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## **PACKAGING INFORMATION**

Orderable Device	Status	Package Type	Package Drawing	Pins	Package Qty	Eco Plan	Lead finish/ Ball material	MSL Peak Temp	Op Temp (°C)	Device Marking (4/5)	Samples
TPS6591104DA2NMA	ACTIVE	NFBGA	NMA	98	240	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	6591104DA2NMA	Samples
TPS659110A2NMAR	ACTIVE	NFBGA	NMA	98	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	659110A2NMA	Samples
TPS659110A2ZRC	OBSOLETE	BGA MICROSTAR JUNIOR	ZRC	98		TBD	Call TI	Call TI		TPS659110A2	
TPS659112A2NMAR	ACTIVE	NFBGA	NMA	98	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	659112A2NMA	Samples
TPS659112A2ZRC	OBSOLETE	BGA MICROSTAR JUNIOR	ZRC	98		TBD	Call TI	Call TI		TPS659112A2	
TPS6591133A2NMA	ACTIVE	NFBGA	NMA	98	240	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	6591133A2NMA	Samples
TPS659114A2NMAR	ACTIVE	NFBGA	NMA	98	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	659114A2NMA	Samples
TPS659114A2ZRCT	OBSOLETE	BGA MICROSTAR JUNIOR	ZRC	98		TBD	Call TI	Call TI		659114A2	
TPS659118A2ZRCT	OBSOLETE	BGA MICROSTAR JUNIOR	ZRC	98		TBD	Call TI	Call TI		659118A2	
TPS65911AA2NMAR	ACTIVE	NFBGA	NMA	98	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	65911AA2NMA	Samples
TPS65911AA2NMAT	ACTIVE	NFBGA	NMA	98	250	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	65911AA2NMA	Samples

<sup>&</sup>lt;sup>(1)</sup> The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

RoHS Exempt: TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.

<sup>(2)</sup> **RoHS**: TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".



## PACKAGE OPTION ADDENDUM

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**Green:** TI defines "Green" to mean the content of Chlorine (CI) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

- (3) MSL, Peak Temp. The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.
- (4) There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.
- (5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.
- (6) Lead finish/Ball material Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

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