

ON Semiconductor



Subject: ON Semiconductor PRODUCT/PROCESS CHANGE NOTIFICATION 10135

TITLE: ASSEMBLY/TEST SITE CHANGE FROM MOTOROLA KLM TO TESLA SEZAM,
CZECH REPUBLIC

EFFECTIVE DATE: 11-APR-00

AFFECTED CHANGE CATEGORIES

On Semiconductor Assy Site
On Semiconductor Test Site

Subcontractor Assembly Site
Subcontractor Test Site

AFFECTED PRODUCT DIVISIONS

ANALOG PRODUCTS DIV

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office.

Ref: RRG60

SAMPLES: Contact Below
Contact your local ON Semiconductor Sales Office.

Ref: RTC540@email.sps.mot.com

For any questions concerning this notification:
REFERENCE: SAM MOORE PHONE: 602-244-3529

DISCLAIMER:

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.
GPCN FORMAT: CUSTOMER

DO NOT REPLY TO THIS MESSAGE.

Semiconductor Technology Grp

PRODUCT/PROCESS CHANGE NOTIFICATION

ISSUE DATE: 10-Feb-2000

NOTIFICATION #:10135

EFFECTIVE DATE: 11-Apr-2000

ISSUING DIVISION:ON SEMICONDUCTO

DESCRIPTION AND PURPOSE

ON Semiconductor is qualifying the Tesla Sezam assembly site in Rosnov, Czech Republic to process 5 lead T0-220 insertion mount and 5 lead D2T surface mount packages to meet growing business needs and additional capacity requirements. Tesla is already qualified on the 3 lead versions of these packages and the 5 lead devices will be processed using the same equipment. The 5 lead T0-220 and D2T process is being transferred from Motorola's KLM facility with no changes. There will be no change to the function of the devices being transferred. Device parameters will continue to meet all databook specifications and reliability will continue to meet or exceed ON Semiconductor standards.

QUALIFICATION PLAN

This change notification is being issued with generic data from the qualified Tesla 3 lead assembly line and the qualified 5 lead process in Motorola KLM. The Tesla assembly lines for 3 and 5 leads share common plating, trim and form, tape and reel, and test equipment. The 5 lead process is being transferred exactly from Motorola KLM using the same frame design, die attach, mold compound, solder plating, and final packaging.

For verification purposes only, ON Semiconductor will perform Autoclave, Temperature Cycling, and Humidity-Temperature-Bias testing on LM2576 and MC34167 devices processed in Tesla both in T0-220 and D2T packages. The D2T devices will also be subjected to Moisture Sensitivity Level-1 Pre-Conditioning prior to reliability testing. This data will be available on or before 17-May-2000.

RELIABILITY DATA SUMMARY

Motorola KLM data:

Operating life 160 units 1008 hrs. 0 rej.

Ta 125 deg C

Temperature Cycling 160 units 1000 cycles 0 rej.

MIL-STD-883C 1010b conditions

Temperature Cycling 240 units 1000 cycles 0 rej.

MIL-STD-883b conditions

Autoclave: 180 units 240 hrs. 0 rej.

15 psig 121C 100 % RH

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Moisture Sensitivity Level-1 Pre Conditioning 690 units 0 rej.

10 temp cycles, 168 hrs 85C/85%RH, IR Reflow 220 deg. C 3 passes

followed by

Autoclave 135 units 240 hrs. 0 rej.

Temperature Cycling 240 units 1000 cycles 0 rej.

Power Temperature Cycling 240 units 1000 cycles 0 rej.

Temperature-Humidity-Bias 135 units 1008 hrs 0 rej.

Solder heat: 190 units 0 rej.

260 deg C, 10 sec dwell on leads,

Reliability Data from the 3 lead Tesla line:

Operating life 231 units 1008 hrs. 0 rej.

Ta 125 C

Autoclave: 135 units 144 hrs. 0 rej.

15 psig, 121C, 100% PH

Temperature Cycling 231 units 1000 cycles 0 rej.

Temperature-Humidity-Bias 161 units 1008 hrs 0 rej.

Moisture Sensitivity Level-1 Pre Conditioning 660 units 0 rej.

10 temp cycles, 85C/85%RH 168 hrs, IR Reflow 3 passes at 220 deg. C.

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Followed by:

Temperature-Humidity-Bias 504hrs 210 units 0 rej.

Autoclave 144 hrs 210 units 0 rej.

Temp Cycling 1000 cycles, 210 units 0 rej.

ELECTRICAL CHARACTERISTIC SUMMARY

Characterization studies to be completed on the new line, however previous studies from both Tesla, and Motorola KLM show no change to parameters is expected. Data to be available in April 2000.

CHANGED PART IDENTIFICATION

Customers may see product from both sites starting with WW16 Date Codes. After WW26 all product will be sourced from Tesla.

Marking will show tracability codes:

KLM Site: Q

Tesla Site: SQ

FILE FORMAT: ASCII TEXT

FONT - Courier

SIZE - 12 Point

LINE - 70 characters/line

PAGE - 55 lines/page

PAGEBREAK CHARACTER - ^L (Control L)

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

LM2575D2T-005	, LM2575D2T-012	, LM2575D2T-015	, LM2575D2T-3.3
LM2575D2T-ADJ	, LM2575T-005	, LM2575T-012	, LM2575T-015
LM2575T-3.3	, LM2575T-ADJ	, LM2575TV-005	, LM2575TV-012
LM2575TV-015	, LM2575TV-3.3	, LM2575TV-ADJ	, LM2576D2T-005
LM2576D2T-012	, LM2576D2T-015	, LM2576D2T-3.3	, LM2576D2T-ADJ
LM2576D2T-ADJR4	, LM2576D2TR4-005	, LM2576D2TR4-3.3	, LM2576T-005
LM2576T-012	, LM2576T-015	, LM2576T-3.3	, LM2576T-ADJ
LM2576TV-005	, LM2576TV-012	, LM2576TV-ADJ	, LM2931ACD2T
LM2931ACD2TR4	, LM2931ACT	, LM2931ACTH	, LM2931ACTV
LM2931CD2T	, LM2931CD2TR4	, LM2931CT	, LM2931CTV
LM2935D2T	, LM2935T	, LM2935TH	, LM2935TV
MC33166D2T	, MC33166D2TR4	, MC33166T	, MC33166TH
MC33166TV	, MC33167D2T	, MC33167T	, MC33167TH
MC33167TV	, MC33267D2T	, MC33267D2TR4	, MC33267T
MC33267TH	, MC33267TV	, MC33369QT	, MC33369QTV
MC33369T	, MC33369TV	, MC33370QT	, MC33370QTV
MC33370T	, MC33370T1	, MC33370TV	, MC33371QT
MC33371QTV	, MC33371T	, MC33371TV	, MC33372QT
MC33372QTV	, MC33372T	, MC33372TV	, MC33373QT
MC33373QTV	, MC33373T	, MC33373TV	, MC33374QT
MC33374QTV	, MC33374T	, MC33374TV	, MC33379T
MC33379TV	, MC33380T	, MC33380TV	, MC33381T
MC33381TV	, MC33382T	, MC33382TV	, MC33383T
MC33383TV	, MC33384T	, MC33384TV	, MC33566D2T-001
MC33566D2T-1RK	, MC34166D2T	, MC34166D2TR4	, MC34166T
MC34166TH	, MC34166TV	, MC34167D2T	, MC34167T
MC34167TH	, MC34167TV	, MC74A0-50T	, MC74A1-50T
MC74A2-50T	, MC74A3-50T	, MC74A4-50T	, MC74A5-50T
MC74A6-50T	, MC74A7-50T	, PC33366T	, PC33379T
PC33379TV	, PC33380T	, PC33380TV	, PC33381T
PC33381TV	, PC33382T	, PC33382TV	, PC33383T
PC33383TV	, PC33384T	, PC33384TV	, PC33566D2T
PC33566D2T-001	, PTB6404-5L		
TCM2575-12.0VAT	, TCM2575-12.0VBV	, TCM2575-12.0VRT	, TCM2575-15.0VAT
TCM2575-15.0VBV	, TCM2575-15.0VRT	, TCM2575-3.3VAT	, TCM2575-3.3VBV
TCM2575-3.3VRT	, TCM2575-5.0VAT	, TCM2575-5.0VBV	, TCM2575-5.0VRT
TCM2575VAT	, TCM2575VBV	, TCM2575VRT	, TCM2576-12.0VAT
TCM2576-12.0VBV	, TCM2576-12.0VRT	, TCM2576-15.0VAT	, TCM2576-15.0VRT
TCM2576-3.3VAT	, TCM2576-3.3VRT	, TCM2576-5.0VAT	, TCM2576-5.0VBV
TCM2576-5.0VRT	, TCM2576VAT	, TCM2576VBV	, TCM2576VRT
TCM33166EAT	, TCM33166EBV	, TCM33166ERT	, TCM33167EAT
TCM33167EBV	, TCM33167ERT	, TCM33369VAT	, TCM33369VAV
TCM33370VAT	, TCM33370VAV	, TCM33371VAT	, TCM33371VAV
TCM33372VAT	, TCM33372VAV	, TCM33373VAT	, TCM33373VAV
TCM33374VAT	, TCM33374VAV	, TY93062D2T	, XC33369QT
XC33369QTV	, XC33369T	, XC33369TV	, XC33370QT
XC33370QTV	, XC33371QT	, XC33371QTV	, XC33371TV
XC33372QT	, XC33372QTV	, XC33373QT	, XC33373QTV
XC33374QT	, XC33374QTV	, XC33374TV	, XC33379T
XC33379TV	, XC33380T	, XC33380TV	, XC33381T
XC33381TV	, XC33382T	, XC33382TV	, XC33383T
XC33383TV	, XC33384T	, XC33384TV	