

## Product Change Notice (PCN)

**Subject:** Firmware update for Clock Matrix family of jitter attenuators and clock synchronizers

**Publication Date:** 6/16/2021

**Effective Date:** 9/16/2021

**Revision Description:**

Initial Release

**Description of Change:**

This notice is to advise our customers that the firmware for the affected product list will be updated from version 4.8.7 to version 4.8.8 on the effective date of this notice. This is firmware update only and there is no change to the device.

With this change muxed outputs driven by DPLL/DCO\_5 and DPLL/DCO\_6, specifically Q8 and Q11 outputs, will always be phase aligned to other outputs driven by the same channel.

For example, if Q8 and Q9 are both driven by DPLL/DCO\_5, the muxed output Q8 will always be phase aligned with Q9.

The current firmware version 4.8.7 will be discontinued and replaced by new firmware version 4.8.8 as of the effective date on this notice. The Last Time Buy (LTB) date for the current firmware version FWv4.8.7 will be September 16, 2021.

**Affected Product List:**

Please refer to Appendix A for the Affected Product List

**Reason for Change:**

Multiplexed outputs Q8 and Q11 can be out of phase due to misalignment with internal master divider if the phase alignment occurs between two trigger events.

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

There is no change to the form or fit of the device except changes to the firmware as described in the description of change section of this PCN.

**Product Identification:**

FW revision ID is hard-coded in OTP registers. New FW can be identified by FW\_Hotfix=8. If using older version this field will read "7".

**Qualification Status:** Not Applicable. This is firmware update only. Successful regression testing of the v4.8.8 firmware has been completed.

**Sample Availability Date:** 6/16/2021

**Device Material Declaration:** Available upon request

**Note:**

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

**For additional information regarding this notice, please contact [idt-pcn@lm.renesas.com](mailto:idt-pcn@lm.renesas.com)**

**Appendix A - Affected Product List**

Orderable Part Number	Orderable Part Number	Orderable Part Number	Orderable Part Number
8A35001E-000AJG	8A35027E-003NLG	8A34002E-004NLG	8A34042E-000NLG
8A35001E-000AJG8	8A35027E-003NLG8	8A34002E-004NLG8	8A34042E-000NLG#
8A35001E-001AJG	8A35027E-103NLG	8A34002E-005NLG	8A34042E-000NLG8
8A35001E-001AJG8	8A35029E-001AJG	8A34002E-005NLG#	8A34042E-001NLG
8A35001E-002AJG	8A35029E-001AJG8	8A34002E-005NLG8	8A34042E-001NLG8
8A35001E-002AJG8	8A35029E-000AJG	8A34002E-990NLG	8A34043E-000NBG
8A35001E-003AJG	8A35029E-000AJG8	8A34002E-990NLG#	8A34043E-000NBG#
8A35001E-003AJG8	8A35030E-000AJG	8A34003E-000NBG	8A34043E-000NBG8
8A35003E-000AJG	8A35030E-000AJG8	8A34003E-000NBG#	8A34043E-001NBG
8A35003E-000AJG8	8A35032E-000AJG	8A34003E-000NBG8	8A34043E-001NBG#
8A35003E-001AJG	8A35032E-000AJG8	8A34003E-001NBG	8A34043E-001NBG8
8A35003E-001AJG8	8A35032E-004AJG	8A34003E-001NBG#	8A34044E-000NLG
8A35003E-002AJG	8A35032E-004AJG8	8A34003E-001NBG8	8A34044E-000NLG#
8A35003E-002AJG8	8A35032E-005AJG	8A34003E-990NBG	8A34044E-000NLG8
8A35004E-000NLG	8A35032E-005AJG8	8A34003E-990NBG#	8A34044E-001NLG
8A35004E-000NLG#	8A35032E-006AJG	8A34003E-990NBG8	8A34044E-001NLG#
8A35004E-000NLG8	8A35032E-006AJG8	8A34004E-000NBG	8A34044E-001NLG8
8A35005E-000AJG	8A35034E-000AJG	8A34004E-000NBG#	8A34044E-002NLG
8A35005E-000AJG8	8A35034E-000AJG8	8A34004E-000NBG8	8A34044E-002NLG#
8A35006E-000AJG	8A35036E-000AJG	8A34011E-000AJG	8A34044E-002NLG8
8A35006E-000AJG8	8A35036E-000AJG8	8A34011E-000AJG8	8A34044E-500NLG
8A35012E-000NLG	8A35036E-001AJG	8A34011E-002AJG	8A34044E-500NLG8
8A35012E-000NLG#	8A35036E-001AJG8	8A34011E-002AJG8	8A34045E-000NLG
8A35012E-000NLG8	8A35036E-002AJG	8A34011E-003AJG	8A34045E-000NLG#
8A35017E-000AJG	8A35036E-002AJG8	8A34011E-003AJG8	8A34045E-000NLG8
8A35017E-000AJG8	8A35036E-003AJG	8A34012E-000NLG	8A34045E-001NLG
8A35023E-000AJG	8A35036E-003AJG8	8A34012E-000NLG#	8A34045E-001NLG#
8A35023E-000AJG8	8A34001E-000AJG	8A34012E-000NLG8	8A34045E-001NLG8
8A35024E-000NLG	8A34001E-000AJG8	8A34012E-001NLG	8A34045E-003NLG
8A35024E-000NLG#	8A34001E-001AJG	8A34012E-001NLG#	8A34045E-003NLG#
8A35024E-000NLG8	8A34001E-001AJG8	8A34012E-001NLG8	8A34045E-003NLG8
8A35025E-000NLG	8A34001E-002AJG	8A34013E-000NBG	8A34045E-004NLG
8A35025E-000NLG#	8A34001E-002AJG8	8A34013E-000NBG#	8A34045E-004NLG#
8A35025E-000NLG8	8A34001E-003AJG	8A34013E-000NBG8	8A34045E-004NLG8
8A35027E-000NLG	8A34001E-003AJG8	8A34041E-000AJG	8A34045E-005NLG
8A35027E-000NLG#	8A34002E-000NLG	8A34041E-000AJG8	8A34045E-005NLG#
8A35027E-000NLG8	8A34002E-000NLG#	8A34041E-001AJG	8A34045E-005NLG8
8A35027E-001NLG	8A34002E-000NLG8	8A34041E-001AJG8	8A34045E-006NLG
8A35027E-001NLG#	8A34002E-003NLG	8A34041E-999AJG	8A34045E-006NLG#
8A35027E-001NLG8	8A34002E-003NLG8	8A34041E-999AJG8	8A34045E-006NLG8

Orderable Part Number	Orderable Part Number	Orderable Part Number	Orderable Part Number
8A34045E-007NLG	8A34045E-500NLG8	8A34046E-001NLG	8A34046E-002NLG#
8A34045E-007NLG#	8A34046E-000NLG	8A34046E-001NLG#	8A34046E-002NLG8
8A34045E-007NLG8	8A34046E-000NLG#	8A34046E-001NLG8	
8A34045E-500NLG	8A34046E-000NLG8	8A34046E-002NLG	