

PCN Number:	20220520000.2	PCN Date:	June 02, 2022
Title:	Qualification of AIZU as an additional Fab site option for select HPA07 devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Dec 2, 2022	Sample requests accepted until:	July 2, 2022*

***Sample requests received after July 2, 2022 will not be supported.**

Change Type:

<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its AIZU fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

Current Sites			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DP1DM5	HPA07	200mm	AIZU	HPA07	200mm

Qual details are provided in the Qual Data Section.

Reason for Change:

Continuity of Supply

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	DM5	USA	Dallas
AIZU	CU2	JPN	Aizuwakamatsu-shi

Sample product shipping label (not actual product label)



MADE IN: Malaysia
2DC: 20:

MSL 2 / 260C/1 YEAR	SEAL DT
MSL 1 / 235C/UNLIM	03/29/04

OPT:
ITEM: 39
LBL: 5A (L)T0:1750




(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483S12
 (P)
 (2P) REV: (V) 0033317
 (20L) CS0: SHP (21L) CCO:USA
 (22L) ASU: MLA (23L) ACU: MYS

Product Affected:

ADS1018QDGSRQ1	DAC6551AQDGKRQ1	DAC8551AQDGKRQ1	OPA4322AQPWRCT
ADS1118QDGSRQ1			

Automotive New Product Qualification Summary

(As per AEC-Q100 and JEDEC Guidelines)

Approved 23-Jan-2019

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: TLV2314QDRQ1	QBS Product Reference: OPA2172QDGKRQ1	QBS Product Reference: TLV313QDCKRQ1	QBS Process Reference: INA215AQDCKRQ1
Test Group A – Accelerated Environment Stress Tests										
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 2-260C	-	1/all/0	-	3/all/0
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 1-260C	1/all/0	-	1/all/0	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0
AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	1/77/0	3/231/0
TC-BP	A4	MIL-STD883 Method 2011	1	60	Post Temp. Cycle, Bond Pull	Wires	1/30/0	1/30/0	1/30/0	1/30/0
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	-	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp. Storage Bake, 175C	500 Hours	1/45/0	1/45/0	1/45/0	1/45/0
Test Group B – Accelerated Lifetime Simulation Tests										
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000 Hours	1/77/0	-	-	3/231/0
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 140C	480 Hours	-	1/77/0	1/77/0	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	-	-	-	3/2400/0
EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	--	N/A	-	-	-
Test Group C – Package Assembly Integrity Tests										
WBS	C1	AEC Q100-001	1	30	Bond Shear Cpk>1.67	Wires	1/30/0	1/30/0	-	1/30/0
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull Cpk>1.67	Wires	1/30/0	1/30/0	-	1/30/0
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability >95% Lead Coverage	8 Hours Steam Age, Pb & Pb-Free	1/40/0	-	-	-
SD	C3	JEDEC JESD22-B102	1	15	Solderability - Dip and Look	Pb	1/15/0	-	-	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions (Cpk>1.67)	--	3/30/0	-	-	-
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post HTSL/Bump	-	-	-	-
LI	C6	JEDEC JESD22-B105	1	50	Lead Integrity	Leads	-	-	-	-
LI	C6	JEDEC JESD22-B105	1	50	Lead Pull to Destruction	Leads	-	1/24/0	1/22/0	-
Test Group D – Die Fabrication Reliability Tests										
EM	D1	JESD81	-	-	Electromigration	--	Completed Per Process Technology Requirements	-	-	-
TDDB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	--	Completed Per Process Technology Requirements	-	-	-
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	--	Completed Per Process Technology Requirements	-	-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	--	Completed Per Process Technology Requirements	-	-	-
SM	D5	-	-	-	Stress Migration	--	Completed Per Process Technology Requirements	-	-	-
Test Group E – Electrical Verification Tests										
HBM	E2	AEC Q100-002	1	3	ESD - HBM	4000 V	1/3/0	1/3/0	1/3/0	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM	1500 V	1/3/0	-	1/3/0	-
LU	E4	AEC Q100-004	1	6	Latch-up	(Per AEC-Q100-004)	1/6/0	1/6/0	1/6/0	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	3/60/0	3/60/0	3/60/0	-

Automotive New Product Qualification Summary

(As per AEC-Q100 and JEDEC Guidelines)

Approved 02-Dec-2016

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: AD5111SBQDGSRQ1	QBS Product Reference: AD51015AQDGSRQ1	QBS Product Reference: AD51118QDGSRQ1	QBS Process Reference: INA215AQDCKRQ1
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 2-260C	1/301/0	4/286/0	1/305/0	3/648/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0
AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	1/77/0	3/231/0
TC-BP	A4	MIL-STD883 Method 2011	1	30	Post Temp Cycle Bond Pull	Wires	1/30/0	1/30/0	1/30/0	1/30/0
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	-	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp. Storage Bake, 175C	500 Hours	1/45/0	1/45/0	1/45/0	1/45/0
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000 Hours	-	-	1/77/0	3/231/0
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 140C	480 Hours	1/77/0	1/77/0	-	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 150C	408 Hours	-	-	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	-	-	-	3/2400/0
EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention	--	N/A	-	-	-
WBS	C1	AEC Q100-001	1	30	Bond Shear (Cpk>1.67)	Wires	1/30/0	-	1/30/0	1/30/0
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull (Cpk>1.67)	Wires	1/30/0	-	1/30/0	1/30/0
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability	Pb	-	-	-	-
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability	Pb-Free	-	-	-	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions (Cpk>1.67)	--	-	-	-	-
LI	C6	JEDEC JESD22-B105	1	30	Lead Pull to Destruction	Leads	1/30/0	-	-	-
EM	D1	JESD81	-	-	Electromigration	-	Completed Per Process Technology Requirements	-	-	-
TDDB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	Completed Per Process Technology Requirements	-	-	-
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	Completed Per Process Technology Requirements	-	-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements	-	-	-
SM	D5	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements	-	-	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM	2000 V	1/3/0	1/3/0	1/3/0	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM	1000 V	1/3/0	-	1/3/0	-
LU	E4	AEC Q100-004	1	6	Latch-up	(Per AEC-Q100-004)	1/6/0	1/6/0	1/6/0	-
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67	3/60/0	-	3/60/0	-

Automotive New Product Qualification Summary

(As per AEC-Q100 and JEDEC Guidelines)

Approved 30-May-2019

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Spec	Min Lot Qty	\$/Lot	Test Name / Condition	Duration	Qual Device: AD8353QPWRQ1	QBS Process Reference: INA215AQDCKRQ1	QBS Package Reference: INA250A1QPWRQ1
Test Group A – Accelerated Environment Stress Tests									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning	Level 2-260C	3/389/0	3/948/0	3/950/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0
AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96 Hours	1/77/0	3/231/0	3/231/0
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0
TC-BP	A4	MIL-STD883 Method 2011	1	80	Post Temp. Cycle, Bond Pull	Wires	1/30/0	1/30/0	1/30/0
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	1/45/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 Hours	-	-	1/45/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 175C	500 Hours	3/231/0	1/45/0	-
Test Group B – Accelerated Lifetime Simulation Tests									
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000 Hours	-	3/231/0	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 140C	480 Hours	-	-	3/231/0
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 150C, 6.5V	408 Hours	3/231/2 (1)	-	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-
EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	--	N/A	-	-
Test Group C – Package Assembly Integrity Tests									
WBS	C1	AEC Q100-001	1	30	Bond Shear (Cpk>1.67)	Wire	1/30/0	1/30/0	1/30/0
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull (Cpk>1.67)	Wires	1/30/0	1/30/0	1/30/0
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability	Pb	1/15/0	-	-
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability	Pb free	1/15/0	-	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Physical Dimensions (Cpk>1.67)	--	3/30/0 (2)	-	3/30/0
LI	C6	JEDEC JESD22-B105	1	24	Lead Pull to Destruction	Leads	1/24/0	-	-
Test Group D – Die Fabrication Reliability Tests									
EM	D1	JESD81	-	-	Electromigration	--	Completed Per Process Technology Requirements	-	-
TDDB	D2	JESD35	-	-	Time Dependent Dielectric Breakdown	-	Completed Per Process Technology Requirements	-	-
HCI	D3	JESD80 & 28	-	-	Hot Injection Carrier	--	Completed Per Process Technology Requirements	-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	--	Completed Per Process Technology Requirements	-	-
SM	D5	-	-	-	Stress Migration	--	Completed Per Process Technology Requirements	-	-
Test Group E – Electrical Verification Tests									
HBM	E2	AEC Q100-002	1	3	ESD - HBM	3000 V	1/3/0	-	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM	500 V	1/3/0	-	-
LU	E4	AEC Q100-004	1	6	Latch-up	(Per AEC-Q100-004)	1/6/0	-	1/6/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67	3/90/0	-	3/90/0

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

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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