



PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

14-AUG-2001

SUBJECT: ON Semiconductor Product/Process Change Notification #11678

TITLE: Initial Notification - Qualification of Alternate Assembly/Test Sites for Power Products

EFFECTIVE DATE: 12-Dec-2001

AFFECTED CHANGE CATEGORY:
Subcontractor Assembly/Test Site

AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Carolyn Antillon <RM8160@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or
Barbara Matteson <RM2230@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Chris Holly <RV1140@onsemi.com>

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

Final Product/Process Change Notification (FPC�) -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:
As part of our Manufacturing Restructuring Program, ON Semiconductor is qualifying the following alternate assembly/test sites for our Power Products currently produced in our Guadalajara, Mexico facility:

Package	D2PAK
Technologies	Bipolar Power, Rectifier, IGBT, TMOS
Alternate Assembly/Test Site	ON Semiconductor SBN1 (Seremban, Malaysia)

Package	TO220 Clip
Technologies	Thyristor
Alternate Assembly/Test Site	ON Semiconductor SBN1 (Seremban, Malaysia)

Package	TO220-Fullpack
Technologies	Bipolar Power, Rectifier
Alternate Assembly/Test Site	PSi Technologies (Manilla, Philippines)



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Package Chip Sales-Waffle Pack
 Technologies Bipolar Power, Zeners, IGBT
 Alternate Assembly/Test Site PSi Technologies (Manilla, Philippines)

Package Chip Sales-Ring Pack
 Technologies Bipolar Power, Thyristor, TMOS
 Alternate Assembly/Test Site ON Semiconductor-TESLA (Czech Republic)

Sample Availability :

In order to expedite the product sampling process, ON Semiconductor requests that our customers place their sample request orders to Barbara Matteson (contact information above) by August 31, 2001. This will allow ON Semiconductor to produce and deliver the samples in a timely manner (usually 2-3 weeks after receiving the order), thus ensuring that our valued customers have adequate time to evaluate this change in their applications.

QUALIFICATION PLAN:

<u>Test</u>	<u>Conditions</u>	<u>Comments</u>
Preconditioning	MSL-1	Prior to Autoclave and Temp Cycling for D2PAK devices only.
HTRB	Tj=Max rated Tj, 1000 hrs.	
IOL	Ta=25 deg. C, delta Tj =>100 deg. C,	
Temp Cycle	Air to Air, -65 to 150 deg. C 1000 cycles	
Autoclave	Ta=121 deg. C, RH= 100%, PSIG= 15, 96 hrs.	
Resistance to Solder Heat	Per AEC-101	
Solderability	Per AEC-101	
Physical Dimensions	Per Spec.	
Parametric Verification	Tri Temp	

Qualification Vehicle Justification

<u>Package</u>	<u>New Site</u>	<u>Tech</u>	<u>Qual Vehicles</u>	<u>Justification</u>
D2PAK	SBN1	Bipolar	SJB1002T4	Highest Voltage
		Rectifier	MBRB4030T4	Largest Die
		IGBT	MGB20N40CL	Gen1
		IGBT (Gen2)	MGB15N40CL	Gen2
		TMOS	MTP75N05HD	
Thyristor TO220 Clip	SBN1	Thyristor	MAC15A10	Highest Voltage, Largest Die
		Thyristor	MAC228A10	Highest Voltage, Sensitive Gate
TO220-FullPack	PSI	Bipolar	MJF18008	Highest Voltage
		Rectifier	MBRF2060CT	Largest Die

RELIABILITY DATA SUMMARY: To be published in Final Product Change Notification (FPCN).

ELECTRICAL CHARACTERISTIC SUMMARY: To be published in Final Product Change Notification (FPCN).

CHANGED PART IDENTIFICATION: To be published in Final Product Change Notification (FPCN).

**Product/Process Change Notification #11678****AFFECTED DEVICE LIST (WITHOUT SPECIALS):****PART**

2N6344, 2N6344A, 2N6348A, 2N6349, 2N6349A, 2N6394, 2N6395, 2N6397, 2N6397T, 2N6399, 2N6400, 2N6401, 2N6402, 2N6403, 2N6404, 2N6405, 2N6504, 2N6505, 2N6507, 2N6507T, 2N6508, 2N6508T, 2N6509, 2N6509T, BUL146F, C122B1, C122F1, C122FIT, MAC15-008, MAC15-010, MAC15A10, MAC15A6, MAC15A8, MAC210A10, MAC210A8, MAC212A10, MAC212A8, MAC218A8, MAC228A10, MAC228A4, MAC228A6, MAC228A8, MAC3030-008, MBRB1045, MBRB1045T4, MBRB1545CT, MBRB1545CTT4, MBRB20100CT, MBRB20100CTT4, MBRB20200CT, MBRB20200CTT4, MBRB2060CT, MBRB2060CTT4, MBRB2515L, MBRB2515LT4, MBRB2535CTL, MBRB2535CTLT4, MBRB2545CT, MBRB2545CTT4, MBRB3030CT, MBRB3030CTL, MBRB3030CTLT4, MBRB3030CTT4, MBRB4030, MBRB4030T4, MBRC929, MBRF20100CT, MBRF20200CT, MBRF2060CT, MBRF2545CT, MCR218-002, MCR218-004, MCR218-006, MCR218-6T, MCR310-010, MCR68-002, MCR69-002, MCR69-003, MCR72-003, MCR72-006, MCR72-008, MCR72-6T, MCR72-8T, MGB15N35CLT4, MGB15N40CLT4, MGB19N35CLT4, MGB20N35CLT4, MGB20N40CL, MGB20N40CLT4, MJB18004D2T4, MJB42C, MJB42CT4, MJB44H11, MJB44H11T4, MJB45H11, MJB45H11T4, MJF122, MJF127, MJF15030, MJF15031, MJF18002, MJF18004, MJF18008, MJF2955, MJF3055, MJF31C, MJF32C, MJF44H11, MJF45H11, MJF47, MJF6388, MJF6668, MTAJ25N06EL, MTB10N40E, MTB10N40ET4, MTB10N60E7, MTB10N60E7T4, MTB1306, MTB1306P, MTB1306PT4, MTB1306T4, MTB20N20E, MTB20N20ET4, MTB23P06V, MTB23P06VT4, MTB24N06HDL, MTB24N06HDL1, MTB24N06HDLT4, MTB29N15E, MTB29N15ET4, MTB2N40E, MTB2P50E, MTB2P50ET4, MTB30N06VL, MTB30N06VLT4, MTB30P06V, MTB30P06VT4, MTB33N10E, MTB33N10ET4, MTB36N06V, MTB36N06VT4, MTB3N100ET4, MTB40N10E, MTB40N10ET4, MTB4N50ET4, MTB50N06V, MTB50N06VL, MTB50N06VLT4, MTB50N06VT4, MTB50P03HDL, MTB50P03HDLT4, MTB52N06V, MTB52N06VL, MTB52N06VLT4, MTB52N06VT4, MTB55N06Z, MTB55N06ZT4, MTB60N05HDL, MTB60N05HDLT4, MTB60N06HD, MTB60N06HDT4, MTB6N60ET4, MTB75N03HDL, MTB75N03HDLT4, MTB75N05HD, MTB75N05HDT4, MTB75N06HD, MTB75N06HDT4, MTB8N50E, MTB8N50ET4, MURB1620CT, MURB1620CTT4, MURB1660CT, MURB1660CTT4, MURF1620CT, MURF1660CT, MURHB840CT, MURHB840CTT4, MURHB860CT, MURHB860CTT4, MURHF860CT, MZC5355B, MZC5361B, MZC5368B, NTB10N40, NTB10N40T4, NTB10N60, NTB10N60T4, NTB12N50, NTB12N50T4, NTB15N40, NTB15N40T4, NTB18N06, NTB18N06L, NTB18N06LT4, NTB18N06T4, NTB22N06, NTB22N06L, NTB22N06LT4, NTB22N06T4, NTB27N06L, NTB27N06LT4, NTB30N06, NTB30N06L, NTB30N06LT4, NTB30N06T4, NTB35N15, NTB35N15T4, NTB45N06, NTB45N06L, NTB45N06LT4, NTB45N06T4, NTB52N10, NTB52N10T4, NTB60N06, NTB60N06L, NTB60N06LT4, NTB60N06T4, NTB6N60, NTB6N60T4, NTB75N03-006, NTB75N03-06T4, NTB75N03L09, NTB75N03L09T4, NTB75N06, NTB75N06L, NTB75N06LT4, NTB75N06T4, NTB8N50, NTB8N50T4, SBRB1545CT, SBRB20100CT, SBRB20100CTT4, SBRB20200CT, SBRB20200CTT4, SBRB2060CT, SBRB2060CTT4, SBRB2515L, SBRB2515LT4, SBRB2535CTL, SBRB2535CTLT4, SBRB2545CT, SBRB2545CTT4, SBRB3030CT, SBRB3030CTL, SBRB3030CTLT4, SBRB3030CTT4, SBRB4030, SBRB4030T4, SC141D, SC146D, SGB20N36CLT4, SJB42C, SJB42CT4, STB10N40E, STB10N40ET4, STB1306, STB1306T4, STB15N06V, STB15N06VT4, STB20N20E, STB20N20ET4, STB23P06V, STB23P06VT4, STB24N06HDL, STB24N06HDL1, STB24N06HDLT4, STB29N15E, STB29N15ET4, STB2N60E, STB2N60ET4, STB2P50E, STB2P50ET4, STB30N06EL, STB30N06ELT4, STB30N06VL, STB30N06VLT4, STB30P06V, STB30P06VT4, STB33N10E, STB33N10ET4, STB36N06V, STB36N06VT4, STB3N60E, STB3N60ET4, STB40N10E, STB40N10ET4, STB4N40E, STB4N40ET4, STB4N50E, STB4N50ET4, STB50N06E, STB50N06EL, STB50N06ELT4, STB50N06ET4, STB50N06V, STB50N06VL, STB50N06VLT4, STB50N06VT4, STB50P03HDL, STB50P03HDLT4, STB52N06V, STB52N06VL, STB52N06VLT4, STB52N06VT4, STB55N06Z, STB55N06ZT4, STB60N05HDL, STB60N05HDLT4, STB60N06HD, STB60N06HDT4, STB6N60E, STB6N60ET4, STB75N03HDL, STB75N03HDLT4, STB75N05HD, STB75N05HDT4, STB75N06HD, STB75N06HDT4, STB8N50E, STB8N50ET4, STB9N25E, STB9N25ET4,



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STC591BP, SURB1620CT, SURB1620CTT4, SURB1660CT, SURB1660CTT4, SURHB840CT,
SURHB840CTT4, SURHB860CT, SURHB860CTT4, T2500D, T2800D, TEC0193APF,
TEC0193BPF, TPA0233, XTB10N60, XTB10N60T4,