



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Qualification Report For PCN# 20110901001
Die Conversion for Selected LVC LL Devices in the DBV and DCK Packages

Date: 12/15/2011

Dear Customer:

Texas Instruments is pleased to announce the completion of qualification testing for the product change described in PCN# 20110901001. 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 PCN# 20110901001
Die Conversion for Selected LVC LL Devices in the DBV and DCK Packages

Qualification Data: DCK Devices (Approved 8/04/2011)			
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.			
Qualification Device Construction Details:			
Qualification Vehicle #1: SN74LVC1G00DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000/TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size(PASS/FAIL)	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
X-Ray	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #2: SN74LVC1G02DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size(PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #3: SN74LVC1G04DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #4: SN74LVC1G06DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle # 5: SN74LVC1G07DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle # 6: SN74LVC1G08DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle # 7: SN74LVC1G14DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle # 8: SN74LVC1G17DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #9: SN74LVC1G32DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #10: SN74LVC1G34DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #11: SN74LVC1G38DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #12: SN74LVC1GU04DCKR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char - LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Approved by A-T Site	PASS	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Data: DBV Devices (Approved 8/22/2011)			
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.			
Qualification Device Construction Details:			
Qualification Vehicle #1: SN74LVC1G00DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
X-Ray	Approved by A-T Site; Bottom side Only	5/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #2: SN74LVC1G02DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #3: SN74LVC1G04DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #4: SN74LVC1G06DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #5: SN74LVC1G07DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #6: SN74LVC1G08DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #7: SN74LVC1G14DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #8: SN74LVC1G17DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #9: SN74LVC1G32DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #10: SN74LVC1G34DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #11: SN74LVC1G38DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #12: SN74LVC1GU04DBVR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char -LV	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Notes: Qualification tests “pass” on zero fails for each test			

**Reference Qualification: LVC Little Logic Devices in 6 Pin DSF
1G00/1G02/1G08/1G32/1G38 – HNT**

Qualification Data: DSF Devices (Approved 3/30/2011)			
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.			
Qualification Device Construction Details:			
Qualification Vehicle #1: SN74LVC1G00DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
X-Ray	Approved by A-T Site; Bottomside Only	5/0	
ESD MM	250V	3/0	
ESD HBM	3500V	3/0	
Latch Up	JESD 78, Class II	6/0	
Steady State Life Test	150C, 300 Hrs	77/0	
Manufacturability (assy)		Pass	
Notes: Qualification tests “pass” on zero fails for each test			

Qualification Vehicle #2: SN74LVC1G02DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Latch-Up	JESD 78, Class II	6/0	
ESD MM	200V	3/0	
ESD HBM	4000V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #3: SN74LVC1G08DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
ESD MM	200V	3/0	
Latch Up	JESD 78, Class II	6/0	
ESD HBM	4000V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #4: SN74LVC1G32DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
ESD MM	250V	3/0	
ESD HBM	3500V	3/0	
Latch Up	JESD 78, Class II	6/0	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #5: SN74LVC1G38DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions		Sample Size (PASS/FAIL)
Electrical Char	Approved by Product Engineer		PASS
Manufacturability-TQ	Assembly (per mfg. Site specification)		PASS
ESD CDM	1500V		3/0
Latch-Up	JESD 78, Class II		6/0
ESD MM	200V		3/0
ESD HBM	4000V		3/0
Notes: Qualification tests “pass” on zero fails for each test			

**Reference Qualification: LVC Little Logic Devices in 6 Pin DSF
1G04/1G06/1G07/1G14/1G17/1G34/1GU04 – HNT**

Qualification Data: DSF Devices (Approved 6/27/2011)			
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.			
Qualification Device Construction Details:			
Qualification Vehicle #1: SN74LVC1G04DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
X-Ray	Approved by A-T Site; Bottomside Only	5/0	
ESD MM	250V	3/0	
ESD HBM	5000V	3/0	
Latch Up	JESD 78, Class II	6/0	
Steady State Life Test	150C, 300 Hrs	77/0	
Notes: Qualification tests “pass” on zero fails for each test			

Qualification Vehicle #2: SN74LVC1G06DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Latch-Up	JESD 78, Class II	6/0	
ESD MM	200V	3/0	
ESD HBM	3500V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #3: SN74LVC1G07DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
ESD MM	250V	3/0	
Latch Up	JESD 78, Class II	6/0	
ESD HBM	4000V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #4: SN74LVC1G14DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
ESD MM	250V	3/0	
ESD HBM	4000V	3/0	
Latch Up	JESD 78, Class II	6/0	
Notes: Qualification tests "pass" on zero fails for each test			

Qualification Vehicle #5: SN74LVC1G17DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Latch-Up	JESD 78, Class II	6/0	
ESD MM	250V	3/0	
ESD HBM	2000V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #6: SN74LVC1G34DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
ESD MM	250V	3/0	
ESD HBM	4000V	3/0	
Latch Up	JESD 78, Class II	6/0	
Notes: Qualification tests "pass" on zero fails for each test			
Qualification Vehicle #7: SN74LVC1GU04DSFR			
Wafer Fab Site:	FFAB	Wafer Process:	50b10.13_BOPO2 / P9792
Protective Die Coating:	Ti300/TiN1700/AlCu0.5=6000 /TiN500	Wafer Size Dia.	200mm
Qualification: ☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)	
Electrical Char	Approved by Product Engineer	PASS	
Manufacturability-TQ	Assembly (per mfg. Site specification)	PASS	
ESD CDM	1500V	3/0	
Latch-Up	JESD 78, Class II	6/0	
ESD MM	250V	3/0	
ESD HBM	2000V	3/0	
Notes: Qualification tests "pass" on zero fails for each test			

Use Disclaimer:

Plastic encapsulated TI semiconductor devices are not designed and are not warranted to be suitable for use in some military applications and/or military environments. Use of plastic encapsulated TI semiconductor devices in military applications and/or military environments, in lieu of hermetically sealed ceramic devices, is understood to be fully at the risk of the buyer.

Quality and Reliability Data Disclaimer:

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customer should provide adequate design and operating safeguards.

Quality and reliability data provided by Texas Instruments is intended to be an estimate of product performance based upon history only. It does not imply that any performance levels reflected in such data can be met if the product is operated outside the conditions expressly stated in the latest published data sheet for a device. Device attributes listed in qualification reports may not reflect materials or processes currently being used in the construction of the devices.

Reliability data shows characteristic failure mechanisms of the specific environmental stress as documented in the industry standards for each stress condition.

TI warrants its devices as per datasheet limits. Any usage outside of these limits is the sole responsibility of the consumer and voids all warranties and responsibilities from TI.

THIS INFORMATION SHOULD NOT BE USED TO ASSIST IN THE PRACTICE OF “UPRATING” OR “UPSCREENING” DEVICES FOR USE BEYOND THEIR RATED LIMITS.