

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)
BQ24160ARGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	0 to 125	BQ 24160A
BQ24160ARGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	0 to 125	BQ 24160A
BQ24160ARGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	0 to 125	BQ 24160A
BQ24160ARGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	0 to 125	BQ 24160A
BQ24160RGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160RGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160RGER.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160RGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160RGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160RGET.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24160
BQ24160YFFR	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24160
BQ24160YFFR.A	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24160
BQ24160YFFT	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24160
BQ24160YFFT.A	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24160
BQ24161BRGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGER.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B

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)
BQ24161BRGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGET.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGETG4	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGETG4.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BRGETG4.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161B
BQ24161BYFFR	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-	BQ24161B
BQ24161BYFFR.A	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24161B
BQ24161BYFFT.A	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24161B
BQ24161RGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161RGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161RGER.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161RGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161RGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161RGET.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24161
BQ24161YFFR	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24161
BQ24161YFFT	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24161
BQ24163RGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163
BQ24163RGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163
BQ24163RGER.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163
BQ24163RGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163

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BQ24163RGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163
BQ24163RGET.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24163
BQ24163YFFR	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24163
BQ24163YFFR.A	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24163
BQ24163YFFT	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24163
BQ24163YFFT.A	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24163
BQ24168RGER	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGER.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGER.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGERG4	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGERG4.A	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGERG4.B	Active	Production	VQFN (RGE) 24	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGET	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGET.A	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168RGET.B	Active	Production	VQFN (RGE) 24	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	BQ 24168
BQ24168YFFR	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168
BQ24168YFFR.A	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168
BQ24168YFFR.B	Active	Production	DSBGA (YFF) 49	3000 LARGE T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168
BQ24168YFFT	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168
BQ24168YFFT.A	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168
BQ24168YFFT.B	Active	Production	DSBGA (YFF) 49	250 SMALL T&R	Yes	SNAGCU	Level-1-260C-UNLIM	-40 to 85	BQ24168

⁽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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