To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

Send any inquiries to http://www.renesas.com/inquiry.

Date: Aug.05.2008

RENESAS TECHNICAL UPDATE

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
Renesas Technology Corp.

Product Category	MPU&MCU		Document No.	TN-SH7-A668A/E	Rev.	1.00
Title	SH7764 Power-on/Power-off sequence correction		Information Category	Technical Notification		
Applicable Product	R5S77640P300BG R5S77640D300BG R5S77640N300BG R5S77641P300BG R5S77641D300BG R5S77641N300BG	Lot No. All lots	Reference Document	SH7764 Group Hardware Manual (REJ09B0360-0100)		

We would like to inform valued customers on SH7764 Power-on/Power-off sequence correction as described bellow.

- Note -

1. Correntions on “33.2 Power-on/Power-off Sequence” (page 1574)

- Original -

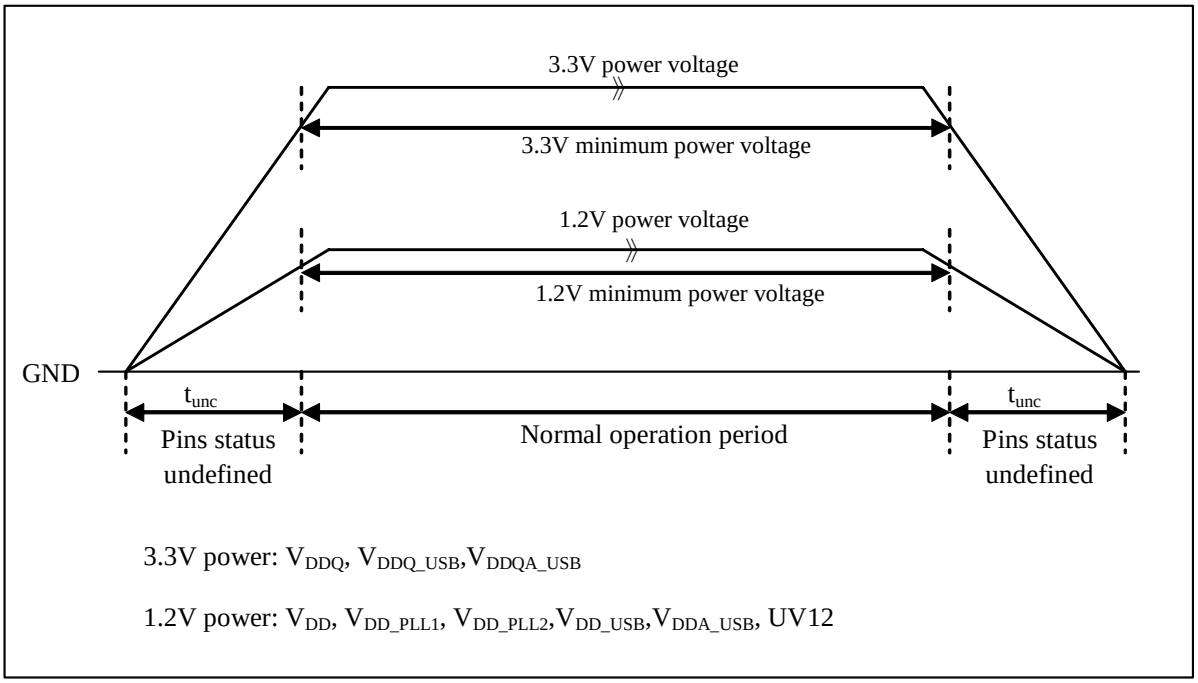

Figure 33.1 Power-on/Power-off Sequence

Table 33.2 Recommended Time for Power-on/Power-off Sequence

Item	Symbol	Max.	Unit
State undefined time	t_{UNC}	100	ms

Note: The table shown above is the maximum values, so they represent guidelines rather than strict requirements.

Either the 3.3-V power supply or the 1.2-V power does not matter to be turned on or turned off. An undefined time appears until either of the power supply, which turns on later, reaches above the minimum voltage and after it has reached below the minimum voltage. During these periods, pin and internal states become undefined. Design the system so that these undefined states do not cause an overall malfunction.

- Correction -

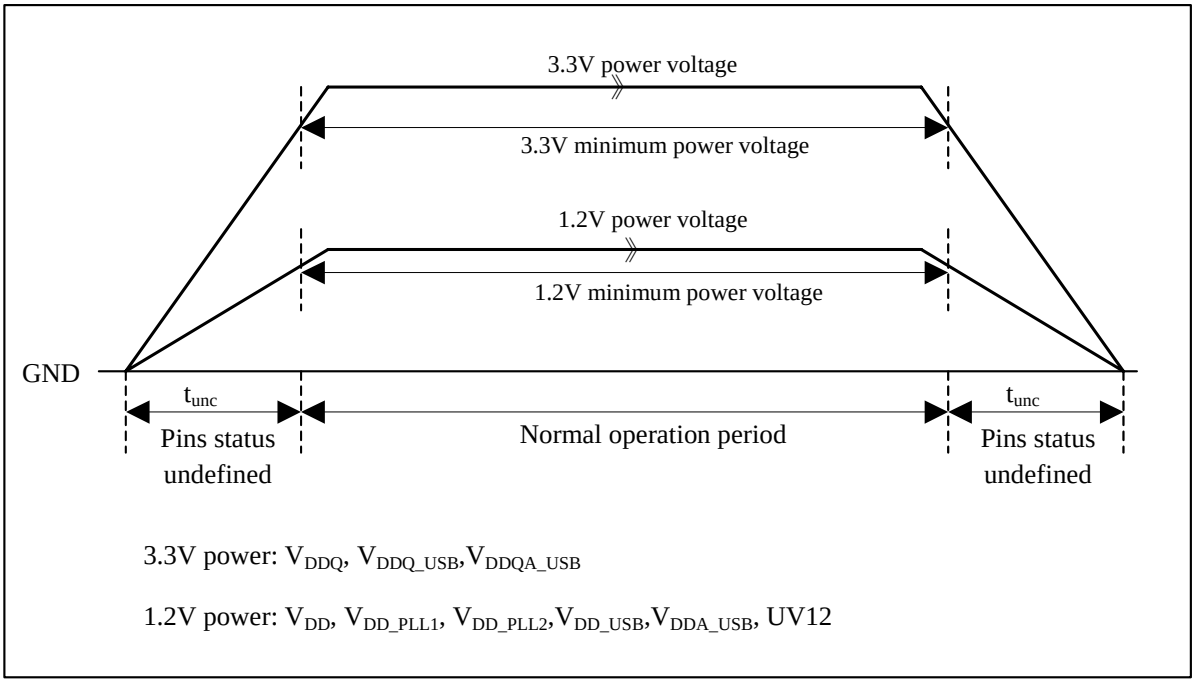

Figure 33.1 Power-on/Power-off Sequence

Table 33.2 Recommended Time for Power-on/Power-off Sequence

Item	Symbol	Max.	Unit
State undefined time	t_{UNC}	100	ms

Note The table shown above is the maximum values, so they represent guidelines rather than strict requirements.

Either the 3.3-V power supply or the 1.2-V power does not matter to be turned on or turned off for this LSI device operation. An undefined time appears until either of the power supply, which turns on later, reaches above the minimum voltage and after it has reached below the minimum voltage. During these periods, pin and internal states become undefined. Design the system so that these undefined states do not cause an overall system malfunction. For designing system, recommends that 1.2-V power is turned on before turning on 3.3-V power in power-on sequence and 3.3-V power is turned off before turning off 1.2-V power in power-off sequence. And then recommends that 3.3-V power is turned on as quick as possible after 1.2-V power reaches approximately 0.6V level in power-on sequence. Nevertheless when 3.3-V power needs to be turned on before turning on 1.2-V power, time period between turning on 3.3-V power and 1.2-V power reaching approximately 0.6V level should be considered to be shortened as much as possible.

- End of report -