

IOPMP Task Group Meeting December 7, 2023

Video link

Draft 5 release note

Major changes:

- Corrected typos and inconsistencies.
- Merged 'sid_num' and 'entry_num' into 'HWCFG1'.
- Specified the default values for each register.
- Adjusted the register offsets.
- Reorganized the error report for better clarity.
- Enhanced descriptions for the register table, prefetch violation, and acronyms.
- Added a warning regarding 'TOR' being the first entry of 'MD'.
- Incorporated bits for 'chk_x', 'no_x', 'no_w', and 'stall_en' in 'HWCFG0'.

Uncompleted Tasks:

- Static rule: Consensus not yet reached, deferred to draft 6.
- Multi-fault report: Compliance with RERI (RAS Error Report Interface) is required.



Plan for Draft 6

- Static rules
- Multi-fault report with RERI compliance
- Interrupt control bits for each entry
- adding more...



Comments/questions from Sifive

- Based on draft 5, some of our answers are posted on the mailing list.
 - https://lists.riscv.org/g/tech-iopmp/message/173
- Remaining Issues:
 - 1) The way to lock entry/MD:
 - Per-entry/MD lock bit? or lock the first N entry/MD?
 - 2) Per-entry interrupt control bits: (will be added in draft6)
 - Interrupt control bit: <u>suppressing interrupts?</u> or <u>enabling interrupts?</u>
 - Could replace the prefetch-related reaction in draft5 by this feature.
 - 3) Enlarge per-entry space to 32B:
 - 4) The way to program the association between entries and SIDs:
 - the associations are indexed <u>by entry</u> or <u>by SID</u>.

