

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)
INA191A1YFDR	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E3
INA191A1YFDR.A	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E3
INA191A2YFDR	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E2
INA191A2YFDR.A	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E2
INA191A3YFDR	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E4
INA191A3YFDR.A	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E4
INA191A4YFDR	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E5
INA191A4YFDR.A	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E5
INA191A5YFDR	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E6
INA191A5YFDR.A	Active	Production	DSBGA (YFD) 6	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	1E6
INA2191A1YBJR	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29J1
INA2191A1YBJR.A	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29J1
INA2191A2YBJR	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29K1
INA2191A2YBJR.A	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29K1
INA2191A3YBJR	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29L1
INA2191A3YBJR.A	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29L1
INA2191A4YBJR	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29M1
INA2191A4YBJR.A	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29M1
INA2191A5YBJR	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29N1
INA2191A5YBJR.A	Active	Production	DSBGA (YBJ) 12	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 125	29N1

(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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