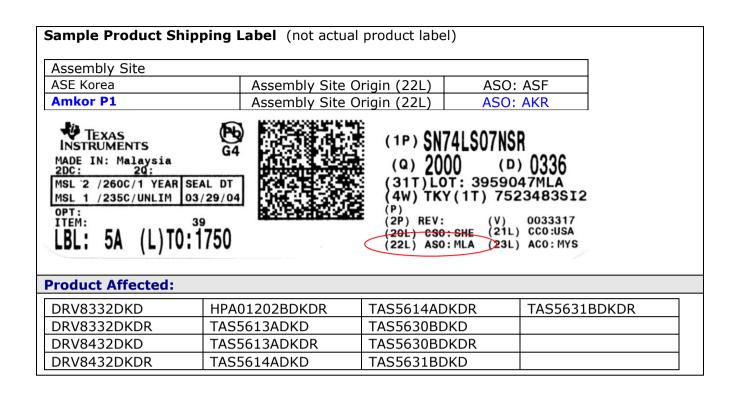
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## **Qualification Report**

Approval Date 9-Nov-2018

## **Qualification Results**

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

Туре	Test Name / Condition	Duration	Qual Device: DRV8432DK DR	QBS Device: TAS5424BTDKDR Q1	QBS Device: TAS5424BTDKE Q1
PC	Preconditioning	Level 4-260C	3/77/0		
TC	Temperature Cycle, -65/150C	500 Cycles	3/77/0		
MQ	Manufacturability (Assembly)	(per mfg. site spec.)	PASS		
MSL	Moisture Sensitivity	Level 4-260C	3/12/0		
YLD	FTY and Bin Summary	-	PASS		
PC	Auto Preconditioning	Level 3-245C		3/321/0	3/398/0
HTSL	Auto High Temperature Storage Life, 150C	1000 Hours		3/135/0	3/135/0
HAST	Auto Biased HAST, 130C/85%RH	96 Hours		3/231/0	3/231/0
AC	Auto Autoclave, 121C, 2 atm	96 Hours		3/231/0	3/231/0
TC	Auto Temperature Cycle, -65/150C	500 Cycles		3/231/0	3/231/0
PTC	Auto Power Temperature Cycle, - 40/105C	500 Cycles		1/45/0	1/45/0
WBP	Auto Post TC Bond Pull			PASS	PASS
MQ	Manufacturability (Auto Assembly)	(per mfg. site spec.)		PASS	PASS
HTOL	Auto High Temperature Operating Life, 125C	1000 Hours			3/231/0
ELFR	Auto Early Life Failure Rate, 150C	24 Hours			3/800/0
ED	Electrical Distributions	Cpk>1.67, tri- temp			3/90/0

SD	Auto Solderability	Pb / Pb-Free	 	1/30/0
PD	Auto Physical Dimensions	(per device drawing)	 	3/30/0
TPI	Thermal Path Integrity	Level 3-245C	 	3/36/0

- QBS: Qual by Similarity

- Qual Device DRV8432DKDR is qualified at LEVEL4-260C.

- QBS Device TAS5424BTDKDRQ1 is qualified at LEVEL3-245C.

- QBS Device TAS5424BTDKEQ1 is qualified at LEVEL3-245C.

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable.

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1000 Hours, 140C/480 Hours,

150C/300 Hours, and 155C/240 Hours.

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1000 Hours, and 170C/420 Hours.

- The following are equivalent Temperature Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles.

Quality and Environmental data is available at TI's external Web site: http://www.ti.com/ Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "http://www.ti.com/lsds/ti/legal/termsofsale.page"

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