date: 2003/04/08

## RENESAS TECHNICAL UPDATE

Classification of Production	MPU			No	TN-SH7-476A/E	Rev	1
THEME	Notice about the sign of the operation result by FIPR and FTRV instruction command.		1. Spec change 2. Supplement of Documents 3. Limitation of Use 4. Change of Mask 5. Change of Production Line				
PRODUCT NAME	SH7750 SH7750S SH7750R SH7751 SH7751R SH7760 SH-4 core use product	Lot No.	Reference Documents	ADE-6 SH775 ADE-6	50 series hardware manual 602-124E 51 series hardware manual 602-201B 60 hardware manual 602-291	Effective Date  Eternity	

There are the following notes about the sign of the operation result by FIPR and FTRV instruction command of SH-4.

## 1. Notes

When two or more of the data which are operated by FIPR and FTRV instruction command are infinity, and all of the infinities in the result of multiplication in FIPR or FTRV instruction operation have the same sign, there is a possibility to mistake the sign of operation result.

## 2. Workaround

- 1. Do not use an infinity. When all of the following (1) (3) conditions consist, an infinity isn't treated.
  - (1) Rounding to Zero (FPSCR.RM = 01) is used as a rounding mode.
  - (2) It is not divided by Zero.
  - (3) A positive or negative infinity is not loaded to FR0 FR15 or XF0 XF15.
- 2. Neither FIPR nor the FTRV instruction commands are used, and it operates it by FADD, FMUL, and FMAC instruction command.