

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)
M430FR2155TRSMTG4	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
M430FR2155TRSMTG4.A	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
M430FR2355TRSMRG4	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
M430FR2355TRSMRG4.A	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2153TDBT	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2153
MSP430FR2153TDBT.A	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2153
MSP430FR2153TDBTR	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2153
MSP430FR2153TDBTR.A	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2153
MSP430FR2153TPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2153
MSP430FR2153TPT.A	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2153
MSP430FR2153TPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2153
MSP430FR2153TPTR.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2153
MSP430FR2153TRHAR	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRHAR.A	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRHAT	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRHAT.A	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRSMR	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRSMR.A	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRSMT	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2153TRSMT.A	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2153
MSP430FR2155TDBT	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2155
MSP430FR2155TDBT.A	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2155
MSP430FR2155TDBTR	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2155
MSP430FR2155TDBTR.A	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2155
MSP430FR2155TPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2155
MSP430FR2155TPT.A	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2155

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)
MSP430FR2155TPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2155
MSP430FR2155TPTR.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2155
MSP430FR2155TRHAR	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRHAR.A	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRHAT	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRHAT.A	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRSMR	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRSMR.A	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRSMT	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2155TRSMT.A	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2155
MSP430FR2353TDBT	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2353
MSP430FR2353TDBT.A	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2353
MSP430FR2353TDBTR	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2353
MSP430FR2353TDBTR.A	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2353
MSP430FR2353TPTR	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2353
MSP430FR2353TPTR.A	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2353
MSP430FR2353TPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2353
MSP430FR2353TPTR.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2353
MSP430FR2353TRHAR	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRHAR.A	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRHAT	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRHAT.A	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRSMR	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRSMR.A	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRSMT	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2353TRSMT.A	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2353
MSP430FR2355TDBT	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2355
MSP430FR2355TDBT.A	Active	Production	TSSOP (DBT) 38	50 TUBE	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2355
MSP430FR2355TDBTR	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2355

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)
MSP430FR2355TDBTR.A	Active	Production	TSSOP (DBT) 38	2000 LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	430FR2355
MSP430FR2355TPT	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2355
MSP430FR2355TPT.A	Active	Production	LQFP (PT) 48	250 JEDEC TRAY (10+1)	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2355
MSP430FR2355TPTR	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2355
MSP430FR2355TPTR.A	Active	Production	LQFP (PT) 48	1000 LARGE T&R	Yes	NIPDAU	Level-3-260C-168 HR	-40 to 105	430FR2355
MSP430FR2355TRHAR	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRHAR.A	Active	Production	VQFN (RHA) 40	2500 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRHAT	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRHAT.A	Active	Production	VQFN (RHA) 40	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRSMR	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRSMR.A	Active	Production	VQFN (RSM) 32	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRSMT	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355
MSP430FR2355TRSMT.A	Active	Production	VQFN (RSM) 32	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 105	FR2355

(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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