

Product Bulletin

Document #:PB24415Z Issue Date:30 Nov 2021

| Title of Change: | AR0220AT Temperature Sensor Specification | | | |
|-------------------------|--|-------------------------------|--|--|
| Effective date: | 30 Nov 2021 | | | |
| Contact information: | Contact your local onsemi Sales Office or William.Howlett@onsemi.com | | | |
| Type of notification: | This Product Bulletin is for notification purposes only. onsemi will proceed with implementation of this change upon publication of this Product Bulletin. | | | |
| Change Category: | Documentation | | | |
| Change Sub-Category(s): | Datasheet/Product Doc change | | | |
| Sites Affected: | | | | |
| onsemi Sites | | External Foundry/Subcon Sites | | |
| None | | None | | |

Description and Purpose:

This change effects the onsemi AR0220AT Rev4 image sensor. The temperature sensor specifications listed below supersede the specifications listed in the AR0220AT data sheet. This change has been documented in the "AR0220AT Rev4 Temperature Sensor Addendum".

Temperature Sensor Tolerance

AR0220AT Rev4 is specified according to the following table:

Table 1: TEMPSENSO and TEMPSENS1 TOLERANCE

| Temperature Range (Junction) | Tolerance | |
|------------------------------|-----------|--|
| +105°C ~ +125°C | ±5°C | |

Note: Temperature sensor tolerance is valid for all voltage ranges for the specified power supply tolerances in AR0220AT Datasheet.

In order to support a customer need for temperature sensor accuracy of ±5°C the AR0220AT4R00XUEA2-VL-TPBR will be provided for all parts built after Sept 2nd, 2020. For all AR0220AT4R00XUEA2-VL-TPBR the temperature sensor has been verified by screen/evaluation/calibration improvement, etc.

In order to ensure accuracy of ±5°C at 105°C to 125°C, the following steps are taken:

- •Five reads at each step (125°C, 55°C, -40°C) to make sure it is repeatable with limits on the readings for each step
- •Limits on the error term at -40°C because this is the first step the temp sensor is fully calibrated and a different insertion for the step.
- $\bullet \mbox{Limits}$ on the calculated slope between the temperature $\mbox{\ points}.$
- •Limits on the read at final test which is 25°C

List of Affected Standard Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the <u>PCN Customized Portal</u>.

| | AR0220AT4R00XUEA2-VL-TPBR | | |
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