

CHANGE NOTIFICATION



Linear Technology Corporation
1630 McCarthy Blvd., Milpitas, CA 95035-7417
(408) 432-1900

April 21, 2015

Dear Sir/Madam:

PCN# 042115

Subject: Notification of Additional Wafer Fab Location Tower Semiconductor Ltd., Israel
For Part Number: LTC3407-2

Linear Technology has successfully qualified the Tower Semiconductor wafer fabrication facility located in Migdal Haemek, Israel. LTC currently owns and operates two wafer fabrication facilities located in Camas, Washington and Milpitas, California. The ability to process wafers in an additional wafer fabrication facility provides an extra measure of safety to insure uninterrupted product flow to our customers.

The qualification of the Tower Semiconductor consisted of 1,000 hours of op-life testing, temp cycle, thermal shock, autoclave, and 1,000 hours of bake at 150°C and 175°C. Additionally, devices have been characterized over the full operating temperature range and have been subjected to ESD testing and latch up immunity testing. The devices have been found to meet the LTC data sheets. The devices from the Tower Semiconductor were carefully compared to the current production devices to ensure identical performance when installed in customer applications.

The first product manufactured in Tower Semiconductor will be shipped after June 21, 2015. The devices manufactured in Tower Semiconductor will have the same part number and the same top mark as those currently shipped from LTC. However, when necessary we can use our lot number traceability system to identify where and when a device was fabricated. Complete part numbers of affected devices are as follows:

LEAD FREE FINISH	TAPE AND REEL	PART MARKING
LTC3407EDD-2#PBF	LTC3407EDD-2#TRPBF	LBFB
LTC3407IDD-2#PBF	LTC3407IDD-2#TRPBF	LBFB
LTC3407EMSE-2#PBF	LTC3407EMSE-2#TRPBF	LTBDZ
LTC3407IMSE-2#PBF	LTC3407IMSE-2#TRPBF	LTBDZ

Qualification test results, Tower Semiconductor third party certifications and capacity details are attached for your review. Additional information can be found at www.jazzsemi.com.

Linear Technology is requesting your expeditious approval of this PCN so that LTC can service your delivery requests. Should you have any further questions or concerns please contact your local Linear Technology Sales person or you may contact me at 408-432-1900 ext. 2077, or by e-mail at jason.hu@linear.com. If I do not hear from you by June 21, 2015, we will consider this change to be approved by your company.

Sincerely,

Jason Hu
Quality Assurance Engineer

Tower Semiconductor Capacity Summary

Plant Address:

Tower Semiconductor Ltd.
Ramat Gavriel Industrial Park
20 Shaul Amor Avenue
P.O. Box 619
Migdal Haemek 23105
Israel
Tel: +972-4-6506611
Fax: +972-4-6547788

Headcount:

1300 employees

Sq. Feet:

- Buildings: 150,000 M²
- Clean room: 15,000 M²

Certifications (i.e. ISO-14001, TS16949):

- TS 16949:2009
- ISO 9001:2008
- OHSAS 18001:2007
- SI ISO 27001:2007
- ISO 14001:2004

Floor space Utilization (%utilized):

- Clean room: 15,000 M²

Land Area:

- 90000 M²

Fab Capacity:

The Israeli site (Fab1 and Fab2) has capacity of 720K WPY

**TOWER SEMICONDUCTOR 0.6um PROCESS
RELIABILITY DATA FOR LTC3407-2**

3/31/2015

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ T +125°C	NUMBER OF FAILURES ⁽²⁾
MSOP	385 385	1203	1335	385.00 385.00	0 0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
MSOP	116 116	1203	1217	222.72 222.72	0 0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
MSOP	175 175	1203	1217	29.40 29.40	0 0

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
MSOP	177 177	1203	1217	177.00 177.00	0 0

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
MSOP	127 127	1217	1217	88.50 88.50	0 0

• HIGH TEMPERATURE BAKE +175°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
MSOP	231 231	1203	1217	231.00 231.00	0 0

• SOLDER SHOCK: 3H PCT - 1x +245C IMMERSION

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE		NUMBER OF FAILURES
MSOP	75 75	1203	1217		0 0

(1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 30.58 FITS
 (3) Mean Time Between Failures in Years = 3733
 (4) Assumes 20x acceleration from 85°C to 131°C
 Note: 1 FIT = 1 Failure in One Billion Hours.