

Mini58 Series Errata Sheet

Errata Sheet for 32-bit NuMicro™ Family

Document Information

Abstract	This errata sheet describes the functional problem known at the release date of this document.
Apply to	Mini58 Series.

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1 Overview

Functional Problem	Description
UART1 Baud-rate generator Mode 2	If the UART1 baud rate generator is set to Mode 2, UART1 may receive incorrect data.
LDROM address mapping	Only 2 KB LDROM is addressable when boot from LDROM with IAP or boot from APROM with IAP is enabled.

2 Functional Problem

2.1 UART1 Baud Rate Generator Mode 2

Description:

If the UART1 baud rate generator is set to Mode 2, UART1 may receive incorrect data.

Problem:

When the UART1 start bit deglitch block works incorrectly while the baud rate generator is set to Mode 2, RX may receive incorrect data.

Workaround:

The baud rate generator supports three different modes. Use Mode 0 or Mode 1 to avoid this issue.

Mode	BAUDM1	BAUDM0	Divider X	BRD	M	Baud Rate Equation
Mode 0	0	0	B	A	16	$UART_CLK / [16 * (A+2)]$
Mode 1	1	0	B	A	B+1	$UART_CLK / [(B+1) * (A+2)]$, B must ≥ 8
Mode 2	1	1	Don't care	A	1	$UART_CLK / (A+2)$, A must ≥ 8 (UART0 only)

2.2 LDROM Address Mapping

Description:

Only 2 KB LDROM is addressable when boot from LDROM with IAP or boot from APROM with IAP is enabled.

Problem:

The Mini58 supports four booting modes controlled by CBS bits in user config0, including boot from LDROM with IAP, boot from LDROM without IAP, boot from APROM with IAP, and boot from APROM without IAP.

Although the Mini58 provides 2.5 KB LDROM, only 2KB is addressable when booting with IAP is enabled. Thus, accessing LDROM beyond 2KB will trigger hard fault and crash your system.

Workaround:

There is no workaround solution for this issue. User should shrink LDROM image size below 2 KB by using higher compiler optimization level and remove unnecessary code/variables.

Revision History

Date	Revision	Description
2016.01.12	1.00	1. Initially issued.
2016.10.25	1.01	1. Added LDROM address mapping limitation.

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