



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

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

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](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

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

**Qualification Report For # 20110808000  
C10 Offload to CFAB**

**Qualification Data: 11/14/2012**

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

**Qual Vehicle: SN74AVC16T245DGGR**

Wafer Fab Site:	CFAB	Metallization:	Ti/TiN/AlCu.5%/TiN
Wafer Fab Process:	33C10	Wafer Diameter:	200mm
		Passivation:	10KACN

**Qualification:**     Plan     **Test Results**

Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (300 Hrs)	77/0	77/0	77/0
Electrical Characterization	-	77/0	77/0	77/0
High Temp. Storage Bake	170C (168, 420 Hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD HBM	2000V	3/0	3/0	3/0
ESD CDM	500V	3/0	3/0	3/0
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
Wafer level Reliability	Approved by TDQRE	Pass	Pass	Pass
Wafer Fab MQ	Per site spec	Pass	Pass	Pass
Assembly / Test MQ	(per mfg. Site specification)	Pass	Pass	Pass
Latch-up	(per JESD78)	6/0	6/0	6/0
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	-	-

\*\*Preconditioning: Level 1@260C

**Qual Vehicle: TS3L500AERHUR**

Wafer Fab Site:	CFAB	Metallization:	Ti/TiN/NCu0.5%/TiN
Wafer Fab Process:	33C10	Wafer Diameter:	200mm
		Passivation:	10KACN

**Qualification:**     Plan     **Test Results**

Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (300 Hrs)	77/0	77/0	77/0
Electrical Characterization	-	Pass	Pass	Pass
High Temp. Storage Bake	170C (168, 420 Hrs)	77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD HBM	2000V	3/0	3/0	3/0

ESD CDM	500V	3/0	3/0	3/0
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
Wafer level Reliability	Approved by TDQRE	Pass	Pass	Pass
Latch-up	(per JESD78)	6/0	6/0	6/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Wafer Fab MQ	(per mfg. Site specification)	Pass	Pass	Pass
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0
<b>**Preconditioning: Level 1@260C</b>				
<b>Qual Vehicle: TXS0102DQE</b>				
Wafer Fab Site:	CFAB	Metallization:	Ti/TiN/NCu0.5%/TiN	
Wafer Fab Process:	33C10	Wafer Diameter:	200mm	
		Passivation:	10KACN	
<b>Qualification:</b> <input type="checkbox"/> <b>Plan</b> <input checked="" type="checkbox"/> <b>Test Results</b>				
Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (300 Hrs)	77/0	-	-
**Biased HAST	130C/85%RH (96 Hrs)	77/0	-	-
**Autoclave 121C	121C, (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD HBM	2000V	3/0	-	-
ESD CDM	500V	3/0	-	-
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
Latch-up	(per JESD78)	6/0	-	-
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Wafer Fab MQ	(per mfg. Site specification)	Pass	-	-
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 1 @ 260C peak +5/-0C)	12/0	12/0	12/0
<b>**Preconditioning: Level 1@260C</b>				

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

<b>Location</b>	<b>E-Mail</b>
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>