USB72x6 Silicon Errata and Data Sheet Clarification

This document describes known silicon errata for the following USB72x6 devices:

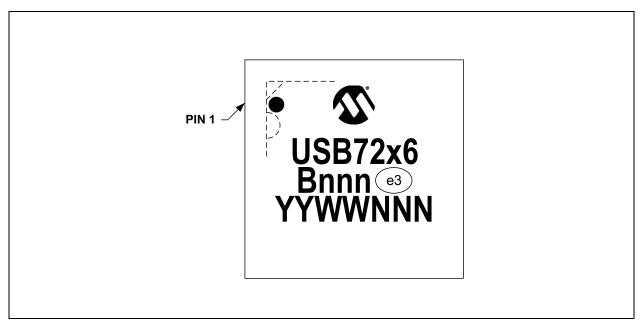
- USB7206
- USB7216

The silicon errata discussed in this document are for silicon with silicon revisions as listed in Table 1. Parts affected by these errata are marked in Figure 1.

TABLE 1: AFFECTED SILICON REVISIONS

Part Numbers	Silicon Revision
USB7206, USB7216	B1

FIGURE 1: TOP MARKING SILICON REVISION INDICATION



Note: Figure 1 details the top markings of an example part and highlights the location of the silicon revision. Other top marking values may differ (lot codes, location of manufacture, and so on).

A summary of USB72x6 silicon errata is provided in Table 2.

TABLE 2: SILICON ISSUE SUMMARY

Item Number	Silicon Issue Summary	
1.	FlexConnect USB 3.0 operation requires special conditions	
2.	Type-C Bridging	

Silicon Errata Issues

Module 1: FlexConnect USB 3.0 operation requires special conditions

DESCRIPTION

FlexConnect: For USB 3.0 connections only, the following conditions exist:

- · The Flexed port may not re-enumerate if disconnected and reconnected.
- · After flexing and unflexing, the UFP may not re-enumerate.

These conditions are avoided if both of the following steps are taken:

- 1. Run the hub using SPI Flash memory.
- 2. Disable the host (PC) power management.

Note: USB 2.0 connections enumerate normally in all FlexConnect states.

END USER IMPLICATIONS

If FlexConnect operation is required for USB 3.0 connections, both of the following must be met:

- · The hub must operate using SPI Flash memory.
- · Host power management must be disabled.

Work around

None.

PLAN

This erratum will be corrected in a future revision of this silicon.

Module 2: Type-C Bridging

DESCRIPTION

The internal Type-C Bridge device is not implemented for USB7216 devices with only basic Type-C ports.

END USER IMPLICATIONS

There is no end user impact as long as USB 3 Hub Command Verifier (HUB3CV) Ver. 2.1.12.1 or later is used; with this version, a missing Type-C Bridge device will not result in a compliance test failure.

Work around

None.

PLAN

This erratum will be corrected in a future revision of this silicon.

APPENDIX A: DOCUMENT REVISION HISTORY

Revision Level & Date	Section/Figure/Entry	Correction
DS80000847A (09-19-19)	Initial release	

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