

PRODUCT/PROCESS CHANGE NOTIFICATION

PCN APM-SLI/07/2905 Notification Date 09/19/2007

NEW COPPER ON COPPER PROCESS FOR D2PAK and P2PAK PACKAGES

SLI - LINEAR & INTERFACE

Product Identification (Product Family/Commercial Product)	Voltage Regulator
Type of change	Package assembly material change
Reason for change	To improve performances and service
Description of the change	Linear & Interface Division has been decided to set up a new frame (raw Copper) and wire (Cu) for D2PAK and P2PAK packages in Shenzhen plant. Currently the involved devices are produced with a Gold Wire bonding on Cu/Ag SPOT Frame. The same products will be also produced with a Copper on Copper process. No change in electrical and Quality performances.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	See "N" as Additional info fields in the MARKING
Manufacturing Location(s)	

Table 1. Change Identification

Table 2. Change Implementation Schedule

Forecasted implementation date for change	12-Dec-2007
Forecasted availabillity date of samples for customer	12-Sep-2007
Forecasted date for STMicroelectronics change Qualification Plan results availability	12-Sep-2007
Estimated date of changed product first shipment	19-Dec-2007

Table 3. List of Attachments

Customer Part numbers list	
Qualification Plan results	

Customer Acknowledgement of Receipt	PCN APM-SLI/07/2905	
Please sign and return to STMicroelectronics Sales Office	Notification Date 09/19/2007	
Qualification Plan Denied	Name:	
Qualification Plan Approved	Title:	
	Company:	
🗖 Change Denied	Date:	
Change Approved	Signature:	
Remark		

DOCUMENT APPROVAL

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



MPA (Micro, Power, Analog) Group Voltage Regulator, Interface, Advanced logic & Power RF Quality & Reliability

REL-6043-283W07

Reliability Evaluation Plan and Results LM317

D2PAK Cu wire bonded onto raw copper l/f in SHENZHEN.

Line L317

Package

D2PAK

Test Conditions S.S. Requirement DRYNG 24H @ 125°C PRECONDITIONING 179x1 Parameter deviation STORE 168.H OF SMD DEVICES Lot within spec. limits after @ TA=85°C RH=85% go no go test **BEFORE TC/PP** IR 3 times @ 245°C Parameter deviation 77x1 H.T.S. TA=150°C within spec. limits at Lot 1000h D.U.T. PRECONDITIONED 77x1 Parameter deviation PRESSURE POT within spec. limits at 168h TA=121°C – PA=2ATM Lot D.U.T. PRECONDITIONED Parameter deviation THERMAL CYCLES 77x1 TA=-65°C TO 150°C within spec. limits at Lot AIR TO AIR 500cycles 1 HOUR/CYCLE DRYNG 24H @ 125°C Parameter deviation SMD MOISTURE STORE 168.H 25x1 within spec. limits at end INDUCED STRESS @ TA=85°C RH=85% Lot of test IR 3 times @ 245°C

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