



# PRODUCT/PROCESS CHANGE NOTIFICATION

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PCN APM-SLI/08/3388  
Notification Date 01/30/2008

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**Additional TO-220 Assembly&Testing Line in SMIC for  
L78xxCV and LM317T Families**

**SLI - LINEAR & INTERFACE**

**Table 1. Change Implementation Schedule**

Forecasted implementation date for change	17-Apr-2008
Forecasted availability date of samples for customer	23-Jan-2008
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	23-Jan-2008
Estimated date of changed product first shipment	30-Apr-2008

**Table 2. Change Identification**

Product Identification (Product Family/Commercial Product)	L78xxCV and LM317T Families
Type of change	Package assembly location change
Reason for change	In order to increase capacity
Description of the change	A new TO-220 Assembly and Testing line for L78xxCV and LM317T families has been installed in Subcontractor SMIC (Cheng - China) for Voltage Regulators. This new additional line will increase production capacity in order to satisfy our Customers demand. No change in electrical characteristics. POA comparison is here attached. Samples of L7805CV are already available while we should have parts of LM317T by week 8. For the time being, only these two versions are available to qualify the new subcontractor.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	See "GR" as Assy&Testing code
Manufacturing Location(s)	



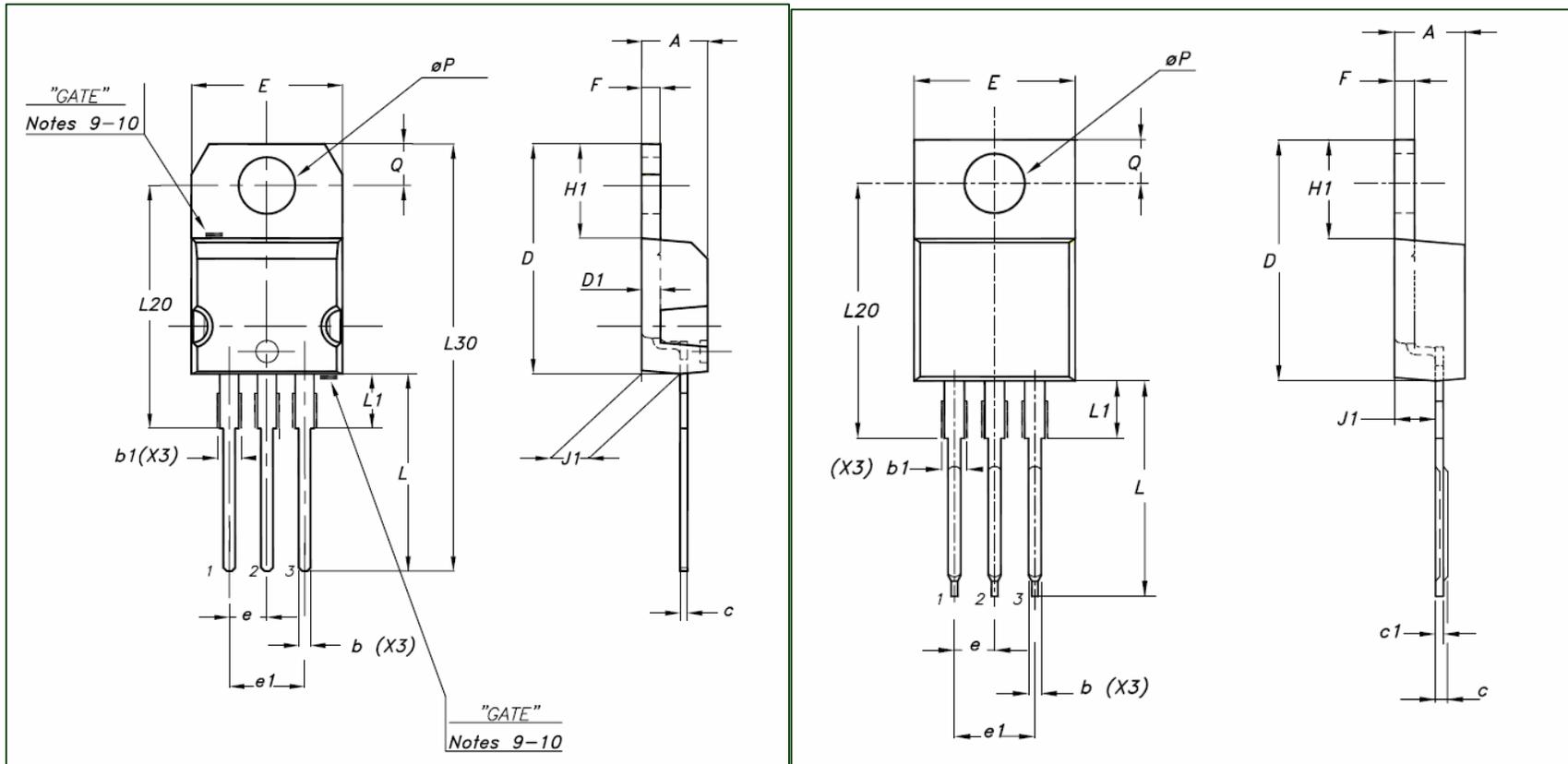
## DOCUMENT APPROVAL

Name	Function
San biagio, Marcello	Division Marketing Manager
Naso, Lorenzo	Division Product Manager
Lisi, Giuseppe	Division Q.A. Manager

## POA COMPARISON

Package	TO 220						
Subcon	ST			Subcon	SMIC		
Unit	Millimeter			Unit	Millimeter		
Symbol	Min	Nom	Max	Symbol	Min	Nom	Max
<b>A</b>	4.40	-	4.60		4.47	4.57	4.67
<b>b</b>	0.61	-	0.88		0.80	0.81	0.86
<b>b1</b>	1.14	-	1.70		1.15		1.44
<b>c</b>	0.49	-	0.70			0.56	
<b>c1</b>						0.38	
<b>D</b>	15.25	-	15.75		15.07	15.24	15.45
<b>D1</b>		1.27					
<b>E</b>	10.00	-	10.40		10	10.15	10.30
<b>e</b>	2.40	-	2.70		2.29	2.54	2.79
<b>e1</b>	4.95	-	5.15		4.83	5.08	5.33
<b>F</b>	1.23	-	1.32			1.27	
<b>H1</b>	6.20	-	6.60			6.24	
<b>J1</b>	2.40	-	2.72		2.04	2.67	2.92
<b>L</b>	13.00	-	14.00		13.35	13.50	13.65
<b>L1</b>	3.50	-	3.93			3.90	
<b>L20</b>		16.40			16.25	16.40	16.55
<b>L30</b>		28.90				28.74	
<b>P(diam.)</b>	3.75	-	3.85			3.83	
<b>Q</b>	2.65	-	2.95		2.72	2.74	2.80

## POA COMPARISON



Comment: In spite of some difference in tolerances, the packages are compatible



REL-6043-376.07W

**IMS (Industrial & Multisegment Sector)  
APM (Analog, Power, MEMS) Group  
Voltage Regulator, Interface, Advanced logic & Power RF  
Quality & Reliability**

**Reliability Evaluation Plan and final results**

**on TO220 - Smic subcontractor**

**Test Vehicle: L7805CV**

**Line.. LX05**

**Package. TO220**

Test	Conditions	S.S.	Requirement	Results
H.T.B.	TA=125°C Vbias= 35V	77x1 Lot	Parameter deviation within spec. limits	No parameter deviation at 1000h.
H.T.S.	TA=150 °C	77 x 3 Lot	Parameter deviation within spec. limits	No parameter deviation at 1000h.
T.H.B.	TA=85°C - RH=85% Vbias= 24V	77 x 1 Lot	Parameter deviation within spec. limits	No parameter deviation at 1000h.
PRESSURE POT	TA=121°C - PA=2Atm	77 x 3 Lot	Parameter deviation within spec. limits	No parameter deviation at 168h.
THERMAL CYCLES AIR TO AIR	TA=-65°C TO 150°C 1 HOUR / CYCLE	77 x 3 Lot	Parameter deviation within spec. limits	No parameter deviation at 500 cy

**Comments:** The reliability tests results are aligned to our STD production.

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