

CHANGE NOTIFICATION



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

September 07, 2012

PCN# 090712

Dear Customer:

Subject: Notification of Change for Team Pacific Corporation to Assemble the TO-3P Package

Linear Technology Corporation has successfully qualified Team Pacific Corporation for assembling plastic TO-3P packages (also known as the TO-247 packages). Our current assembly sub-contractor will no longer support this package. Team Pacific Corporation is ISO-14001 and ISO/TS16949 certified. A summary of Team's capacity and LTC's qualification results are shown on the attached pages. LTC's Quality Engineer has physically audited the facility. In addition, our Far East Quality Surveillance Engineer will regularly perform monitors and inspections in Team. LTC product assembled in Team can be identified by the Country of Origin marked on the devices as "Philippines". The datecode of the first units assembled by Team will be approximately 1233.

Additionally, as with all changes of this nature, Linear Technology will perform reliability testing on all of the first production lots in accordance with our Quick Reaction Reliability (QR2) Monitor Program. This monitor program is designed to provide fast feedback and to protect our customers from possible reliability problems associated with package assembly.

Should you have any concerns, please contact me before October 08, 2012, at which time we will consider this change to be approved. If you have any questions or concerns, please feel free to contact me at (408) 432-1900 ext. 2077, or by e-mail at JASON.HU@linear.com.

Sincerely,

Jason Hu
Quality Assurance Engineer

Confidential Statement

This change notice is for Linear Technology's Customers only.
Distribution or notification to third parties is prohibited

Team Pacific Corporation Capacity Summary

Team Pacific Corporation

Plant Address: Electronics Avenue

FTI Special Economic Zone

Taguig City 1630, Philippines

Tel: +63-2- 838- 4671

Fax: +63-2-838 - 5012- 13

Website: <http://www.teamglac.com/index.html>

Headcount:

- ~650

Sq. Feet:

- Floor area – 109,340 sq. ft.
- Clean room (50KPPM – for Hermetics line) – 12,916.7 sq. ft.

Packages (list all the packages you currently manufacture):

- TO247 STD with hole (2L, 3L, 4L, 5L)
- TO247 EXT without hole (2L, 3L, 4L, 5L)
- TO264 STD with hole (2L, 3L)
- TO264 EXT without hole (2L, 3L)
- SOT227 (4L) - Parallel, Anti-Parallel, Pad B, Pad C, Buck, Boost, Padless DBC AL2O3, Non-Isolated
- EXT SOT227 (4L, 6L) - Padless DBC AL2O3 - Trademark
- eXp TO247 (2L, 3L) - Trademark
- eXp TO247 Dual - Trademark
- Power Module - Team Packaging (20mm module, VPMP2, VPMP3, IPM)

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

- ISO9001: 2008 version by TUV Rheinland
- ISO-TS16949: 2009 version by TUV Rheinland
- Mil-PRF - 38535 (QML) - by DLA Land and Maritime

Floor space Utilization (%utilized):

- 90%

Land Area:

- 183,525 sq. ft.

Package Capacity:

- Hermetic package = 1020K/month
- TO-247 (TO-3P) = 1200K/month
- Others = 920K/month
- Die Sales = 2500K/month
- Total Current Capacity = 3140K/month

Team Pacific Corporation History: (Brief history of TEAM.)

A 100% Filipino company, established in 1987 as a subcontract assembler of semiconductor products, and expanded its operations for assembly and test of Power and Hermetic Packages.

TPC co-develops new packages and assembly designs for manufacturers of electronics and semiconductors. Equipped with 25 years of engineering experience, the company customizes innovative packaging solutions for the large power packaging requirements for commercial / industrial products, space station and automotive applications.

- 1987: Founded & Established Hermetics line & CDIP's
- 1989: Launched Power Devices and PDIP's packages
- 1991: Start Production of Discrete Power Packages
- 1998: Launched Specific Power Modules products
- 2001: Co-Development of ISOPLUS Packages
- 2003: Launched Company Product EXT SOT227 - TM
- 2005: Outsourced Power Modules and DO's packages
- 2009: Start Developing Team Owned Discreet Packaging "eXp TO247" – TM
- 2010: Launched Team Owned Discreet Packaging "eXp TO247"
- 2011: Start Developing Team Owned Power Module Packaging

2012: Launched Team Owned Power Module Packaging at PCIM 2012.

Team TO-3P PACKAGE Qualification Summary

8/27/2012

• PRESSURE COOKER TEST AT 15 PSIG, +121°C^(1,2)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	DEVICE HOURS	NUMBER OF FAILURES
LT1084	77	1221	1221	1,848.00	0
	77			1,848.00	0

• TEMP CYCLE FROM -65°C to +150°C^(1,2)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	DEVICE CYCLES	NUMBER OF FAILURES
LT1084	77	1221	1221	7,700.00	0
	77			7,700.00	0

• THERMAL SHOCK FROM -65°C to +150°C^(1,2)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	DEVICE CYCLES	NUMBER OF FAILURES
LT1084	75	1221	1221	7,500.00	0
	75			7,500.00	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE		NUMBER OF FAILURES
LT1084	50	1221	1221		0
	50				0

• SPECIAL FLOW #1: 2x +245°C REFLOW, 100 TC, 48h PCT

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE		NUMBER OF FAILURES
LT1084	50	1221	1221		0
	50				0

(1) 3h PCT moisture soak followed by 3x +245°C reflow used in place of MSL 1 Preconditioning.

(2) MSL 1 Preconditioning per J-STD-020 run in parallel due out WW07. Mechanical tests will follow J-STD-020 Preconditioning.