
Disabling clock monitoring

ET Rev. 2.01

Introduction

This errata sheet introduces a method to disable 'clock monitoring' function safely. If the 'clock monitoring' function is disabled in an inappropriate method, the MCU device may malfunction. It is important that the 'clock monitoring' function is disabled in the correct order.

This document describes the correct sequence of disabling the 'clock monitoring' function and introduces the example code corresponding to the sequence.

Table 1 summarizes the limitations.

Table 1. Limitation summary

Module	Limitations
SCU	Depending on the procedure to disable the clock monitoring function, the MCU may malfunction.

Table 2 shows the list of MCU devices to which this document applies.

Table 2. Device limitations

Reference product	Part name
A31G11x	A31G111GR, A31G111KN, A31G111KU, A31G111LU, A31G112CL, A31G112GR, A31G112KN, A31G112KU, A31G112KY, A31G112LU, A31G112SQ
A31G12x	A31G122ML, A31G122MM, A31G122RL, A31G122RM, A31G123CL, A31G123ML, A31G123MM, A31G123RL, A31G123RM, A31G123RN, A31G123SQ
-	A31R713CL, A31R713ML, A31R713RT
A31L12x	A31L122CL, A31L122KN, A31L122KU, A31L122RL, A31L123CL, A31L123KN, A31L123KU, A31L123RL

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1. Disabling clock monitoring

1.1 Description of limitation

The 'clock monitoring' function is disabled by default. Users want to enable or disable the 'clock monitoring' function depending on the individual applications, and they may change the settings.

If the 'clock monitoring' function is enabled by setting the MACTS[1:0] bits to '10', disabling this function by writing '0b' to the MONEN bit in SCU_CMONCR register may cause the device to malfunction.

1.2 Workaround

It is recommended to clear the MACTS[1:0] bits in SCU_CMONCR register to '00', before disabling the 'clock monitoring' function.

Table 3 describes the procedure for disabling the 'clock monitoring' function.

Table 3. Sequence of disabling clock monitoring

Step	Description
1	<ul style="list-style-type: none"> Clear the MACTS[1:0] bits in SCU_CMONCR register to '00'. <ul style="list-style-type: none"> No action by the 'clock monitoring' function Flags will be set/cleared on condition.
2	<ul style="list-style-type: none"> Clear the MONEN bit in SCU_CMONCR register to '0'. <ul style="list-style-type: none"> The 'clock monitoring' function is disabled.

The example code shown below disables the 'clock monitoring' function sequentially:

```

1  SCUCG->CMONCR_b.MACTS = 0;    // 1. Clear MACTS bits
2
3  SCUCG->CMONCR_b.MONEN = 0;    // 2. Disable clock monitoring function

```

1. It clears the MACTS bits in SCU_CMONCR register to '00b'.
2. It disables the 'clock monitoring' function.

Revision history

Revision	Date	Notes
1.00	Nov. 27, 2020	Initial release
2.00	Apr. 14, 2023	Made major changes due to standardization of content structure and document template. Changed the file name (From 'ERRATA_A31G11x_A31G12x_A31R713_A31L12x_ENG_201127').
2.01	Dec. 2, 2024	Updated the disclaimer.

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