

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)
MSP430F5500IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5500
MSP430F5500IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5500
MSP430F5500IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5500
MSP430F5500IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5500
MSP430F5501IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5501
MSP430F5501IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5501
MSP430F5501IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5501
MSP430F5501IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5501
MSP430F5502IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5502
MSP430F5502IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5502
MSP430F5502IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5502
MSP430F5502IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5502
MSP430F5503IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5503
MSP430F5503IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5503
MSP430F5503IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5503
MSP430F5503IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5503

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)
MSP430F5504IPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5504
MSP430F5504IPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5504
MSP430F5504IPTR.Z	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5504
MSP430F5504IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5504
MSP430F5504IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5504
MSP430F5504IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5504
MSP430F5504IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5504
MSP430F5505IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5505
MSP430F5505IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5505
MSP430F5505IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5505
MSP430F5505IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5505
MSP430F5506IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5506
MSP430F5506IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5506
MSP430F5506IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5506
MSP430F5506IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5506
MSP430F5507IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5507
MSP430F5507IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5507
MSP430F5507IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5507

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)
MSP430F5507IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5507
MSP430F5508IPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IPT.Z	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IPTR.Z	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IRGCR	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IRGCR.Z	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IRGCT	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IRGCT.Z	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5508
MSP430F5508IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5508
MSP430F5508IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5508
MSP430F5508IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5508
MSP430F5508IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5508
MSP430F5508IZXH	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5508
MSP430F5508IZXH.Z	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5508
MSP430F5509IPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IPT.Z	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IRGCR	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IRGCR.Z	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IRGCT	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IRGCT.Z	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5509
MSP430F5509IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5509

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)
MSP430F5509IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5509
MSP430F5509IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5509
MSP430F5509IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5509
MSP430F5509IZXH	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5509
MSP430F5509IZXH.Z	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5509
MSP430F5509IZXHR	Active	Production	NFBGA (ZXH) 80	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5509
MSP430F5509IZXHR.Z	Active	Production	NFBGA (ZXH) 80	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5509
MSP430F5510CY.Z	Active	Production	DIESALE (Y) 0	405 NOT REQUIRED	Yes	Call TI	N/A for Pkg Type	-40 to 85	
MSP430F5510IPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IPT.Z	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IPTR.Z	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IPTRG4.Z	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGCR	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGCR.Z	Active	Production	VQFN (RGC) 64	2000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGCT	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGCT.Z	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGCTG4.Z	Active	Production	VQFN (RGC) 64	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430F5510
MSP430F5510IRGZR	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5510
MSP430F5510IRGZR.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5510
MSP430F5510IRGZRG4.Z	Active	Production	VQFN (RGZ) 48	2500 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5510
MSP430F5510IRGZT	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5510

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)
MSP430F5510IRGZT.Z	Active	Production	VQFN (RGZ) 48	250 SMALL T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430 F5510
MSP430F5510IZXH	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5510
MSP430F5510IZXH.Z	Active	Production	NFBGA (ZXH) 80	576 JEDEC TRAY (5+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5510
MSP430F5510IZXHR	Active	Production	NFBGA (ZXH) 80	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5510
MSP430F5510IZXHR.Z	Active	Production	NFBGA (ZXH) 80	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	F5510

(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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