



FINAL PRODUCT/PROCESS CHANGE NOTIFICATIONGeneric Copy

05-Feb-2009**SUBJECT: ON Semiconductor Final Product/Process Change Notification #16212****TITLE: Move of IC T092 Assembly and Test to Dalian, China****PROPOSED FIRST SHIP DATE: 06-May-2009****AFFECTED CHANGE CATEGORY(S): Assembly, Test****AFFECTED PRODUCT DIVISION(S): Automotive and Power Group (APG), Computing and Consumer Group (CCG)****FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or Jaroslav Supina <Jaroslav.Supina@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office**ADDITIONAL RELIABILITY DATA:** AvailableContact your local ON Semiconductor Sales Office or Tomas Vajter <tomas.vajter@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 IPCN 16112 available at www.onsemi.com. This is the Final Product Change Notice to advise customers of the completed qualification of moving to the AUK factory at Dalian, China. Both assembly and test are moved to the AUK factory at Dalian, China. The exact same process flow, bill of material and test equipment are utilized at the new location. There is no change made to the die or product specifications due to this move. The AUK facility at Dalian is fully qualified to meet TS16949, ISO9001 & ISO14001.


Final Product/Process Change Notification #16212
RELIABILITY DATA SUMMARY:
Reliability Test Results:

Qualification Vehicle: LM2931AZ-5.0G

#	Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ ss)	(rej/ ss)	(rej/ ss)	(rej/ ss)
					Read Point	Lot A	Lot B	Lot C	Control
1	Prep	Sample preparation and initial part testing	Various	---	Initial Electrical	done	done	done	done
2	HTSL	High Temp Storage Life	TA = 150°C	c = 0, Room, hot	504 hrs	0/80	0/80	0/80	0/80
					1008 hrs	0/80	0/80	0/80	0/80
3	HTOL	High Temperature Operating Life	TA = 125°C	c = 0, Room, hot	504 hrs	0/80	0/80	0/80	0/80
					1008 hrs	0/80	0/80	0/80	0/80
4	AC	Autoclave	TA = 121 C, RH = 100%, PSIG = 15	c = 0, Room	96 hrs	0/80	0/80	0/80	0/80
5	HAST	HAST	TA = +130C, RH = 85%, PSIG = 18.8, bias	c = 0, Room, hot	96 hrs	0/80	0/80	0/80	0/80
6	TC	Temp Cycle	-65/+150 C	c = 0, Room, hot	300cyc	0/80	0/80	0/80	0/80
					500 cyc	0/80	0/80	0/80	0/80
7	BPS	Bond Pull Strength	Cond C.	Min Cpk 1.33	Results	Cpk>1.67	Cpk>1.67	Cpk>1.67	Cpk>1.67
8	BS	Bond Shear		Min Cpk 1.33	Results	Cpk>1.67	Cpk>1.67	Cpk>1.67	Cpk>1.67
9	SD	Solderability	TA = 245 C	n/a	Results	Cpk = 2.07	Cpk = 3.44	Cpk = 4.31	Cpk = 3.03
10	PD	Physical Dimension	Per case outlin	Ppk>1.66 Cpk>1.33	Results	Cpk>1.67	Cpk>1.67	Cpk>1.67	Cpk>1.67
11	LI	Lead Integrity			Results	done	done	done	done
12	ED	Electrical distribution	Critical Parameters	Room, hot, cold	Results	Cpk>1.67	Cpk>1.67	Cpk>1.67	Cpk>1.67

ELECTRICAL CHARACTERISTIC SUMMARY:

Characterization data available upon request.

CHANGED PART IDENTIFICATION:

Assembly lot traceability codes can be used to determine the factory used for assembly.

**Final Product/Process Change Notification #16212****AFFECTED DEVICE LIST**

LM285Z-1.2G
LM285Z-1.2RAG
LM285Z-2.5G
LM285Z-2.5RAG
LM285Z-2.5RPG
LM2931AZ-5.0G
LM2931AZ-5.0RAG
LM2931AZ-5.0RPG
LM2931Z-5.0G
LM2931Z-5.0RAG
LM2931Z-5.0RPG
LM317LBZG
LM317LBZRAG
LM317LBZRPG
LM317LZG
LM317LZRAG
LM317LZREG
LM317LZRMG
LM317LZRPG
LM385BZ-1.2G
LM385BZ-1.2RAG
LM385BZ-2.5G
LM385BZ-2.5RAG
LM385Z-1.2G
LM385Z-1.2RAG
LM385Z-1.2RPG
LM385Z-2.5G
LM385Z-2.5RPG
LP2950ACZ-3.0G
LP2950ACZ-3.0RAG
LP2950ACZ-3.3G
LP2950ACZ-3.3RAG
LP2950ACZ-5.0G
LP2950ACZ-5.0RAG
LP2950CZ-3.0G
LP2950CZ-3.0RAG
LP2950CZ-3.3G
LP2950CZ-3.3RAG
LP2950CZ-5.0G
LP2950CZ-5.0RAG
LP2950CZ-5.0RPG
MC33064P-5G
MC33064P-5RAG
MC33064P-5RPG
MC33164P-3G
MC33164P-3RAG
MC33164P-3RPG
MC33164P-5G
MC33164P-5RAG
MC33164P-5RPG
MC34064P-5G
MC34064P-5RAG
MC34064P-5RMG

**Final Product/Process Change Notification #16212**

MC34064P-5RPG
MC34164P-3G
MC34164P-3RPG
MC34164P-5G
MC34164P-5RAG
MC34164P-5RPG
MC78L05ABPG
MC78L05ABPRAG
MC78L05ABPREG
MC78L05ABPRMG
MC78L05ACPG
MC78L05ACPRAG
MC78L05ACPREG
MC78L05ACPRMG
MC78L05ACPRPG
MC78L08ABPG
MC78L08ABPRAG
MC78L08ABPRPG
MC78L08ACPG
MC78L08ACPRAG
MC78L08ACPREG
MC78L08ACPRPG
MC78L09ABPRAG
MC78L09ABPRPG
MC78L09ACPG
MC78L12ABPG
MC78L12ABPRPG
MC78L12ACPG
MC78L12ACPRAG
MC78L12ACPREG
MC78L12ACPRMG
MC78L12ACPRPG
MC78L15ABPG
MC78L15ABPRAG
MC78L15ABPRPG
MC78L15ACPG
MC78L15ACPRAG
MC78L15ACPRPG
MC78L18ABPG
MC78L18ACPG
MC78L18ACPRAG
MC78L18ACPRMG
MC78L18ACPRPG
MC78L24ABPG
MC78L24ACPG
MC78L24ACPRAG
MC78L24ACPRPG
MC79L05ABPG
MC79L05ABPRAG
MC79L05ACPG
MC79L05ACPRAG
MC79L05ACPRMG
MC79L05ACPRPG
MC79L12ABPG
MC79L12ABPRAG

**Final Product/Process Change Notification #16212**

MC79L12ACPG
MC79L12ACPRAG
MC79L12ACPRPG
MC79L15ABPG
MC79L15ABPRPG
MC79L15ACPG
MC79L15ACPRAG
MC79L15ACPREG
MC79L15ACPRPG
MC79L18ABPRPG
MC79L18ACPG
MC79L24ABPG
MC79L24ACPG
MC79L24ACPRMG
MC79L24ACPRPG
NCP100ALPRPG
NCV2931AZ-5.0G
NCV2931AZ-5.0RAG
NCV317LBZG
NCV317LBZRAG
NCV33064P-5RAG
NCV33064P-5RPG
NCV78L05ABPG
NCV78L05ABPRAG
NCV78L05ABPREG
NCV78L05ABPRMG
NCV78L05ABPRPG
NCV78L12ABPG
NCV78L24ABPRPG
SC431ILPRAG
TL431ACLPG
TL431ACLPRAG
TL431ACLPREG
TL431ACLPRPG
TL431AILPG
TL431AILPRAG
TL431AILPRMG
TL431AILPRPG
TL431BCLPG
TL431BCLPRAG
TL431BCLPREG
TL431BCLPRMG
TL431BILPG
TL431BILPRAG
TL431BVLPG
TL431BVLPRAG
TL431CLPG
TL431CLPRAG
TL431CLPREG
TL431CLPRMG
TL431CLPRPG
TL431ILPG
TL431ILPRAG
TL431ILPRPG
TLV431ALPG



Final Product/Process Change Notification #16212

TLV431ALPRAG
TLV431ALPREG
TLV431ALPRMG
TLV431ALPRPG
TLV431BLPG
TLV431BLPRAG
TLV431BLPREG
TLV431BLPRMG
TLV431BLPRPG
TYA33164P-5RPG