

**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="#">MSP430F5513IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5513
MSP430F5513IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5513
<a href="#">MSP430F5514IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5514
MSP430F5514IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5514
MSP430F5514IRGCRG4.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5514
<a href="#">MSP430F5514IRGCT</a>	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5514
MSP430F5514IRGCT.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5514
<a href="#">MSP430F5515IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5515
MSP430F5515IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5515
<a href="#">MSP430F5515IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5515
MSP430F5515IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5515
<a href="#">MSP430F5517IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5517
MSP430F5517IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5517
<a href="#">MSP430F5517IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5517
MSP430F5517IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5517
<a href="#">MSP430F5519IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5519
MSP430F5519IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5519
<a href="#">MSP430F5519IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5519
MSP430F5519IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5519
<a href="#">MSP430F5521IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5521
MSP430F5521IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5521
<a href="#">MSP430F5521IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5521
MSP430F5521IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5521

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="#">MSP430F5522IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5522
MSP430F5522IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5522
<a href="#">MSP430F5522IRGCT</a>	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5522
MSP430F5522IRGCT.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5522
<a href="#">MSP430F5522IZXH</a>	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5522
MSP430F5522IZXH.Z	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5522
<a href="#">MSP430F5522IZXHR</a>	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5522
MSP430F5522IZXHR.Z	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5522
<a href="#">MSP430F5524IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5524
MSP430F5524IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5524
<a href="#">MSP430F5524IRGCT</a>	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5524
MSP430F5524IRGCT.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5524
<a href="#">MSP430F5524IZXH</a>	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5524
MSP430F5524IZXH.Z	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5524
<a href="#">MSP430F5524IZXHR</a>	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5524
MSP430F5524IZXHR.Z	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5524
<a href="#">MSP430F5525IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5525
MSP430F5525IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5525
<a href="#">MSP430F5525IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5525
MSP430F5525IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5525
<a href="#">MSP430F5526IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5526
MSP430F5526IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5526
<a href="#">MSP430F5526IRGCT</a>	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5526
MSP430F5526IRGCT.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5526
<a href="#">MSP430F5526IZXH</a>	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5526

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MSP430F5526IZXH.Z	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5526
<a href="#">MSP430F5526IZXHR</a>	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5526
MSP430F5526IZXHR.Z	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5526
<a href="#">MSP430F5527IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5527
MSP430F5527IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5527
<a href="#">MSP430F5527IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5527
MSP430F5527IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5527
<a href="#">MSP430F5528IRGCR</a>	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5528
MSP430F5528IRGCR.Z	Active	Production	VQFN (RGC)   64	2000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5528
<a href="#">MSP430F5528IRGCT</a>	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU   NIPDAUAG	Level-3-260C-168 HR	-40 to 85	M430F5528
MSP430F5528IRGCT.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5528
MSP430F5528IRGCTG4.Z	Active	Production	VQFN (RGC)   64	250   SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5528
<a href="#">MSP430F5528IYFFR</a>	Active	Production	DSBGA (YFF)   64	2500   LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	M430F5528
MSP430F5528IYFFR.Z	Active	Production	DSBGA (YFF)   64	2500   LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	M430F5528
<a href="#">MSP430F5528IZXH</a>	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5528
MSP430F5528IZXH.Z	Active	Production	NFBGA (ZXH)   80	576   JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5528
<a href="#">MSP430F5528IZXHR</a>	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5528
MSP430F5528IZXHR.Z	Active	Production	NFBGA (ZXH)   80	2500   LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5528
<a href="#">MSP430F5529IPN</a>	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5529
MSP430F5529IPN.Z	Active	Production	LQFP (PN)   80	119   JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5529
<a href="#">MSP430F5529IPNR</a>	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5529
MSP430F5529IPNR.Z	Active	Production	LQFP (PN)   80	1000   LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5529

(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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