

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F5304IPT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5304	Samples
MSP430F5304IPTR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5304	Samples
MSP430F5304IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5304	Samples
MSP430F5304IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5304	Samples
MSP430F5308IPT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5308	Samples
MSP430F5308IPTR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5308	Samples
MSP430F5308IRGCR	ACTIVE	VQFN	RGC	64	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5308	Samples
MSP430F5308IRGCT	ACTIVE	VQFN	RGC	64	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5308	Samples
MSP430F5308IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5308	Samples
MSP430F5308IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5308	Samples
MSP430F5308IZXH	ACTIVE	NFBGA	ZXH	80	576	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5308	Samples
MSP430F5308IZXHR	ACTIVE	NFBGA	ZXH	80	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5308	Samples
MSP430F5309IPT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5309	Samples
MSP430F5309IRGCR	ACTIVE	VQFN	RGC	64	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5309	Samples
MSP430F5309IRGCT	ACTIVE	VQFN	RGC	64	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5309	Samples
MSP430F5309IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5309	Samples
MSP430F5309IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5309	Samples
MSP430F5309IZXH	ACTIVE	NFBGA	ZXH	80	576	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5309	Samples
MSP430F5309IZXHR	ACTIVE	NFBGA	ZXH	80	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5309	Samples

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F5310IPT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5310	Samples
MSP430F5310IPTR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5310	Samples
MSP430F5310IRGCR	ACTIVE	VQFN	RGC	64	2000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5310	Samples
MSP430F5310IRGCT	ACTIVE	VQFN	RGC	64	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5310	Samples
MSP430F5310IRGZR	ACTIVE	VQFN	RGZ	48	2500	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5310	Samples
MSP430F5310IRGZT	ACTIVE	VQFN	RGZ	48	250	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5310	Samples
MSP430F5310IZQE	OBSOLETE	BGA MICROSTAR JUNIOR	ZQE	80		TBD	Call TI	Call TI		M430F5310	
MSP430F5310IZQER	OBSOLETE	BGA MICROSTAR JUNIOR	ZQE	80		TBD	Call TI	Call TI		M430F5310	
MSP430F5310IZXH	ACTIVE	NFBGA	ZXH	80	576	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5310	Samples

(1) 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.

(2) **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".

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 (Cl) 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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