



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

**Qualification Report for PCN# 20120323000  
4H Combines C21/C24/C40 HFAB to DFAB  
Information Only**

Dear Customer:

Texas Instruments is pleased to announce the completion of qualification testing for the product change described in PCN# 20120323000. 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



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## Qualification Report For # 20120323000 4H Combines C21/C24/C40 HFAB to DFAB

Qualification Data (Approved: 1/23/2013)					
This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.					
Qual Vehicle 1: PCF8575DB					
Wafer Fab Site:	DFAB	Metallization:	TiW/AlCu 0.5%		
Wafer Fab Process:	C21	Wafer Diameter:	200mm		
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test	Conditions		Sample Size/Fails		
			Lot#1	Lot#2	Lot#3
Life Test	150C (300Hrs)		77/0	77/0	77/0
Electrical Characterization	(full temperature range, all datasheet parameters)		Pass	Pass	Pass
**High Temp. Storage Bake	150C (500 Hrs)		77/0	77/0	77/0
**Biased HAST	130C/85%RH (96 Hrs)		77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)		77/0	77/0	77/0
**T/C -55C/+125C	-55C/+125C (500 Cycles)		77/0	77/0	77/0
ESD CDM	250V		3/0	3/0	3/0
ESD HBM	1000V		3/0	3/0	3/0
Wafer level Reliability	Per Site Specification		Pass	-	-
Latch-up	( per JESD78 )		6/0	6/0	6/0
Manufacturability (Assembly)	(per mfg. Site specification)		Pass	-	-
**Preconditioning: Level 1-260C					
Qual Vehicle 2: SMJ320C40GFM50					
Wafer Fab Site:	DFAB	Metallization:	TiW/AlCu 0.5%		
Wafer Fab Process:	C21	Wafer Diameter:	200mm		
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test	Conditions		Sample Size/Fails		
			Lot#1	Lot#2	Lot#3
Life Test	125C (1000 Hrs)		77/0	-	-
Electrical Characterization	-		Pass	-	-
Manufacturability (Assembly)	(per mfg. Site specification)		Pass	-	-
Qual Vehicle 3: TL16C550CFN					
Wafer Fab Site:	DFAB	Metallization:	TiW/AlCu 0.5%		
Wafer Fab Process:	C40	Wafer Diameter:	200mm		
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test	Conditions		Sample Size/Fails		
			Lot#1	Lot#2	Lot#3
Electrical Characterization	(full temperature range, all datasheet parameters)		Pass	Pass	Pass
**T/C -55C/+125C	-55C/+125C (500 Cycles)		77/0	77/0	77/0

ESD CDM		250V	3/0	3/0	3/0
ESD HBM		1000V	3/0	3/0	3/0
Latch-up		( per JESD78 )	6/0	6/0	6/0
Manufacturability (Assembly)		(per mfg. Site specification)	Pass	-	-
**Preconditioning: Level 3-260C					
Qual Vehicle 4: TL16C750FN					
Wafer Fab Site:		DFAB	Metallization:		TiW/AICu 0.5%
Wafer Fab Process:		C24	Wafer Diameter:		200mm
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test		Conditions	Sample Size/Fails Lot#1 Lot#2 Lot#3		
Electrical Characterization		(full temperature range, all datasheet parameters)	Pass	Pass	Pass
**T/C -55C/+125C		-55C/+125C (500 Cycles)	77/0	77/0	77/0
ESD CDM		250V	3/0	3/0	3/0
ESD HBM		1000V	3/0	3/0	3/0
Latch-up		( per JESD78 )	6/0	6/0	6/0
Manufacturability (Assembly)		(per mfg. Site specification)	Pass	-	-
**Preconditioning: Level 3-260C					
Qual Vehicle 5: PCF8574PWR (MSL Level 1-260C)					
Wafer Fab Site:		DFAB	Metallization:		TiW/AICu 0.5%
Wafer Fab Process:		C21	Wafer Diameter:		200mm
Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results					
Reliability Test		Conditions	Sample Size/Fails Lot#1 Lot#2 Lot#3		
ESD CDM		250V	3/0	3/0	3/0
ESD HBM		1000V	3/0	3/0	3/0
Latch-up		( per JESD78 )	6/0	6/0	6/0

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

Location	E-Mail
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>