

HITACHI SEMICONDUCTOR TECHNICAL UPDATE

Classification of Production	Microprocessor		No	TN-SH7-455A/E	Rev	1
THEME	Notice concerning consumption current	Classification of Information	1. Spec change 2. Supplement of Documents ③ Limitation of Use 4. Change of Mask 5. Change of Production Line			
PRODUCT NAME	SH7750 SH7750S	Lot No.	Reference Documents	SH7750 series hardware manual SH7751 series hardware manual	Effective Date	
	SH7750R SH7751 SH7751R SH-4 core use product	All lots			Eternal	

1. Summary

After power-on reset, until it executes more than one instruction among the following arithmetic operation or floating point arithmetic instructions, the specification of the consumption current at sleep mode and standby mode might be unwarrantable.

(1) Arithmetic operation instruction

MAC.W, MAC.L

(2) Floating point operation instruction

(I) At the time of FPSCR.PR = 0 :

FADD, FSUB, FMUL, FMAC, FLOAT, FTRC, FDIV, FSQRT, FIPR, FTRV

(II) At the time of FPSCR.PR = 1 :

FADD, FSUB, FMUL, FLOAT, FTRC, FDIV, FSQRT, FCNVSD, FCNVDS

2. Workaround

Between the power-on reset and the transfer to the sleep mode or the standby mode, one or more of the above-mentioned instructions are executed.

(Example) When you reduce the influence on FPSCR etc., the following two instructions are arranged from H 'A0000000.

Address Example of instruction

H'A0000000 FLDI1 FR0

H'A0000002 FADD FR0,FR0 ; Because 1 is loaded into FR0 by FLDI1 FR0,

: : ; 1 is not set in the cause/flag bit of FPSCR.