Revision History	Memory Manager for Linux User's Manual: Software		

Rev.	Date	Description	
		Page	Summary
v0.1	Oct. 2015	-	New creation
v0.2	Nov. 2015	-	Modified typographical errors
		3	Fig1-2: Added ChangeHistory.txt to "mmngr" and "mmngrbuf" dir.
		22, 25	Changed an API parameter name from "data" to "mem_param".
v0.3	Apr. 2016	-	Update format of header and footer. Add caption for all Figures and Tables. Update List of Abbreviations and Acronyms for Lossy compression feature. Add List of Terminologies for Lossy compression feature.
		1	Add description of Lossy mem allocation.
		7	Add requirement for total size of OMXBUF and SSPBUF.
		10	Fig3-1: add the block of CMA for Lossy mem allocation
		15,16, 17, 19	Add description about CMA for Lossy mem allocation in MMNGR API(s).
		28	Add section 8.1 Lossy support structure
		29	Add Table 8 4 List of Parameter Definition for Lossy mem allocation.
		30	Add Restriction and Notice for Lossy mem allocation. Update Notices for CMA area in non-support IPMMU environment.
		32	Add section 10.2 Relationship between mem_param and Lossy mem return value.
v0.4	Aug. 2016	-	Update List of Terminologies.
		1	Add IPMMU PMB support.
		2	Fig1-1: change the name of MIT license file
		5, 6, 8	Remove 32-bit library description.
		9	Add section 2.4 Device tree configuration
		33,34	Add section 10.3 Enable IPMMU PMB support.
v0.5	Jan. 2017	3	Add new common header files to Figure 1-2.
		5, 6, 7	Add new environment variable INCSHARED, remove KERNELDIR variable
		6, 33	Add information about H3 Ver.1.x dts Add label mmp_reserved to the example of MMP CMA area
		9	Update description for memory-region.
		34	Correct guideline to enable IPMMU devices in kernel source code. From edit dts file to edit dtsi file
		34	Update example of enabling node ipmmu_vp for H3 (Ver.1.x)
		15, 17, 25, 30	Add notice for value of phard_addr when IPMMU PMB is enabled
		19, 20, 22	Add notice for value of hard_addr when IPMMU PMB is enabled
		33, 34	Add customize CMA areas' definitions guide for CMA area for Lossy compression feature
		34	Update notice about default CMA area when CMA area for MMP is moved to 40-bit address space

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v0.6	Mar. 2017	1, 17	Clarify the supported VSP devices as VSPI and VSPB
		4	Table 1-2: Update BSP name (add "M3")
		6, 33, 34	Use Ver. for SoC revision, e.g. H3 Ver.1.x
		6, 33	Add information about H3 Ver.2.0 dts
		34	Update information about enabling ipmmu_vi node for M3 Add information about enabling ipmmu nodes for H3 Ver.2.0
v0.7	Jun. 2017	-	Update List of Terminologies.
		1, 6, 15, 17, 19, 20, 22, 25, 30, 33 - 35	Use IPMMU (MMU mode) instead of IPMMU (PMB mode). All description of IPMMU (PMB mode) are removed.
		19, 22, 25	Change the explanation of mem_param from "T.B.D" to "Do not use".
		4	Add information about XS board support
		30	Add Restriction when IPMMU MMU is enabled
		6, 33	Add DT file information about XS board for M3 SoC
		33	Notice about the registers managed by MMNGR Remove the description about shadow area in customize CMA areas' definitions example
		33	Remove the requirements when customize the CMA areas when IPMMU enabled
		34	Add kernel configuration to share IPMMU MMU resources between MMNGR and other BSP drivers
		34	Update the example of enabling node ipmmu_vp0 for H3 for Ver.2.0
		34	Add IPMMU-DS1 and IPMMU-SY support Add notice about using the space reserved as CMA area for MMP for DTV (SSP) when IPMMU is enabled
		36, 37	Add guideline to map CMA to IPMMU virtual address space. Add sample memory map when IPMMU is enabled
v1.00	Aug. 2017	-	Update document format
v1.01	Nov. 2017	4, 30	Add information about M3N support
		6	Add DT file information for M3N SoC
		30	Add Notice when IPMMU MMU is enabled on M3N
		33-34	Update IPMMU MMU support description for M3N
		36-37	Add guideline to map CMA to IPMMU virtual address space for M3N
v1.50	Jan. 2018	32	Add new case: specify undefined memory allocation request in requesting Lossy data
v1.51	Mar. 2018	4, 6, 7, 30, 33, 34	Add information about E3 support
		30	Add Notice when IPMMU MMU is enabled on E3
		36-37	Add guideline to map CMA to IPMMU virtual address space for E3

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v1.52	Apr. 2018	6, 33, 34, 36	Add information about H3 Ver.3.0 support
		30, 36, 37	Update Restrictions and Notices about IPMMU mapping.
		30	Update Notices about space reserved as CMA area for Lossy compression feature on R-Car E3
v1.53	Jun. 2018	47, 48	Revise H3 SoC revision information
v1.54	Oct. 2018	24, 30	Add notice about buffer handling in "End the export of dmabuf fd" API
v2.00	Dec. 2018	-	Update Address List
		4	Update hardware environment
		6, 33	Add information about Ebisu-4D board for E3 SoC
		6, 33	Update unit address in DT examples
		24, 30	Update notice about buffer handling in "End the export of dmabuf fd" API
v2.01	Apr. 2019	-	Update Address List
		1	Clarify support status regarding directly DMA buffer-sharing between MMNGR and Linux Kernel Display Driver
		6, 33, 34, 36	Update information about R-Car E3 Ver.1.0 and Ver.1.1
		6, 33, 34, 36	Update information about R-Car M3 Ver.3.0 and Ver.1.x
		30	Update Notices about Lossy compression feature support on R-Car E3
v2.50	Apr. 21, 2021	-	Update Address List
		6, 33, 34	Add Kernel v5.10 support
v3.00	Dec. 10, 2021	All	Add Kernel v5.10.41 support
V3.1.0	Dec. 25, 2023	-	Add Kernel v5.19.194 support for H3, M3, M3N, E3.