

Product Advisory (PA)

Subject: Product Advisory for RC32504A, RC32514A, RC32508A, RC325xxA

Publication Date: 12/11/2025

Effective Date: 12/11/2025

Revision Description:

Initial Release

Description of Change:

This notice is to inform our customers of a DPLL lock issue during device boot. During initial startup, the affected devices may fail to lock its DPLL if they cannot detect a valid VCO clock reference. The likelihood of this detection failure varies with voltage and temperature conditions. This is only seen during initial boot; normal operation is unaffected.

A DPLL lock failure can be identified by the following status bits:

- `dppll_lock_sts = 0`
- `osc_fallback = 1`

Workaround

Override the clock selection by setting `sys_clk_sel` (register `0x16D[7:6]`) = 2. This forces the device to use the system clock divider and enables proper VCO clock reference operation.

There are two methods to apply this fix.

1. Use the serial interface (I2C or SPI) to write the register setting during device initialization.
2. Program the register setting into the device's OTP to automatically apply the workaround on every start. Contact Renesas for assistance with setting up this configuration.

This is a workaround only. There is no change to the existing product.

Affected Product List: Refer Appendix A

Reason for Change:

During boot, the device fails to correctly select the system clock divider and instead defaults to the RC oscillator circuit, preventing the DPLL from locking.

Impact on Fit, Form, Function, Quality & Reliability:

There is no change to the existing product. There is no impact on fit, form, function, quality and reliability of the device.

Product Identification: Not Applicable

Qualification Status: Not Applicable
Sample Availability Date: Not Applicable
Device Material Declaration: Available upon request

Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Renesas within 30 days of the publication date.

For additional information regarding this notice, please contact idt-pcn@lm.renesas.com

Appendix A – Affected Part Numbers

Orderable Part	Orderable Part	Orderable Part	Orderable Part
RC32504A000GNK#BB0	RC32504A112GNK#BB0	RC32504A125GNK#BB0	RC32504A221GNK#BB0
RC32504A000GNK#KBO	RC32504A112GNK#BBC	RC32504A125GNK#KBO	RC32504A221GNK#KBO
RC32504A101GNK#BB0	RC32504A112GNK#KBO	RC32504A200GNK#BB0	RC32504A222GNK#BB0
RC32504A101GNK#BBC	RC32504A112GNK#KBC	RC32504A200GNK#BBC	RC32504A222GNK#KBO
RC32504A101GNK#KBO	RC32504A113GNK#BB0	RC32504A200GNK#KBO	RC32504A224GNK#BB0
RC32504A101GNK#KBC	RC32504A113GNK#KBO	RC32504A200GNK#KBC	RC32504A224GNK#KBO
RC32504A102GNK#BB0	RC32504A114GNK#BB0	RC32504A201GNK#BB0	RC32504A225GNK#BB0
RC32504A102GNK#KBO	RC32504A114GNK#BBN	RC32504A201GNK#BBC	RC32504A225GNK#KBO
RC32504A103GNK#BB0	RC32504A114GNK#KBO	RC32504A201GNK#KBO	RC32504A226GNK#BB0
RC32504A103GNK#BBC	RC32504A114GNK#KBN	RC32504A201GNK#KBC	RC32504A226GNK#KBO
RC32504A103GNK#KBO	RC32504A115GNK#BB0	RC32504A202GNK#BB0	RC32504A227GNK#BB0
RC32504A103GNK#KBC	RC32504A115GNK#KBO	RC32504A202GNK#BBC	RC32504A227GNK#KBO
RC32504A104GNK#BB0	RC32504A116GNK#BB0	RC32504A202GNK#KBO	RC32504A228GNK#BB0
RC32504A104GNK#BBC	RC32504A116GNK#BBC	RC32504A202GNK#KBC	RC32504A228GNK#KBO
RC32504A104GNK#KBO	RC32504A116GNK#KBO	RC32504A203GNK#BB0	RC32504A229GNK#BB0
RC32504A104GNK#KBC	RC32504A116GNK#KBC	RC32504A203GNK#BBC	RC32504A229GNK#KBO
RC32504A105GNK#BB0	RC32504A117GNK#BB0	RC32504A203GNK#KBO	RC32504A230GNK#BB0
RC32504A105GNK#BBC	RC32504A117GNK#BBC	RC32504A203GNK#KBC	RC32504A230GNK#KBO
RC32504A105GNK#KBO	RC32504A117GNK#KBO	RC32504A206GNK#BB0	RC32504A231GNK#BB0
RC32504A105GNK#KBC	RC32504A117GNK#KBC	RC32504A206GNK#KBO	RC32504A231GNK#KBO
RC32504A106GNK#BB0	RC32504A118GNK#BB0	RC32504A208GNK#BB0	RC32504A232GNK#BB0
RC32504A106GNK#BBC	RC32504A118GNK#BBC	RC32504A208GNK#KBO	RC32504A232GNK#KBO
RC32504A106GNK#KBO	RC32504A118GNK#KBO	RC32504A209GNK#BB0	RC32504A233GNK#BB0
RC32504A106GNK#KBC	RC32504A118GNK#KBC	RC32504A209GNK#KBO	RC32504A233GNK#KBO
RC32504A108GNK#BB0	RC32504A119GNK#BB0	RC32504A210GNK#BB0	RC32504A234GNK#BB0
RC32504A108GNK#BBC	RC32504A119GNK#BBC	RC32504A210GNK#KBO	RC32504A234GNK#KBO
RC32504A108GNK#KBO	RC32504A119GNK#KBO	RC32504A212GNK#BB0	RC32504A235GNK#BB0
RC32504A108GNK#KBC	RC32504A119GNK#KBC	RC32504A212GNK#KBO	RC32504A235GNK#KBO
RC32504A109GNK#BB0	RC32504A120GNK#BB0	RC32504A213GNK#BB0	RC32504A236GNK#BB0
RC32504A109GNK#BBC	RC32504A120GNK#KBO	RC32504A213GNK#KBO	RC32504A236GNK#KBO
RC32504A109GNK#KBO	RC32504A121GNK#BB0	RC32504A214GNK#BB0	RC32504A237GNK#BB0
RC32504A109GNK#KBC	RC32504A121GNK#BBN	RC32504A214GNK#KBO	RC32504A237GNK#KBO
RC32504A110GNK#BB0	RC32504A121GNK#KBO	RC32504A215GNK#BB0	RC32504A238GNK#BB0
RC32504A110GNK#BBC	RC32504A121GNK#KBN	RC32504A215GNK#KBO	RC32504A238GNK#KBO
RC32504A110GNK#KBO	RC32504A122GNK#BB0	RC32504A217GNK#BB0	RC32504A239GNK#BB0
RC32504A110GNK#KBC	RC32504A122GNK#KBO	RC32504A217GNK#KBO	RC32504A239GNK#KBO
RC32504A111GNK#BB0	RC32504A123GNK#BB0	RC32504A219GNK#BB0	RC32504A240GNK#BB0
RC32504A111GNK#BBC	RC32504A123GNK#KBO	RC32504A219GNK#KBO	RC32504A240GNK#KBO
RC32504A111GNK#KBO	RC32504A124GNK#BB0	RC32504A220GNK#BB0	RC32504A241GNK#BB0
RC32504A111GNK#KBC	RC32504A124GNK#KBO	RC32504A220GNK#KBO	RC32504A241GNK#KBO

Orderable Part	Orderable Part	Orderable Part
RC32504A242GNK#BB0	RC32504A262GNK#BB0	RC32514A104GNL#BB0
RC32504A242GNK#KB0	RC32504A262GNK#KB0	RC32514A104GNL#KB0
RC32504A243GNK#BB0	RC32504A263GNK#BB0	RC32514A200GNL#BB0
RC32504A243GNK#KB0	RC32504A263GNK#KB0	RC32514A200GNL#KB0
RC32504A244GNK#BB0	RC32504A264GNK#BB0	RC32514A202GNL#BB0
RC32504A244GNK#KB0	RC32504A264GNK#KB0	RC32514A202GNL#KB0
RC32504A245GNK#BB0	RC32504A601GNK#BB0	RC32514A203GNL#BB0
RC32504A245GNK#KB0	RC32504A601GNK#KB0	RC32514A203GNL#KB0
RC32504A246GNK#BB0	RC32504A602GNK#BB0	RC32514A205GNL#BB0
RC32504A246GNK#KB0	RC32504A602GNK#KB0	RC32514A205GNL#KB0
RC32504A247GNK#BB0	RC32504A999GNK#BB0	RC32514A206GNL#BB0
RC32504A247GNK#KB0	RC32504A999GNK#KB0	RC32514A206GNL#KB0
RC32504A248GNK#BB0	RC32508A000GNE#BB0	RC32514A207GNL#BB0
RC32504A248GNK#KB0	RC32508A000GNE#KB0	RC32514A207GNL#KB0
RC32504A249GNK#BB0	RC32508A100GNE#BB0	RC32514A208GNL#BB0
RC32504A249GNK#KB0	RC32508A100GNE#KB0	RC32514A208GNL#KB0
RC32504A250GNK#BB0	RC32508A101GNE#BB0	RC32514A209GNL#BB0
RC32504A250GNK#KB0	RC32508A101GNE#KB0	RC32514A209GNL#KB0
RC32504A251GNK#BB0	RC32508A102GNE#BB0	RC32514A210GNL#BB0
RC32504A251GNK#KB0	RC32508A102GNE#KB0	RC32514A210GNL#KB0
RC32504A252GNK#BB0	RC32508A103GNE#BB0	RC32514A211GNL#BB0
RC32504A252GNK#KB0	RC32508A103GNE#KB0	RC32514A211GNL#KB0
RC32504A253GNK#BB0	RC32508A104GNE#BB0	RC32514A212GNL#BB0
RC32504A253GNK#KB0	RC32508A104GNE#KB0	RC32514A212GNL#KB0
RC32504A254GNK#BB0	RC32508A105GNE#BB0	RC32514A213GNL#BB0
RC32504A254GNK#KB0	RC32508A105GNE#KB0	RC32514A213GNL#KB0
RC32504A255GNK#BB0	RC32508A106GNE#BB0	RC32514A214GNL#BB0
RC32504A255GNK#KB0	RC32508A106GNE#KB0	RC32514A214GNL#KB0
RC32504A256GNK#BB0	RC32508A108GNE#BB0	
RC32504A256GNK#KB0	RC32508A108GNE#KB0	
RC32504A257GNK#BB0	RC32514A000GNL#BB0	
RC32504A257GNK#KB0	RC32514A000GNL#KB0	
RC32504A258GNK#BB0	RC32514A100GNL#BB0	
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RC32504A261GNK#KB0	RC32514A103GNL#KB0	