



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**Qualification Report for PCN# 20110808000
C10 Offload to CFAB
Information Only**

Date:

Dear Customer:

Texas Instruments is pleased to announce the completion of qualification testing for the product change described in PCN# 20110808000. The details of the qualification results are included in the following pages and are being forwarded to you in response to your inquiry about this PCN.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Qualification Report For # 20110808000 C10 Offload to CFAB

Qualification Data: Approved 10/30/2012				
This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.				
Qual Vehicle 1: SN74AVC16T245DGGR				
Package Construction Details				
Assembly Site:	MLA	Mold Compound:	4209002	
# Pins-Designator, Family:	48-DGG, TSSOP	Mount Compound:	4042500	
Lead frame (Finish, Base):	NiPdAu, Cu	Wafer Fab Site:	CFAB	
Bond Wire:	0.8 Mil Diameter, Au	Wafer Size:	200 mm	
Qualification: ☐ Plan ☒ Test Results				
Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
Life Test	150C, 300 hrs	77/0	77/0	77/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
ESD - CDM	1000 V	3/0	3/0	3/0
Electrical Characterization	(Approved by Product Engineering)	Pass	Pass	Pass
X-RAY	Topside Only	5/0	5/0	5/0
Manufacturability (Wafer Fab)	(Approved by Wafer Fab)	Pass	Pass	Pass
Wafer level Reliability	(Approved by Wafer Fab)	Pass	Pass	Pass
*Biased HAST	130C/85%RH (96 hrs)	77/0	77/0	77/0
*Temperature Cycle	-65/+150C (500 cycles)	77/0	77/0	77/0
*Autoclave	121C (96 hrs)	77/0	77/0	77/0
Latch-up	(Per JESD78, Class II)	6/0	6/0	6/0
ESD - HBM	2500 V	3/0	3/0	3/0
Moisture Sensitivity, L1	MSL 1 / 260C	12/0	12/0	12/0
*High Temp Storage Bake	170C / 420 hours	77/0	77/0	-
Notes: *Preconditioning sequence: Level 1-260C.				

Qual Vehicle 2: SN74AVC2T245RSWR					
Package Construction Details					
Assembly Site:	HNT	Mold Compound:	450176		
# Pins-Designator, Family:	10-RSW, QFN	Mount Compound:	400173		
Lead frame (Finish, Base):	NiPdAu, Cu	Wafer Fab Site:	CFAB		
Bond Wire:	0.6 Mil Diameter, Au	Wafer Size:	200 mm		
Qualification: ☐ Plan ☒ Test Results					
Reliability Test	Conditions	Sample Size / Fail			
		Lot#1	Lot#2	Lot#3	
Bond Strength	76 ball bonds, min. 3 units	80/0	80/0	80/0	
Die Shear	-	30/0	30/0	30/0	
Life Test	150C, 300 hrs	77/0	-	-	
ESD - CDM	1000 V	3/0	-	-	
Electrical Characterization	(Approved by Product Engineering)	Pass	-	-	
Manufacturability (Wafer Fab)	(Approved by Wafer Fab)	Pass	-	-	
X-RAY	Topside Only	5/0	5/0	5/0	
Manufacturability (Assembly)	(Approved by A-T site)	Pass	Pass	Pass	
*Temperature Cycle	-65/+150C (500 cycles)	77/0	77/0	77/0	
*Autoclave	121C (96 hrs)	77/0	77/0	77/0	
*Biased HAST	130C/85%RH (96 hrs)	77/0	-	-	
Latch-up	(Per JESD78, Class II)	6/0	6/0	6/0	
ESD - HBM	2500 V	3/0	3/0	3/0	
Moisture Sensitivity, L1	MSL 1 / 260C	12/0	-	-	
Notes: *Preconditioning sequence: Level 1-260C.					
Qual Vehicle 3: TS3L500AERHUR					
Package Construction Details					
Assembly Site:	NSE	Mold Compound:	6491322		
# Pins-Designator, Family:	56-RHU, TQFN	Mount Compound:	6491321		
Lead frame (Finish, Base):	NiPdAu, Cu	Wafer Fab Site:	CFAB		
Bond Wire:	1.3 Mil Diameter, Au	Wafer Size:	200 mm		
Qualification: ☐ Plan ☒ Test Results					
Reliability Test	Conditions	Sample Size / Fail			
		Lot#1	Lot#2	Lot#3	
Bond Strength	76 ball bonds, min. 3 units	95/0	95/0	95/0	
Life Test	150C, 300 hrs	77/0	77/0	77/0	
ESD - CDM	1000 V	3/0	3/0	3/0	
Manufacturability (Assembly)	(Approved by A-T site)	Pass	Pass	Pass	
Wafer level Reliability	(Approved by Wafer Fab)	Pass	Pass	Pass	
Electrical Characterization	(Approved by Product Engineering)	Pass	Pass	Pass	
X-RAY	Topside Only	5/0	5/0	5/0	
Manufacturability (Wafer Fab)	(Approved by Wafer Fab)	Pass	Pass	Pass	
*Autoclave	121C (96 hrs)	77/0	77/0	77/0	
*Temperature Cycle	-65/+150C (500 cycles)	77/0	77/0	77/0	
*Biased HAST	130C/85%RH (96 hrs)	77/0	77/0	77/0	
Latch-up	(Per JESD78, Class II)	6/0	6/0	6/0	
ESD - HBM	2500 V	3/0	3/0	3/0	
Moisture Sensitivity, L1	MSL 1 / 260C	12/0	12/0	12/0	
*High Temp Storage Bake	170C / 420 hours	77/0	77/0	77/0	
Notes: *Preconditioning sequence: Level 1-260C.					

Qual Vehicle 4: TXS0102DQE				
Package Construction Details				
Assembly Site:	HNT	Mold Compound:	450176	
# Pins-Designator, Family:	8-DQE, SON	Mount Compound:	400173	
Lead frame (Finish, Base):	NiPdAu, Cu	Wafer Fab Site:	CFAB	
Bond Wire:	0.8 Mil Diameter, Au	Wafer Size:	200 mm	
Qualification: ☐ Plan ☒ Test Results				
Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
X-RAY	Topside Only	5/0	5/0	5/0
*Autoclave	121C 2 atm (96 hrs)	77/0	77/0	77/0
*Temperature Cycle	-65/+150C (500, 1000 cycles)	77/0	77/0	77/0
ESD – HBM	2500 V	3/0	-	-
ESD – HBM – High	8000 V	3/0	-	-
ESD - CDM	1500 V	3/0	-	-
*Biased HAST	130C/85%RH (96 hrs)	77/0	-	-
Life Test	150C, 300 hrs	79/0	-	-
Latch-up	(Per JESD78, Class II)	6/0	-	-
Manufacturability (Wafer Fab)	(Approved by Wafer Fab)	Pass	-	-
Manufacturability (Assembly)	(Approved by A-T site)	Pass	Pass	Pass
Moisture Sensitivity	MSL 1 / 260C	12/0	12/0	12/0
Notes: *Preconditioning sequence: Level 1-260C.				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or to your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com