

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67451IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451	Samples
MSP430F67451IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67451	Samples
MSP430F67461IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461	Samples
MSP430F67461IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67461	Samples
MSP430F67471IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471	Samples
MSP430F67471IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67471	Samples
MSP430F67481IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481	Samples
MSP430F67481IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67481	Samples
MSP430F67491IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491	Samples
MSP430F67491IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67491	Samples
MSP430F67651IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651	Samples
MSP430F67651IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651	Samples
MSP430F67651IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67651	Samples
MSP430F67661IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661	Samples
MSP430F67661IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67661	Samples
MSP430F67671IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671	Samples
MSP430F67671IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67671	Samples
MSP430F67681IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681	Samples
MSP430F67681IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681	Samples
MSP430F67681IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67681	Samples

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
MSP430F67691IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691	Samples
MSP430F67691IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691	Samples
MSP430F67691IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67691	Samples
MSP430F67751IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751	Samples
MSP430F67751IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751	Samples
MSP430F67751IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67751	Samples
MSP430F67761IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761	Samples
MSP430F67761IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67761	Samples
MSP430F67771IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771	Samples
MSP430F67771IPEUR	ACTIVE	LQFP	PEU	128	750	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771	Samples
MSP430F67771IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67771	Samples
MSP430F67781IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781	Samples
MSP430F67781IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67781	Samples
MSP430F67791IPEU	ACTIVE	LQFP	PEU	128	72	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791	Samples
MSP430F67791IPEUR	ACTIVE	LQFP	PEU	128	750	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791	Samples
MSP430F67791IPZ	ACTIVE	LQFP	PZ	100	90	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791	Samples
MSP430F67791IPZR	ACTIVE	LQFP	PZ	100	1000	RoHS & Green	NIPDAU	Level-3-260C-168 HR	-40 to 85	F67791	Samples

(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.

OBSELETE: 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 ≤ 1000 ppm threshold. Antimony trioxide based flame retardants must also meet the ≤ 1000 ppm 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.

(6) Lead finish/Ball material - Orderable Devices 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.

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