CHANGE NOTIFICATION

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

April 22, 2011

PCN#: 042211

Dear Sir/Madam:

Subject: Notification of Change for 28 lead SSOP (GN28) Package to be Assembled at the Linear Technology Factory in Penang

Linear Technology is pleased to announce that we have passed all of the initial qualification tests required to build 28 Lead SSOP package in our own factory in Penang, Malaysia. The LTC Penang factory will serve as an additional assembly location for 28 Lead SSOP (GN28) package. The Penang plant is a mature manufacturing facility, which has been manufacturing a variety of plastic packages since November 1994. We have now added the necessary manufacturing capability to assemble our own 28 Lead SSOP package.

The assembly plant in Penang is 100% owned and operated by Linear Technology and is equipped with the latest state-of-the-art assembly equipments. Attached you will find qualification results of the 28 Lead SSOP (GN28) devices used to qualify the Penang assembly location. We performed tests such as high temperature storage bake, temp cycle, thermal shock, solderability, bond pull, x-ray inspection and scanning acoustic microscopy to qualify these packages. These qualification lots are continuing reliability testing to achieve long-term reliability information. Additionally, as with all changes of this nature, Linear Technology will perform reliability monitor testing on all lots processed in Penang under our Quick Reaction Reliability (QR^2) program.

Product assembled at LTC Penang will be shipped with a datecode of approximately 1121.

Should you have any further questions, please feel free to 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 May 23, 2011, we will consider this change to be approved by your company.

Sincerely,

Jason Hu
Quality Assurance Engineer

QUALIFICATION DATA

28 Lead SSOP

BUILT IN LTC PENANG

4/13/2011

• HIGH TEMPERATURE BAKE (+175°C)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +175°C	NUMBER OF FAILURES
28 LEAD SSOP	247	1034	1034	247.00	0
	247			247.00	0

• J-STD-016 PRECONDITIONING (168 HOURS 85°C/85%RH, 3X IR REFLOW 260°C, CSAM)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +85°C	NUMBER OF FAILURES
28 LEAD SSOP	841	1034	1034	141.29	0
	841			141.29	0

• J-STD-016 PRECONDITIONING FOLLOWED BY PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
28 LEAD SSOP	400	1034	1034	67.20	0
	400			67.20	0

• J-STD-016 PRECONDITIONING FOLLOWED BY TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
28 LEAD SSOP	418	1034	1034	418.00	0
	418			418.00	0

• J-STD-016 PRECONDITIONING FOLLOWED BY THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
28 LEAD SSOP	418	1034	1034	206.00	0
	418			206.00	0

QUALIFICATION DATA

28 Lead SSOP

BUILT IN LTC PENANG

4/13/2011

• SOLDER SHOCK (3 HRS PCT + 1 SOLDER IMMERSION 245°C)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	NUMBER OF FAILURES
28 LEAD SSOP	247 247	1034	1034	0 0

• SPECIAL TEST 1 (24 HOURS BAKE +125°C, THEN 3 TIMES: 96 HOURS 85/85 + 1X IR REFLOW+260°C)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	NUMBER OF FAILURES
28 LEAD SSOP	234 234	1034	1034	0 0

• SPECIAL TEST 2 (24 HOURS BAKE +125°C THEN 2X IR REFLOW+260°C, 100 CYCLES TEMP CYCLE, 48 HOURS PCT)

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	NUMBER OF FAILURES
28 LEAD SSOP	234 234	1034	1034	0 0