

HITACHI SEMICONDUCTOR TECHNICAL UPDATE

Classification of Production	Development environment		No	TN-EML-108A/E	Rev.	1
THEME	Notes on Usage of Software Breaks	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	E10A/E8000/E8000S emulators corresponding to the products that employs the SH7750/SH7750S/SH7750R/SH7751/SH7751R/SH-4 core	Lot No. All lots	Reference Documents	SH7750 series hardware manual Rev 6.0 (ADE-602-124E) Hitachi Semiconductor Technical Update No.TN-SH7-456A/E, The notes on use of TRAPA instruction/SLEEP instruction/Undefined instruction (H'FFFD)	Effective Date	Permanent

1. Summary

- (1) Incorrect data may be written to the cache memory when a software break condition is satisfied.
- (2) The ITLB hit judgment may be incorrect when a software break condition is satisfied, and an ITLB multi-hit exception may be generated after re-registration.
- (3) Incorrect data may be written to the FPU registers or the MACH and MACL registers when a software break condition is satisfied.

2. Conditions

Same as those listed in the Hitachi Semiconductor Technical Update No.TN-SH7-456A/E, The notes on use of TRAPA instruction/SLEEP instruction/Undefined instruction (H'FFFD). Read this document by replacing the description 'TRAPA instruction is executed' with 'a software break condition is satisfied'.

3. Workaround

Do not set software breakpoints at the addresses that may cause a problem. When you do not know if a problem may arise, use hardware breakpoints (on-chip break) instead.