

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)
MSP430F5418AIPN	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPN.A	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPN.B	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNR	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNR.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNR.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNRG4	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNRG4.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5418AIPNRG4.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5418A
MSP430F5419AIPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZ.A	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZ.B	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZR.A	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZR.B	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZRG4	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZRG4.A	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIPZRG4.B	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5419A
MSP430F5419AIZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A
MSP430F5419AIZCAR.A	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A
MSP430F5419AIZCAR.B	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A
MSP430F5419AIZCAT	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A
MSP430F5419AIZCAT.A	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A
MSP430F5419AIZCAT.B	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5419A

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)
MSP430F5435AIPN	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5435AIPN.A	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5435AIPN.B	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5435AIPNR	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5435AIPNR.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5435AIPNR.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5435A
MSP430F5436AIPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIPZ.A	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIPZ.B	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIPZR.A	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIPZR.B	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5436A
MSP430F5436AIZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZCAR.A	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZCAR.B	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZCAT	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZCAT.A	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZCAT.B	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5436A
MSP430F5436AIZQWT	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-40 to 85	M430F5436A
MSP430F5437AIPN	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPN.A	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPN.B	Active	Production	LQFP (PN) 80	119 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPNR	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A

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)
MSP430F5437AIPNR.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPNR.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPNRG4	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPNRG4.A	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5437AIPNRG4.B	Active	Production	LQFP (PN) 80	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5437A
MSP430F5438ACY.A	Active	Production	DIESALE (Y) 0	320 NOT REQUIRED	-	Call TI	Call TI	0 to 70	
MSP430F5438AIPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZ.A	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZ.B	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZR.A	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZR.B	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZRG4	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZRG4.A	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIPZRG4.B	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5438A
MSP430F5438AIZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A
MSP430F5438AIZCAR.A	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A
MSP430F5438AIZCAR.B	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A
MSP430F5438AIZCAT	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A
MSP430F5438AIZCAT.A	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A
MSP430F5438AIZCAT.B	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5438A

⁽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.

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.

OTHER QUALIFIED VERSIONS OF MSP430F5438A :

- Enhanced Product : [MSP430F5438A-EP](#)

NOTE: Qualified Version Definitions:

- Enhanced Product - Supports Defense, Aerospace and Medical Applications