ON Semiconductor

PRODUCT/PROCESS CHANGE NOTIFICATION
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09-OCT-2001

SUBJECT: ON Semiconductor Product/Process Change Notification #11945

TITLE: 3ld Dpak Single Gauge Leadframe Qual at Internal and External

EFFECTIVE DATE: 08-Dec-2001

AFFECTED CHANGE CATEGORY: Assembly Process

AFFECTED PRODUCT DIVISION: Analog Products

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Joe Duffalo <FFBH9W@onsemi.com >

SAMPLES: No

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Mouayed Saleh <R12646@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.

Final Product/Process Change Notification (FPCN) - 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:
ON Semiconductor would like to notify our valued customers that, in our ongoing effort to improve quality and manufacturing cycle times, we are pleased to announce that we have qualified a new Single Gauge leadframe for the 3 Lead DPAK package. The leadframe change will not effect the case outline of the 3 Lead DPAK package, and there has been no change in the electrical or thermal performance of devices using the new single gauge leadframe. The heatsink thickness will decrease from 35 mils to 20 mils using the new leadframe. The leadframe change will become effective on December 31st, 2001 in both ON's internal Seremban, Malaysia assembly and test site, and in our subcontractor PSI located in Manila, Phillipines. All 3 Lead DPAK packages assembled January 1st, 2002 and afterwards will utilize the new single gauge leadframe and will have a manufacturing datecode of 0201 or higher (e.g. 02 for year 2002 and the last two digits sequencing upwards by week). ON Semiconductor continues to make substantial investments in both new technologies and improved manufacturing capabilities to provide the highest quality and reliability in the semiconductor industry. We believe these actions will also improve our ability to serve you better.

QUALIFICATION PLAN: See Reliability Data

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RELIABILITY DATA SUMMARY:

Reliability Test Results - Without Preconditioning

Test Type	Duration	Control	Qual 1	Qual 2	Qual 3
1. HTOL	500 Hours	0/84	0/84	0/84	0/84
2. HTS	500 Hours	0/84	0/84	0/84	0/84
	1000 Hours	0/84	0/84	0/84	0/84
3. SOLDER HEAT	-	0/45	0/45	0/45	0/45

Reliability Test Results - With Preconditioning

Test Type	Duration	Control	Qual 1	Qual 2	Qual 3
1. Autoclave	96 Hours	0/84	0/84	0/84	0/84
2. Temp Cycle	500 Hours	0/84	0/84	0/84	0/84
	1000 Cycles	0/84	0/84	0/84	0/84
3. H3TRB	500 Hours	0/84	0/84	0/84	0/84

ELECTRICAL CHARACTERISTIC SUMMARY:

	Spec Limit		CPK			
parameter	min	max	QUAL 1	QUAL 2	QUAL 3	CONTROL
VO2 @ V2, 0MA	3.23	3.37	3.0	3.1	3.1	3.4
VO5 @ V3, 500MA	3.23	3.37	3.0	3.0	3.1	3.5
VO6 @ V3A,800MA	3.23	3.37	3.0	3.1	3.1	3.5
IQ @ V2	0	7.5	39	37	17	39
V DROPOUT, 800MA	0	1.35	22	26	14	34

CHANGED PART IDENTIFICATION:

None, wafer genealogy can be determined from data code information marked on the device.

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

PART

BS33269DTRK-3.3, BS78M05BDTRK, BS78M05CDTRK, JCP78M05CDTRK, LM2931ADT-5.0, LM2931ADT-5.0RK, LM2931DT-5.0, LM317MABDT, LM317MABDTRK, LM317MADTRK, LM317MBDT, LM317MBDTRK, LM317MDT, LM317MDTRK, LM317MDTRK2, LP2950ACDT-3.0, LP2950ACDT-3.3, LP2950ACDT-5.0, LP2950ACDT-5.0RK, LP2950CDT-3.0, LP2950CDT-3.0RK, LP2950CDT-3.3, LP2950CDT-3.3RK, LP2950CDT-5.0, LP2950CDT-5.0RK, MC33269DT, MC33269DT-012, MC33269DT-3.3, MC33269DT-5.0, MC33269DTRK, MC33269DTRK-012, MC33269DTRK-3.3, MC33269DTRK-5.0, MC33275DT-2.5, MC33275DT-2.5RK, MC33275DT-3.0, MC33275DT-3.0RK, MC33275DT-3.3, MC33275DT-3.3RK, MC33275DT-5.0, MC33275DT-5.0RK, MC34268DT, MC34268DTRK, MC7805BDT, MC7805BDTRK, MC7805CDT, MC7805CDTRK, MC7808BDT, MC7808BDTRK, MC7808CDT, MC7808CDTRK, MC7808CDTT5, MC7812BDT, MC7812BDTRK, MC7812CDT, MC7812CDTRK, MC7815BDT, MC7815BDTRK, MC7815CDT, MC7815CDTRK, MC78M05ABDT, MC78M05ABDTRK, MC78M05ACDT, MC78M05ACDTRK, MC78M05BDT, MC78M05BDTRK, MC78M05BDTRK2, MC78M05CDT, MC78M05CDT2, MC78M05CDTRK, MC78M05CDTRK2, MC78M06CDT, MC78M06CDTRK, MC78M08ABDT, MC78M08ABDTRK, MC78M08ACDT, MC78M08ACDTRK, MC78M08BDT, MC78M08BDTRK, MC78M08CDT, MC78M08CDTRK, PART, MC78M09BDT, MC78M09BDTRK, MC78M09CDT, MC78M09CDTRK, MC78M12ABDT, MC78M12ABDTRK, MC78M12ACDT, MC78M12ACDTRK,MC78M12BDT, MC78M12BDTRK, MC78M12CDT, MC78M12CDTRK, MC78M15ABDT, MC78M15ABDTRK, MC78M15ACDT, MC78M15ACDTRK, MC78M15BDT, MC78M15BDTRK, MC78M15CDT, MC78M15CDTRK, MC78M18CDT, MC79M05BDT, MC79M05BDTRK, MC79M05CDT, MC79M05CDTRK, MC79M08BDT, MC79M08CDT, MC79M08CDTRK, MC79M12BDT, MC79M12BDTRK, MC79M12CDT, MC79M12CDTRK, MC79M15BDT, MC79M15BDTRK, MC79M15CDT, MC79M15CDTRK, NCP1117DT12, NCP1117DT12RK, NCP1117DT15, NCP1117DT15RK, NCP1117DT18, NCP1117DT18RK,

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NCP1117DT20, NCP1117DT20RK, NCP1117DT25, NCP1117DT25RK, NCP1117DT285, NCP1117DT285RK,NCP1117DT33, NCP1117DT33RK, NCP1117DT50, NCP1117DT50RK, NCP1117DTA, NCP1117DTARK, SA317MBDTRK, SA317MDTRK, SA78M05BDTRK, SA901002DTRK, SC78M05BDTRK, SC78M08CDTRK, SC901000DTRK, TCM2950-3.0VBB, TCM2950-3.0VVB, TCM2950-3.3VBB, TCM2950-3.3VVB, TCM33269-3.3VVB