



10-Dec-2020

## **PACKAGING INFORMATION**

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan	Lead finish/ Ball material	MSL Peak Temp	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430FR58471IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR58471	Samples
MSP430FR58471IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR58471	Samples
MSP430FR5847IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5847	Samples
MSP430FR5847IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5847	Samples
MSP430FR5847IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5847	Samples
MSP430FR5847IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5847	Samples
MSP430FR5848IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5848	Samples
MSP430FR5848IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5848	Samples
MSP430FR5848IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5848	Samples
MSP430FR5848IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5848	Samples
MSP430FR5849IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5849	Samples
MSP430FR5849IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5849	Samples
MSP430FR5849IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5849	Samples
MSP430FR5849IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5849	Samples
MSP430FR5857IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5857	Samples
MSP430FR5857IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5857	Samples
MSP430FR5857IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5857	Samples
MSP430FR5857IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5857	Samples
MSP430FR5858IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5858	Samples
MSP430FR5858IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5858	Samples





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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
							(6)				
MSP430FR5858IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5858	Samples
MSP430FR5858IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5858	Samples
MSP430FR5859IDA	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5859	Samples
MSP430FR5859IDAR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5859	Samples
MSP430FR5859IRHAR	ACTIVE	VQFN	RHA	40	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5859	Samples
MSP430FR5859IRHAT	ACTIVE	VQFN	RHA	40	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5859	Samples
MSP430FR58671IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR58671	Samples
MSP430FR58671IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR58671	Samples
MSP430FR5867IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5867	Samples
MSP430FR5867IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5867	Samples
MSP430FR5868IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5868	Samples
MSP430FR5868IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5868	Samples
MSP430FR5869IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5869	Samples
MSP430FR5869IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	FR5869	Samples

<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.

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.

<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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- (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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