

**PACKAGING INFORMATION**

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67451A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451A	<a href="#">Samples</a>
MSP430F67451A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451A	<a href="#">Samples</a>
MSP430F67451A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451A	<a href="#">Samples</a>
MSP430F67451A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451A	<a href="#">Samples</a>
MSP430F67461A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461A	<a href="#">Samples</a>
MSP430F67461A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461A	<a href="#">Samples</a>
MSP430F67461A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461A	<a href="#">Samples</a>
MSP430F67461A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461A	<a href="#">Samples</a>
MSP430F67471A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471A	<a href="#">Samples</a>
MSP430F67471A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471A	<a href="#">Samples</a>
MSP430F67471A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471A	<a href="#">Samples</a>
MSP430F67471A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471A	<a href="#">Samples</a>
MSP430F67481A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481A	<a href="#">Samples</a>
MSP430F67481A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481A	<a href="#">Samples</a>
MSP430F67481A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481A	<a href="#">Samples</a>
MSP430F67481A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481A	<a href="#">Samples</a>
MSP430F67491A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491A	<a href="#">Samples</a>

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67491A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491A	<a href="#">Samples</a>
MSP430F67491A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491A	<a href="#">Samples</a>
MSP430F67491A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491A	<a href="#">Samples</a>
MSP430F67651A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651A	<a href="#">Samples</a>
MSP430F67651A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651A	<a href="#">Samples</a>
MSP430F67651A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651A	<a href="#">Samples</a>
MSP430F67651A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651A	<a href="#">Samples</a>
MSP430F67661A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661A	<a href="#">Samples</a>
MSP430F67661A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661A	<a href="#">Samples</a>
MSP430F67661A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661A	<a href="#">Samples</a>
MSP430F67661A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661A	<a href="#">Samples</a>
MSP430F67671A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671A	<a href="#">Samples</a>
MSP430F67671A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671A	<a href="#">Samples</a>
MSP430F67671A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671A	<a href="#">Samples</a>
MSP430F67671A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671A	<a href="#">Samples</a>
MSP430F67681A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681A	<a href="#">Samples</a>
MSP430F67681A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681A	<a href="#">Samples</a>
MSP430F67681A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681A	<a href="#">Samples</a>

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67681AIPZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681A	<a href="#">Samples</a>
MSP430F67691AIEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691A	<a href="#">Samples</a>
MSP430F67691AIEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691A	<a href="#">Samples</a>
MSP430F67691AIPZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691A	<a href="#">Samples</a>
MSP430F67691AIPZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691A	<a href="#">Samples</a>
MSP430F67751AIEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751A	<a href="#">Samples</a>
MSP430F67751AIEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751A	<a href="#">Samples</a>
MSP430F67751AIPZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751A	<a href="#">Samples</a>
MSP430F67751AIPZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751A	<a href="#">Samples</a>
MSP430F67761AIEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761A	<a href="#">Samples</a>
MSP430F67761AIEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761A	<a href="#">Samples</a>
MSP430F67761AIPZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761A	<a href="#">Samples</a>
MSP430F67761AIPZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761A	<a href="#">Samples</a>
MSP430F67771AIEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771A	<a href="#">Samples</a>
MSP430F67771AIEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771A	<a href="#">Samples</a>
MSP430F67771AIPZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771A	<a href="#">Samples</a>
MSP430F67771AIPZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771A	<a href="#">Samples</a>
MSP430F67781AIEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781A	<a href="#">Samples</a>

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67781A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781A	<a href="#">Samples</a>
MSP430F67781A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781A	<a href="#">Samples</a>
MSP430F67781A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781A	<a href="#">Samples</a>
MSP430F67791A1PEU	ACTIVE	LQFP	PEU	128	72	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791A	<a href="#">Samples</a>
MSP430F67791A1PEUR	ACTIVE	LQFP	PEU	128	750	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791A	<a href="#">Samples</a>
MSP430F67791A1PZ	ACTIVE	LQFP	PZ	100	90	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791A	<a href="#">Samples</a>
MSP430F67791A1PZR	ACTIVE	LQFP	PZ	100	1000	Green (RoHS & no Sb/Br)	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791A	<a href="#">Samples</a>

(1) The marketing status values are defined as follows:

**ACTIVE:** Product device recommended for new designs.

**LIFEBUY:** TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

**NRND:** Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

**PREVIEW:** Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

(2) **RoHS:** TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".

**RoHS Exempt:** TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.

**Green:** TI defines "Green" to mean the content of Chlorine (Cl) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

(3) MSL, Peak Temp. - The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

(4) There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

(5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

<sup>(6)</sup> Lead/Ball Finish - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead/Ball Finish values may wrap to two lines if the finish value exceeds the maximum column width.

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