

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
TMS320F280200DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F280200DAS S320	Samples
TMS320F280200DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F280200DAT S320	Samples
TMS320F280200PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F280200PTT	Samples
TMS320F28020DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28020DAS S320	Samples
TMS320F28020DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28020DAT S320	Samples
TMS320F28020PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28020PTS	Samples
TMS320F28020PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F28020PTT	Samples
TMS320F28021DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28021DAS S320	Samples
TMS320F28021DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28021DAT S320	Samples
TMS320F28021PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28021PTS	Samples
TMS320F28021PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F28021PTT	Samples
TMS320F28022DAQ	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28022DAQ S320	Samples
TMS320F28022DAQR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR		F28022DAQ S320	Samples
TMS320F28022DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28022DAS S320	Samples
TMS320F28022DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28022DAT S320	Samples
TMS320F28022PTQ	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28022PTQ	Samples
TMS320F28022PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980)	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
										F28022PTS	
TMS320F28022PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	S320 980 F28022PTT	Samples
TMS320F28023DAQ	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28023DAQ S320	Samples
TMS320F28023DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28023DAS S320	Samples
TMS320F28023DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28023DAT S320	Samples
TMS320F28023PTQ	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28023PTQ	Samples
TMS320F28023PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28023PTS	Samples
TMS320F28023PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F28023PTT	Samples
TMS320F28026DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28026DAS S320	Samples
TMS320F28026DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28026DAT S320	Samples
TMS320F28026FPTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	S320 980 F28026FPTT	Samples
TMS320F28026PTQ	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28026PTQ	Samples
TMS320F28026PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28026PTS	Samples
TMS320F28026PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F28026PTT	Samples
TMS320F28027DAS	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28027DAS S320	Samples
TMS320F28027DASR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	F28027DAS S320	Samples
TMS320F28027DAT	ACTIVE	TSSOP	DA	38	40	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28027DAT S320	Samples
TMS320F28027DATR	ACTIVE	TSSOP	DA	38	2000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	F28027DAT S320	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
TMS320F28027FPTQ	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	S320 F28027FPTQ	Samples
TMS320F28027FPTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	S320 980 F28027FPTT	Samples
TMS320F28027FPTR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	S320 980 F28027FPTR	Samples
TMS320F28027PTQ	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28027PTQ	Samples
TMS320F28027PTQR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	S320 F28027PTQR	Samples
TMS320F28027PTR	ACTIVE	LQFP	PT	48	1000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	S320 F28027PTR	Samples
TMS320F28027PTS	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	(S320, S320 980) F28027PTS	Samples
TMS320F28027PTT	ACTIVE	LQFP	PT	48	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 105	(S320, S320 980) F28027PTT	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.

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.

(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.

Important Information and Disclaimer:The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

OTHER QUALIFIED VERSIONS OF TMS320F28022, TMS320F28022-Q1, TMS320F28023, TMS320F28023-Q1, TMS320F28026, TMS320F28026-Q1, TMS320F28027, TMS320F28027-Q1, TMS320F28027F, TMS320F28027F-Q1 :

● Catalog : [TMS320F28022](#), [TMS320F28023](#), [TMS320F28026](#), [TMS320F28027](#), [TMS320F28027F](#)

● Automotive : [TMS320F28022-Q1](#), [TMS320F28023-Q1](#), [TMS320F28026-Q1](#), [TMS320F28027-Q1](#), [TMS320F28027F-Q1](#)

NOTE: Qualified Version Definitions:

- Catalog - TI's standard catalog product
- Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects