an upcoming change and contains general information regarding the change details and devices affected. It also contains at least a reliability qualification plan, but the actual qualification data will be identified in the Final Product/Process Change Notification (FPCN). This notification will be followed by a Final Product/Process Change Notification (FPCN) at least 60 days from effective date of change.

DESCRIPTION AND PURPOSE:

ON Semiconductor is pleased to announce the Qualification and Process Certification of the ON Semiconductor Tesla wafer fab in Roznov, Czech Republic, to manufacture Mosaic 1 & 1.5 technology products. The Tesla wafer fab is a fully qualified, ISO9001:2000 certified site for other ON Semiconductor devices and has been in production since 1994. MOSAIC 1 & 1.5 products were previously fabricated in the Motorola BMC wafer facility in Mesa, Arizona.

This is the Initial PCN for the technology transfer. This manufacturing site change will not require any design, specification, or circuit performance changes. All designs and mask sets are fully qualified from previous wafer process area (Motorola BMC).

Each device will have electrical characterization performed to insure no change to device functionality or data sheet performance.



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The anticipated timeframe for this transfer program will begin in January 2003 and continue through November 2003. The final PCN's will be issued periodically and contain specific information for each set of devices. Samples will be available per the Final PCNs.

QUALIFICATION PLAN:

Reliability testing will be performed on 5 different device types. Vehicles chosen based on die size, complexity, and volume.

Specific devices to be tested are:	# Lots
MC10H602FN	3
MC10H125FN	1
MC10H141FN	1
MC10ELT21D	1
NCS5000SN	1

Planned Reliability tests are:

Test	Conditions	Interval
HTOL	Tj = 150 deg C, bias	1008 hrs
HTB	Ta = 150 deg C	1008 hrs
MSL1 PC	3 IR	Readout
AC-PC	Ta = 121 deg C, P =15 psig, RH = 100%	96 hrs
HAST-PC	Ta = 130 deg C, P =18.8 psig, RH = 85%, Bias	96 hrs
Temp Cycle-PC	Ta = -65 to +150 deg C	500 cyc

Electrical Characterization Plan:

Characterization on each device being transferred will be performed to the following requirements:

- 1) ESD performance (HBM, MM, CDM)
- 2) Three temperature electrical characterization

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

MC100ELT20D, MC100ELT20DR2, MC100ELT20DT, MC100ELT20DTR2,
 MC100ELT21D, MC100ELT21DR2, MC100ELT21DT, MC100ELT21DTR2,
 MC100ELT22D, MC100ELT22DR2, MC100ELT22DT, MC100ELT22DTR2,
 MC100ELT23D, MC100ELT23DR2, MC100ELT23DT, MC100ELT23DTR2,
 MC100ELT24D, MC100ELT24DR2, MC100ELT24DT, MC100ELT24DTR2,
 MC100ELT25D, MC100ELT25DR2, MC100ELT25DT, MC100ELT25DTR2,
 MC100ELT28D, MC100ELT28DR2, MC100ELT28DT, MC100ELT28DTR2,
 MC100H600FN, MC100H600FNR2, MC100H601FN, MC100H601FNR2,
 MC100H602FN, MC100H603FN, MC100H603FNR2, MC100H604FN,
 MC100H604FNR2, MC100H605FN, MC100H605FNR2, MC100H606FN,
 MC100H607FN, MC100H640FN, MC100H640FNR2, MC100H641FN,
 MC100H641FNR2, MC100H642FN, MC100H642FNR2, MC100H643FN,
 MC100H643FNR2, MC100H644FN, MC100H646FN, MC100H646FNR2,
 MC100H680FN, MC10ELT20D, MC10ELT20DR2, MC10ELT20DT,
 MC10ELT20DTR2, MC10ELT21D, MC10ELT21DR2, MC10ELT21DT,

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MC10ELT21DTR2, MC10ELT22D, MC10ELT22DR2, MC10ELT22DT,
MC10ELT22DTR2, MC10ELT24D, MC10ELT24DR2, MC10ELT24DT,
MC10ELT24DTR2, MC10ELT25D, MC10ELT25DR2, MC10ELT25DT,
MC10ELT25DTR2, MC10ELT28D, MC10ELT28DR2, MC10ELT28DT,
MC10ELT28DTR2, MC10H016FN, MC10H016FNR2, MC10H016L,
MC10H016P, MC10H100L, MC10H100M, MC10H100MEL,
MC10H100P, MC10H101FN, MC10H101FNR2, MC10H101L,
MC10H101M, MC10H101MEL, MC10H101P, MC10H102FN,
MC10H102FNR2, MC10H102L, MC10H102M, MC10H102MEL,
MC10H102P, MC10H103FN, MC10H103FNR2, MC10H103L,
MC10H103M, MC10H103MEL, MC10H103P, MC10H104FN,
MC10H104FNR2, MC10H104L, MC10H104M, MC10H104MEL,
MC10H104P, MC10H105FN, MC10H105FNR2, MC10H105L,
MC10H105M, MC10H105MEL, MC10H105P, MC10H106FN,
MC10H106FNR2, MC10H106L, MC10H106M, MC10H106MEL,
MC10H106P, MC10H107FN, MC10H107FNR2, MC10H107L,
MC10H107M, MC10H107MEL, MC10H107P, MC10H109FN,
MC10H109FNR2, MC10H109L, MC10H109M, MC10H109MEL,
MC10H109P, MC10H113FN, MC10H113FNR2, MC10H113L,
MC10H113M, MC10H113MEL, MC10H113P, MC10H115FN,
MC10H115FNR2, MC10H115L, MC10H115M, MC10H115MEL,
MC10H115P, MC10H116D, MC10H116DR2, MC10H116FN,
MC10H116FNR2, MC10H116L, MC10H116M, MC10H116MEL,
MC10H116P, MC10H117FN, MC10H117FNR2, MC10H117L,
MC10H117M, MC10H117MEL, MC10H117P, MC10H118P,
MC10H121FN, MC10H121FNR2, MC10H121L, MC10H121M,
MC10H121MEL, MC10H121P, MC10H123FN, MC10H123FNR2,
MC10H123L, MC10H123P, MC10H124FN, MC10H124FNR2,
MC10H124L, MC10H124M, MC10H124MEL, MC10H124P,
MC10H125FN, MC10H125FNR2, MC10H125L, MC10H125M,
MC10H125MEL, MC10H125P, MC10H130FN, MC10H130FNR2,
MC10H130L, MC10H130P, MC10H131FN, MC10H131FNR2,
MC10H131L, MC10H131M, MC10H131MEL, MC10H131P,
MC10H135FN, MC10H135FNR2, MC10H135L, MC10H135M,
MC10H135P, MC10H136FN, MC10H136FNR2, MC10H136L,
MC10H136P, MC10H141FN, MC10H141FNR2, MC10H141L,
MC10H141P, MC10H158FN, MC10H158FNR2, MC10H158L,
MC10H158M, MC10H158MEL, MC10H158P, MC10H159FN,
MC10H159FNR2, MC10H159L, MC10H159M, MC10H159MEL,
MC10H159P, MC10H160FN, MC10H160L, MC10H160M,
MC10H160MEL, MC10H160P, MC10H161FN, MC10H161FNR2,
MC10H161L, MC10H161M, MC10H161MEL, MC10H161P,
MC10H162FN, MC10H162FNR2, MC10H162L, MC10H162M,
MC10H162MEL, MC10H162P, MC10H164FN, MC10H164FNR2,
MC10H164L, MC10H164M, MC10H164MEL, MC10H164P,
MC10H165FN, MC10H165FNR2, MC10H165L, MC10H165P,
MC10H166FN, MC10H166FNR2, MC10H166L, MC10H166P,
MC10H171FN, MC10H171P, MC10H172FN, MC10H172FNR2,
MC10H172L, MC10H172P, MC10H173FN, MC10H173FNR2,
MC10H173L, MC10H173M, MC10H173MEL, MC10H173P,
MC10H174FN, MC10H174FNR2, MC10H174L, MC10H174M,
MC10H174MEL, MC10H174P, MC10H175FN, MC10H175FNR2,
MC10H175L, MC10H175M, MC10H175P, MC10H176FN,
MC10H176FNR2, MC10H176L, MC10H176M, MC10H176MEL,
MC10H176P, MC10H180FN, MC10H180L, MC10H180P,
MC10H181FN, MC10H181FNR2, MC10H181P,

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MC10H186FN, MC10H186FNR2, MC10H186L, MC10H186P,
MC10H188FN, MC10H188FNR2, MC10H188L, MC10H188M,
MC10H188MEL, MC10H188P, MC10H189FN, MC10H189FNR2,
MC10H189L, MC10H189M, MC10H189MEL, MC10H189P,
MC10H209FN, MC10H209FNR2, MC10H209L, MC10H209M,
MC10H209MEL, MC10H209P, MC10H210FN, MC10H210FNR2,
MC10H210L, MC10H210M, MC10H210MEL, MC10H210P,
MC10H211FN, MC10H211FNR2, MC10H211L, MC10H211M,
MC10H211MEL, MC10H211P, MC10H330FN, MC10H330FNR2,
MC10H330P, MC10H332FN, MC10H332FNR2, MC10H332P,
MC10H334FN, MC10H334FNR2, MC10H350FN, MC10H350FNR2,
MC10H350L, MC10H350M, MC10H350MEL, MC10H350P,
MC10H351FN, MC10H351FNR2, MC10H351M, MC10H351MEL,
MC10H351P, MC10H352FN, MC10H352FNR2, MC10H352P,
MC10H424FN, MC10H424FNR2, MC10H424P, MC10H600FN,
MC10H600FNR2, MC10H601FN, MC10H601FNR2, MC10H602FN,
MC10H602FNR2, MC10H603FN, MC10H603FNR2, MC10H604FN,
MC10H604FNR2, MC10H605FN, MC10H605FNR2, MC10H606FN,
MC10H606FNR2, MC10H607FN, MC10H640FN, MC10H640FNR2,
MC10H641FN, MC10H641FNR2, MC10H642FN, MC10H642FNR2,
MC10H643FN, MC10H643FNR2, MC10H644FN, MC10H644FNR2,
MC10H645FN, MC10H645FNR2, MC10H646FN, MC10H646FNR2,
MC10H680FN, MC10H680FNR2, MCW100ELT22, MCW100ELT23,
MCW10ELT24, MCW10ELT25, MCW10H101, MCW10H102, MCW10H103,
MCW10H104, MCW10H105, MCW10H107, MCW10H109, MCW10H113,
MCW10H115, MCW10H116, MCW10H124, MCW10H125, MCW10H131,
MCW10H136, MCW10H141, MCW10H145, MCW10H158, MCW10H164,
MCW10H176, MCW10H350, MCW10H351, MCW10H642, NCS5000SNT1, NCSW5000
SC63610FN102HR2, SC63610FN115HR2, SC63610FN116HR2, SC63610FN125HR2,
SC63610FN131HR2, SC63610L102H, SC63610L104H, SC63610L115H,
SC63610L116H, SC63610L125H, SC63610L131H, SC63700L101, SC64017L