

# ClockMatrix™ Firmware Compatibility with Linux PHC Driver

## Abstract

This application note provides the minimum ClockMatrix version for use with the Linux PHC (PTP Hardware Clock) driver for ClockMatrix.

For related information, see [ClockMatrix™ Timing Solutions](#) and [PTP Clock Manager for Linux](#).

## 1. Recommended Firmware Versions

| ClockMatrix Device | Firmware Version |
|--------------------|------------------|
| 8A34001            | 4.8.7            |
| 8A34002            | 4.8.7            |
| 8A34003            | 4.8.7            |
| 8A34004            | 4.8.7            |
| 8A34005            | 5.2.2            |

Note: The firmware version is the major release, the minor release, and the hot fix.

For a running device, the user can find the firmware version in the following registers:

| Register Name             | Description            |
|---------------------------|------------------------|
| GENERAL_STATUS.MAJ_REL    | Major release number.  |
| GENERAL_STATUS.MIN_REL    | Minor release number.  |
| GENERAL_STATUS.HOTFIX_REL | Hotfix release number. |

For the specific version of firmware or more details about these registers, see the *8A3xxx Family Programming Guide*.

## 2. Recommended Linux Kernel Release

To use the firmware versions listed in the previous section, Renesas recommends the driver module in Linux Kernel v5.11 (starting with v5.11-rc1) or later. To use this driver with earlier versions of the kernel, see the “Backporting to Linux v3.x+” section in the *Linux PTP Using PHC Adjust Phase Reference Manual* available on the [PTP Clock Manager for Linux](#) web page.

## 3. Revision History

| Revision | Date      | Description      |
|----------|-----------|------------------|
| 1.0      | Jan.29.21 | Initial release. |

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### Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,  
Koto-ku, Tokyo 135-0061, Japan  
[www.renesas.com](http://www.renesas.com)

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