

This device is designed specifically to power IMVP Mobile Processors under a strict disclosure agreement with Intel Corporation. The end user must have a current CNDA in place with Intel Corporation in order to access this information.

For a detailed datasheet and other design support tools, please contact IMVP@list.ti.com.

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PACKAGING INFORMATION

| Orderable Device | Status | Package Type | Package Drawing | Pins | Package Qty | Eco Plan | Lead finish/ Ball material | MSL Peak Temp | Op Temp (°C) | Device Marking (4/5) | Samples |
|------------------|--------|--------------|--------------------|------|----------------|--------------|-------------------------------|--------------------|--------------|----------------------|---------|
| TPS51623RSMR | ACTIVE | VQFN | RSM | 32 | 3000 | RoHS & Green | NIPDAU | Level-1-260C-UNLIM | -40 to 105 | TPS 51623 | Samples |
| TPS51623RSMT | ACTIVE | VQFN | RSM | 32 | 250 | RoHS & Green | NIPDAU | Level-1-260C-UNLIM | -40 to 105 | TPS 51623 | 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 (CI) 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.

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PACKAGE OPTION ADDENDUM

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PACKAGE MATERIALS INFORMATION

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TAPE AND REEL INFORMATION





| A0 | Dimension designed to accommodate the component width |
|----|---|
| В0 | Dimension designed to accommodate the component length |
| K0 | Dimension designed to accommodate the component thickness |
| W | Overall width of the carrier tape |
| P1 | Pitch between successive cavity centers |

QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



*All dimensions are nominal

| Device | Package Type | Package Drawing | | SPQ | Reel Diameter (mm) | Reel Width W1 (mm) | A0 (mm) | B0 (mm) | K0 (mm) | P1 (mm) | W (mm) | Pin1 Quadrant |
|--------------|-----------------|--------------------|----|------|--------------------------|--------------------------|------------|------------|------------|------------|-----------|------------------|
| TPS51623RSMR | VQFN | RSM | 32 | 3000 | 330.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| TPS51623RSMT | VQFN | RSM | 32 | 250 | 180.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |

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*All dimensions are nominal

| Device | Package Type | Package Drawing | Pins | SPQ | Length (mm) | Width (mm) | Height (mm) |
|--------------|--------------|-----------------|------|------|-------------|------------|-------------|
| TPS51623RSMR | VQFN | RSM | 32 | 3000 | 346.0 | 346.0 | 33.0 |
| TPS51623RSMT | VQFN | RSM | 32 | 250 | 182.0 | 182.0 | 20.0 |

4 x 4, 0.4 mm pitch

PLASTIC QUAD FLATPACK - NO LEAD

This image is a representation of the package family, actual package may vary. Refer to the product data sheet for package details.



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