

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)
MSP430FG4616IPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4616
MSP430FG4616IPZ.Z	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4616
MSP430FG4616IPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4616
MSP430FG4616IPZR.Z	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4616
MSP430FG4616IPZRG4.Z	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4616
MSP430FG4616IZCA	Active	Production	NFBGA (ZCA) 113	260 JEDEC TRAY (10+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4616
MSP430FG4616IZCA.Z	Active	Production	NFBGA (ZCA) 113	260 JEDEC TRAY (10+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4616
MSP430FG4616IZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4616
MSP430FG4616IZCAR.Z	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4616
MSP430FG4616IZQW	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-	M430FG4616
MSP430FG4616IZQWR	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-	M430FG4616
MSP430FG4617IPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4617
MSP430FG4617IPZ.Z	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4617
MSP430FG4617IZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4617
MSP430FG4617IZCAR.Z	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4617
MSP430FG4617IZQWR	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-40 to 85	M430FG4617
MSP430FG4618IPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4618
MSP430FG4618IPZ.Z	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4618
MSP430FG4618IPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4618
MSP430FG4618IPZR.Z	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4618

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MSP430FG4618IZCA	Active	Production	NFBGA (ZCA) 113	260 JEDEC TRAY (10+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZCA.Z	Active	Production	NFBGA (ZCA) 113	260 JEDEC TRAY (10+1)	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZCAR.Z	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZCAT	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZCAT.Z	Active	Production	NFBGA (ZCA) 113	250 SMALL T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4618
MSP430FG4618IZQW	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-	M430FG4618
MSP430FG4618IZQWT	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-	M430FG4618
MSP430FG4619IPZ	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4619 REV #
MSP430FG4619IPZ.Z	Active	Production	LQFP (PZ) 100	90 JEDEC TRAY (5+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4619 REV #
MSP430FG4619IPZR	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4619
MSP430FG4619IPZR.Z	Active	Production	LQFP (PZ) 100	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 85	M430FG4619
MSP430FG4619IZCAR	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4619
MSP430FG4619IZCAR.Z	Active	Production	NFBGA (ZCA) 113	2500 LARGE T&R	Yes	SNAGCU	Level-3-260C-168 HR	-40 to 85	FG4619
MSP430FG4619IZQWR	Obsolete	Production	BGA MICROSTAR JUNIOR (ZQW) 113	-	-	Call TI	Call TI	-	M430FG4619

(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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