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
MSP430F5630IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5630	Samples
MSP430F5631IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5631	Samples
MSP430F5632IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5632	Samples
MSP430F5632IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5632	Samples
MSP430F5632IZCAR	ACTIVE	NFBGA	ZCA	113	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5632	Samples
MSP430F5633IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5633	Samples
MSP430F5633IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5633	Samples
MSP430F5634IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5634	Samples
MSP430F5635IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5635	Samples
MSP430F5635IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5635	Samples
MSP430F5635IZCAR	ACTIVE	NFBGA	ZCA	113	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5635	Samples
MSP430F5635IZCAT	ACTIVE	NFBGA	ZCA	113	250	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5635	Samples
MSP430F5636IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5636	Samples
MSP430F5636IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5636	Samples
MSP430F5636IZQWR	OBSOLETE	BGA MICROSTAR JUNIOR	ZQW	113		TBD	Call TI	Call TI		M430F5636	
MSP430F5637IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5637	Samples
MSP430F5637IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5637	Samples
MSP430F5638IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5638	Samples
MSP430F5638IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5638	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
MSP430F5638IZCAR	ACTIVE	NFBGA	ZCA	113	2500	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5638	Samples
MSP430F5638IZCAT	ACTIVE	NFBGA	ZCA	113	250	RoHS & Green	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5638	Samples
MSP430F5638IZQWR	OBSOLETE	BGA MICROSTAR JUNIOR	ZQW	113		TBD	Call TI	Call TI	-40 to 85	M430F5638	
MSP430F5638IZQWT	OBSOLETE	BGA MICROSTAR JUNIOR	ZQW	113		TBD	Call TI	Call TI	-40 to 85	M430F5638	

(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.

Important Information and Disclaimer: The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and

continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals.
TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.