

# RENESAS TECHNICAL UPDATE

TOYOSU FORESIA, 3-2-24, Toyosu, Koto-ku, Tokyo 135-0061, Japan  
Renesas Electronics Corporation

Product Category	MPU/MCU		Document No.	TN-RH8-B0280A/E	Rev.	1.00
Title	RH850/D1Mx Additional descriptions relating to JPEG Codec unit		Information Category	Technical Notification		
Applicable Product	RH850/D1M1(H)	Lot No.	Reference Document	RH850/D1L/D1M Group User's Manual: Hardware Rev.2.20 (R01UH0451EJ0220)		
	RH850/D1M1A RH850/D1M1-V2 RH850/D1M2(H)					

There is some missing information for JPEG Codec unit (JCUA) on user's manual.

This RENESAS Technical update will mention of them.

## 1. Description

Description on user's manual will be updated as follows. Modification points are used red color.

Note 6 is added to JCUA: "Note 6: Write path must not be used."

Table 14.11 D1M1(H) connection matrix (Page 746)

	Master									
	CPU Sybssystem						Sprite Engine			
	CPU I/F		Global I/F				RLE Unit <sup>2</sup>	Sprite Unit 0 <sup>3</sup>	Sprite Unit 1 <sup>4</sup>	Sprite Unit 2 <sup>5</sup>
	CPU	DMA	OCD	GPU2D	ETNB	JCUA			MSTID	MSTID
Slaves	MSTID1	MSTID2	MSTID0	MSTID4	MSTID6	MSTID5	MSTID8	MSTID9	10	11
CPU Subsystem global I/F <sup>1</sup>	-	-	-	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W	R/W	R/W <sup>6</sup>	R/W

Table 14.12 D1M1-V2 connection matrix (Page 750)

	Master									
	CPU Sybssystem						Sprite Engine			
	CPU I/F		Global I/F				RLE0/ SPEA3 <sup>2</sup>	RLE1/ SPEA0 <sup>3</sup>	RLE2/ SPEA1 <sup>4</sup>	RLE3/ SPEA2 <sup>5</sup>
	CPU	DMA	OCD	GPU2D	ETNB	JCUA			MSTID	MSTID
Slaves	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID
CPU Subsystem global I/F <sup>1</sup>	1	2	0	4	6	5	8	9	10	11
CPU Subsystem global I/F <sup>1</sup>	-	-	-	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W	R/W	R/W <sup>6</sup>	R/W

Table 14.13 D1M1A connection matrix (Page 754)

	Master										
	CPU Sybsystem							Sprite Engine			
	CPU I/F		Global I/F					RLE0/ SPEA3*	RLE1/ SPEA0*	RLE2/ SPEA1*	RLE3/ SPEA2*
	CPU	DMA	OCD	GPU2D	ETNB	JCUA	NFMA	<sup>2</sup>	<sup>3</sup>	<sup>4</sup>	<sup>5</sup>
Slaves	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID
	1	2	0	4	6	5	7	8	9	10	11
CPU Subsystem global I/F <sup>1</sup>	-	-	-	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W <sup>6</sup>		R/W	R/W	R/W <sup>6</sup>	R/W

Table 14.14 D1M2(H) connection matrix (Page 759)

	Master										
	CPU Sybsystem							Sprite Engine			
	CPU I/F		Global I/F					RLE Unit <sup>2</sup>	Sprite Unit 0 <sup>3</sup>	Sprite Unit 1 <sup>4</sup>	Sprite Unit 2 <sup>5</sup>
	CPU	DMA	OCD	GPU2D	MLBB	ETNB	JCUA				
Slaves	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID	MSTID
	1	2	0	4	7	6	5	8	9	10	11
CPU Subsystem global I/F <sup>1</sup>	-	-	-	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W <sup>6</sup>	R/W	R/W	R/W <sup>6</sup>	R/W

2. Workaround

When execution results of JCUA is stored to LRAM, change stored area to VRAM.

3. Final handling

The above updates will be applied to the next revision of RH850/D1M/D1L Group User's Manual: Hardware Rev.2.20.

4. Judgement flow

