

Silicon Errata and Data Sheet Clarification

The PAC1710 and PAC1720 parts you have received conform functionally to the Device Data Sheet (DS20005386), except for the anomalies described below.

The silicon issues discussed in the following pages are for silicon revisions with the Product and Revision IDs listed in [Table 1](#). This silicon's issues are summarized in [Table 2](#).

Future revisions of the device will address the issues noted.

TABLE 1: SILICON REVISION TABLE

Part Number	Product ID	Revision ID	Silicon Revision
PAC1720	57h	81h	A2
PAC1710	58h	81h	A2

Note 1: The Product ID and Revision ID are located in the registers FDh and FFh respectively, as seen in the datasheet.

TABLE 2: SILICON ISSUE SUMMARY

Module Number	Module Name	Feature	Issue Summary	Affected Revision
1	V _{BUS}	ADC Measurement	When temperatures drop below +25°C, the V _{BUS} measurement may be incorrect.	A2
2	I ² C Address	I ² C Addressing	Address could be incorrect when POR occurs below +25°C.	A2
3	Standby Mode	Standby	Device may not respond after going into Standby mode.	A2

1. Module: V_{BUS}

A cold temperature issue has been found that affects a certain percentage of parts. The V_{BUS} measurement is only validated in production at ambient temperature (+25°C), but has been observed to fail at temperatures ranging from -40°C to +15°C on a device-to-device basis. The V_{SENSE} measurement is not affected, the V_{POWER} calculation is affected due to the V_{BUS} measurement issue.

Work around

No current workaround, device will work correctly above 25°C.

2. Module: I²C Address

The Address selection routine may not work correctly below +25°C. This issue is related to [Module 1](#). Note that this could affect other parts on the I²C bus if the incorrect address conflicts with a device on the same bus.

Work around 1

The address will not be correct but will be one of the addresses available to the device. Poll the bus to determine which address was set and use that address for communication.

Work around 2

POR the device when the temperature is greater than +25°C. The I²C Address will not change after POR, even if the temperature is reduced.

3. Module: Standby Mode

The device allows the user to disable the V_{BUS} and/or V_{SENSE} to reduce the current consumption. After the measurement has been disabled, the device may not be able to re-enable the measurements and thus no new measurements can be taken.

Work around 1

A software workaround is in verification. This will be updated with the software requirements when complete.

Work around 2

Do not put the part into standby mode.

Work around 3

POR the device, the device will restart in the default condition and will communicate normally.

APPENDIX A: DOCUMENT REVISION HISTORY

Rev. A Document (10/2021)

- Initial release of this document, issued for silicon A2.

PAC1710/20

NOTES:

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Worldwide Sales and Service

AMERICAS

Corporate Office
2355 West Chandler Blvd.
Chandler, AZ 85224-6199
Tel: 480-792-7200
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Technical Support:
<http://www.microchip.com/support>
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