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| REVISION HISTORY | | | Linux Interface Specification Device Driver IPMMU  User’s Manual: Software |
| Rev. | Date | Description | |
| Page | Summary |
| 1.00 | Nov. 14, 2017 | ⎯ | New creation. |
| 1.50 | Jan. 29, 2018 | ⎯ | Trademark: Use “Arm” instead of “ARM” |
| ⎯ | Notice: Use 2017 version |
| ⎯ | Address list: Use 2018 version |
| 1, 10 | Update reference to H/W UM v0.80 |
| 2 - 5 | Correct H/W Restriction number and update correction status on R-Car Series, 3rd Generation |
| 4 | Add H/W Restriction No.100 |
| 11 - 18 | Update sample description to enable IPMMU on H3/M3/M3N |
| 1.51 | Mar. 28, 2018 | 1, 8, 11 | Add E3 description |
| 2 - 5 | Update correction status on E3 regarding H/W Restriction |
| 12 - 21 | Update sample description to enable IPMMU on H3/M3/M3N  for DMA/Audio/Ethernet/PCIe/USB2F/USB3F |
| 13,  22 - 23 | Update sample description to enable IPMMU on E3 |
| 1.52 | Apr. 25, 2018 | 2 - 5 | Update correction status on H3 Ver.3.0 regarding H/W Restriction |
| 5 | Add H/W Restriction No.102 |
| 12 - 23 | Update guideline how to enable IPMMU support on H3 Ver.3.0 |
| 12 - 23 | Add IPMMU support for I2C and update guideline how to enable IPMMU support |
| 1.53 | Jun. 27, 2018 | 2 - 5 | Revise M3 SoC revision information |
| 17 - 18 | Update PCIe dma-ranges for H3 Ver.3.0 with various DDR config |
| 1.54 | Oct. 29, 2018 | 1 | Update reference to H/W UM v1.00 |
| 17, 21 | Update iommu-map property for PCIEC1 |
| 24 | Update PCIe dma-ranges for E3 with various DDR config |
| 2.00 | Dec. 25, 2018 | ⎯ | Update Address List |
| 1, 8 | Update related documents and hardware environment |
| 2 - 6 | Update correction status on E3 Ver.1.1 and M3 Ver.3.0 regarding H/W Restriction |
| 4 - 5 | Update IPMMU caches information in H/W Restriction No.71 #9 and No.100 |
| 12 | Add IPMMU whitelist config information |
| 27 | Add guideline how to enable System Suspend to RAM support for IPMMU |
| 2.01 | Apr. 17, 2019 | ⎯ | Update Address List |
| 1 | Update related documents |
| 14 - 26 | Update guideline how to enable IPMMU support more clearly |
| 27 | Remove 5.3.3 chapter since IPMMU supports System Suspend to RAM by default |
| 2.02 | Jun. 26, 2019 | 22, 24, 26 | Fix typo in PCIe examples |
| 2.50 | Apr. 24, 2020 | 1,2 | Add supported/unsupported functions table |
| 3 | Update Related Document table |
| 4 | Add Correction status table |
| 6 | Update Restriction List |
| 10 | Update Terminology table and IPMMU naming |
| 14 | Update supported SoCs revision and BSP drivers |
| 2.02 | Jun. 26, 2019 | 16 | Update current IPMMU support status on BSP drivers |
| 2.50 | Apr. 24, 2020 | All | Add R-Car V3U support |
| 2.51 | Jun. 24, 2020 | 30 - 36 | Update micro-TLB assignment for each supported master devices |

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| 2.52 | Sep. 25, 2020 | 14 | Update Directory Configuration for R-Car Gen4 IPMMU support |
| 17 | Update IPMMU notices for R-Car V3U |
| 31 - 36 | Update correct devices base address |
| 2.53 | Dec. 1, 2020 | 3 | Update Table 1.3 Related Documents |
| 11 | Update Table 3.1 Hardware environment |
| 14 | Update chapter 5.1 Directory Configuration  Update chapter 5.2 Integration Procedure |
| 17 | Update IPMMU notices for R-Car V3U |
| 31 - 36 | Update correct devices base address |
| 2.54 | Jan. 29, 2021 | All | Add R-Car V3H Ver.2.0 support |
| 2.55 | Apr. 23, 2021 | All | Add R-Car D3 support |
| 14 | Update Figure 5.1 and Figure 5.2 to matched with Linux kernel v5.10 approach |
| 15, 17 | Update dtsi file name to matched with Linux kernel v5.10 approach |
| 3.00 | Dec. 10, 2021 | - | Update Notice to v5.0.1 |
| 3.1.0 | Dec. 25, 2023 | - | Add Kernel v5.19.194 support for H3, M3, M3N, Ee |