

## PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package   Pins	Package qty   Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
<a href="#">MSP430F6433IPZ</a>	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6433
MSP430F6433IPZ.B	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6433
<a href="#">MSP430F6433IPZR</a>	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6433
MSP430F6433IPZR.B	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6433
<a href="#">MSP430F6433IZCAR</a>	Active	Production	NFBGA (ZCA)   113	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6433
MSP430F6433IZCAR.B	Active	Production	NFBGA (ZCA)   113	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6433
<a href="#">MSP430F6433IZCAT</a>	Active	Production	NFBGA (ZCA)   113	250   SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6433
MSP430F6433IZCAT.B	Active	Production	NFBGA (ZCA)   113	250   SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6433
<a href="#">MSP430F6433IZQWT</a>	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW)   113	-	-	Call TI	Call TI	-40 to 85	M430F6433
<a href="#">MSP430F6435IPZ</a>	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6435
MSP430F6435IPZ.B	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6435
<a href="#">MSP430F6435IPZR</a>	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6435
MSP430F6435IPZR.B	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6435
<a href="#">MSP430F6436IPZ</a>	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6436
MSP430F6436IPZ.B	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6436
<a href="#">MSP430F6436IPZR</a>	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6436
MSP430F6436IPZR.B	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6436
<a href="#">MSP430F6438IPZ</a>	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6438
MSP430F6438IPZ.B	Active	Production	LQFP (PZ)   100	90   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6438
<a href="#">MSP430F6438IPZR</a>	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6438
MSP430F6438IPZR.B	Active	Production	LQFP (PZ)   100	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F6438
<a href="#">MSP430F6438IZCAR</a>	Active	Production	NFBGA (ZCA)   113	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6438

Orderable part number	Status (1)	Material type (2)	Package   Pins	Package qty   Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
MSP430F6438IZCAR.B	Active	Production	NFBGA (ZCA)   113	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F6438
<a href="#">MSP430F6438IZQWR</a>	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW)   113	-	-	Call TI	Call TI	-40 to 85	M430F6438

- (1) Status:** For more details on status, see our [product life cycle](#).
- (2) Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.
- (3) RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.
- (4) Lead finish/Ball material:** Parts 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.
- (5) MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.
- (6) Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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