date: 2003/04/11

## RENESAS TECHNICAL UPDATE

Classification of Production	MPU			No	TN-SH7-479A/E	Rev	1
THEME	Correctional specs and additional specs concerning SH7751 electric characteristic tSTD  Classification of Information		1. S ② S 3. L 4. C 5. C				
PRODUCT NAME	SH7751/ SH7751R	Lot No.	Reference Documents	SH7751 Hardware Manual ADE-602-201B(H) Rev. 3.0			ternity

This is to notify you of the correction and the addition of the pin drive timing at following table 23.24 and 23.25 control signal timing and figure 23.12 standby mode for output delay time (tSTD) of electric characteristic STATUS pins of SH7751.

## (1)The contents before manual correction

Table 23.24 and 23.25 Control Signal Timing

Item	Symbol	Min.	Max.	Unit	Figure
Bus tri-state delay time to standby mode	t <sub>BOFF2</sub>	1-1	2	t <sub>cyc</sub>	23.12
Bus buffer on time	t <sub>BON1</sub>		12	ns	23.11
Bus buffer on time from standby	t <sub>BON2</sub>	-	2	t <sub>eye</sub>	23.12
STATUS 0/1 delay time	t <sub>stD1</sub>	-	6	ns	23.12
STATUS 0/1 delay time to standby	t <sub>stoe</sub>	_	2	t <sub>eye</sub>	23.12

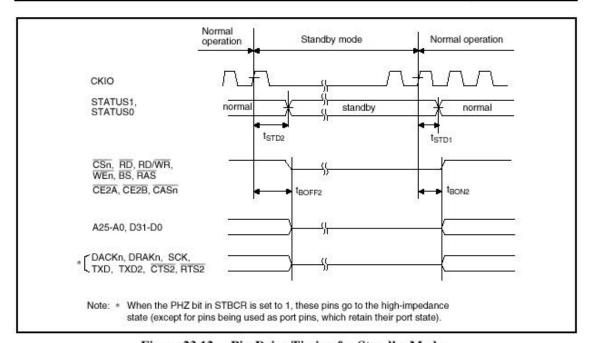


Figure 23.12 Pin Drive Timing for Standby Mode

## (2) The contents after manual correction

Table 23.24 and 23.25 Control Signal Timing

Item	Symbol	Min.	Max.	Unit	Figure
Bus tri-state delay time to standby mode	t <sub>BOFF2</sub>	_	2	t <sub>oyo</sub>	23.12(2)
Bus buffer on time	t <sub>BON1</sub>		12	ns	23.11
Bus buffer on time from standby	t <sub>BON2</sub>	200	2	t <sub>oyo</sub>	23.12(2)
STATUS 0/1 delay time	t <sub>stD1</sub>	_	6	ns	23.12(1)
	t <sub>stoe</sub>		2	t <sub>cyc</sub>	23.12(1)(2)
	t <sub>stos</sub>	-	2	t <sub>cyc</sub>	23.12(2)

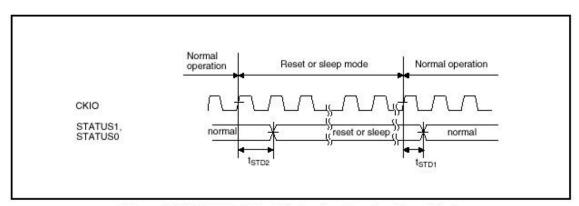


Figure 23.12(1) Pin Drive Timing for Reset or Sleep Mode

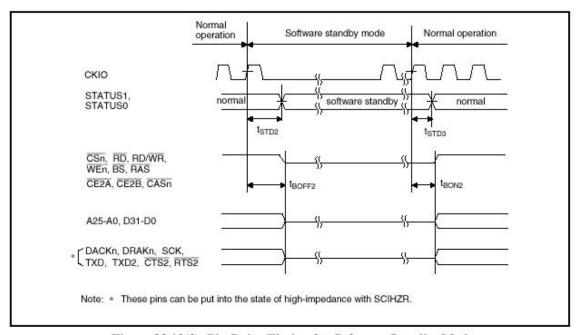


Figure 23.12(2) Pin Drive Timing for Software Standby Mode