

# RENESAS TECHNICAL UPDATE

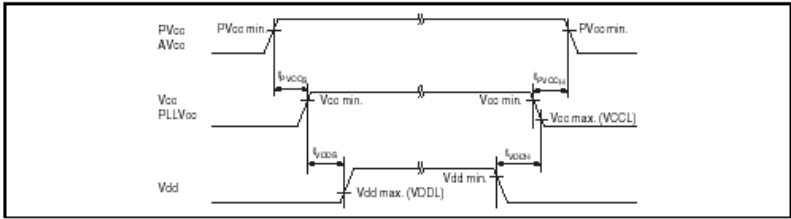
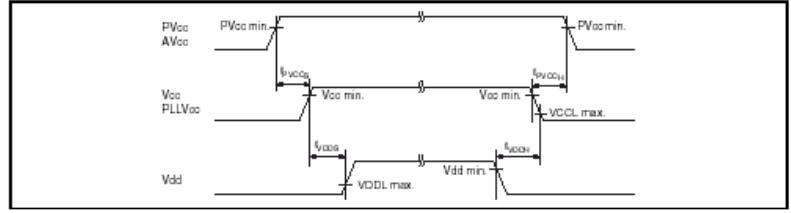
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Renesas Electronics Corporation

Product Category	MPU/MCU		Document No.	TN-SH7-A781A/E	Rev.	1.00
Title	SH7450 Group, SH7451 Group Hardware Manual Errata Rev.A		Information Category	Technical Notification		
Applicable Product	SH7450 Group, SH7451 Group	Lot No.	Reference Document	SH7450 Group, SH7451 Group Hardware Manual REV.1.00 (REJ09B0454-0100)		

Since we corrected the contents of "SH7450 group and SH7451 group hardware manual REV.1.00 (Publish in January, 2010)", we announce you.

Please use attached errata for "SH7450 group and SH7451 group hardware manual REV.1.00" in the case of use.

Appending Document: "SH7450 group and SH7451 group hardware manual REV.1.00" errata Rev.A ... 2 sheets.

Rev.	Page	Part		Contents																										
REV.A	11-1	Section 11 Address Space	Error	Figures 11.1 to 11.6 show this MCU address space. This MCU has a 32-bit (4-Gbyte) physical address space. Internal ROM, internal RAM (SHwyRAM), external address spaces are mapped onto the highest 512 Mbytes (H'0000 0000 to H'1FFF FFFF). IL memory, OL memory, and other internal resources are mapped onto the lowest 512 Mbytes (H'E000 0000 to H'FFFF FFFF).																										
			Correction	Figures 11.1 to 11.6 show this MCU address space. This MCU has a 32-bit (4-Gbyte) physical address space. Internal ROM, internal RAM (SHwyRAM), external address spaces are mapped onto the <b>lowest</b> 512 Mbytes (H'0000 0000 to H'1FFF FFFF). IL memory, OL memory, and other internal resources are mapped onto the <b>highest</b> 512 Mbytes (H'E000 0000 to H'FFFF FFFF).																										
REV.A	38-4	Section 38 Electrical Characteristics  38.2 DC Characteristics  Low level input voltage	Error	<table border="1"> <thead> <tr> <th colspan="7">Table 38.3 DC Characteristics - Input Level Voltage: When 5 V is Used</th> </tr> <tr> <th rowspan="2">Item</th> <th rowspan="2">Symbol</th> <th rowspan="2">EXTAL</th> <th rowspan="2">VIL</th> <th colspan="3">Rating</th> <th rowspan="2">Unit</th> </tr> <tr> <th>Min.</th> <th>Typ.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>Low level input voltage</td> <td>Pins without threshold value switching function</td> <td></td> <td></td> <td>0</td> <td></td> <td>0.25</td> <td>V</td> </tr> </tbody> </table>	Table 38.3 DC Characteristics - Input Level Voltage: When 5 V is Used							Item	Symbol	EXTAL	VIL	Rating			Unit	Min.	Typ.	Max.	Low level input voltage	Pins without threshold value switching function			0		0.25	V
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REV.A	38-14	Section 38 Electrical Characteristics  38.3 AC Characteristics  38.3.1 Power-On/Off Timing	Error	<table border="1"> <thead> <tr> <th colspan="6">Table 38.16 Power-On/Off Timing</th> </tr> <tr> <th>Item</th> <th>Symbol</th> <th>Min.</th> <th>Max.</th> <th>Unit</th> <th>Figures</th> </tr> </thead> <tbody> <tr> <td>PVcc voltage at power off</td> <td>VCCL</td> <td>0</td> <td>1.0</td> <td>V</td> <td>38.4</td> </tr> </tbody> </table>  <p>Figure 38.4 Power-On/Off Timing</p>	Table 38.16 Power-On/Off Timing						Item	Symbol	Min.	Max.	Unit	Figures	PVcc voltage at power off	VCCL	0	1.0	V	38.4								
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REV.A	25-33	Section 25 I2C Bus Interface 3 (IIC3)  25.8 Usage Notes  25.8.10	Add  25.8.10 regarding master receive mode of I2C-bus interface mode When stop condition generation or start condition regeneration overlaps with the falling edge of the ninth clock cycle of the SCL signal, an additional cycle is output after the ninth clock cycle. After a master receive operation is completed, confirm the falling edge of the ninth clock cycle of the SCL signal and generate a stop condition or regenerate a start condition. Confirm the falling edge of the ninth clock cycle of the SCL signal as follows: Confirm the SCLO bit in the ICCR2 register (SCL monitor flag) becomes 0 (SCL pin is low) after confirming the RDRF bit in the ICSR register (receive data register full flag) becomes 1.

REV.A	12-25	Section 12 ROM  12.6.3 FCU Command Usage  Figure 12.10 Procedure for Transition to ROM Read Mode	Error	<pre> graph TD     Start([Start]) --&gt; FRDY{Check the FRDY bit}     FRDY -- "0" --&gt; FRDY     FRDY -- "1" --&gt; Errors{Check errors}     Errors -- "ILGLERR, PRGERR, ERSERR = '0'" --&gt; FRDY     Errors -- "1" --&gt; NextStep{ }     </pre>
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