IOPMP Task Group Meeting

September 28, 2023

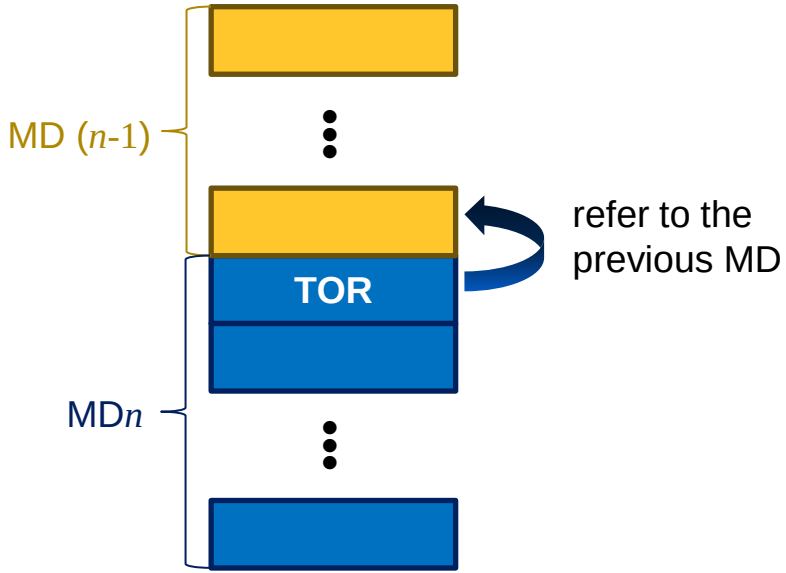
Video link

Minutes

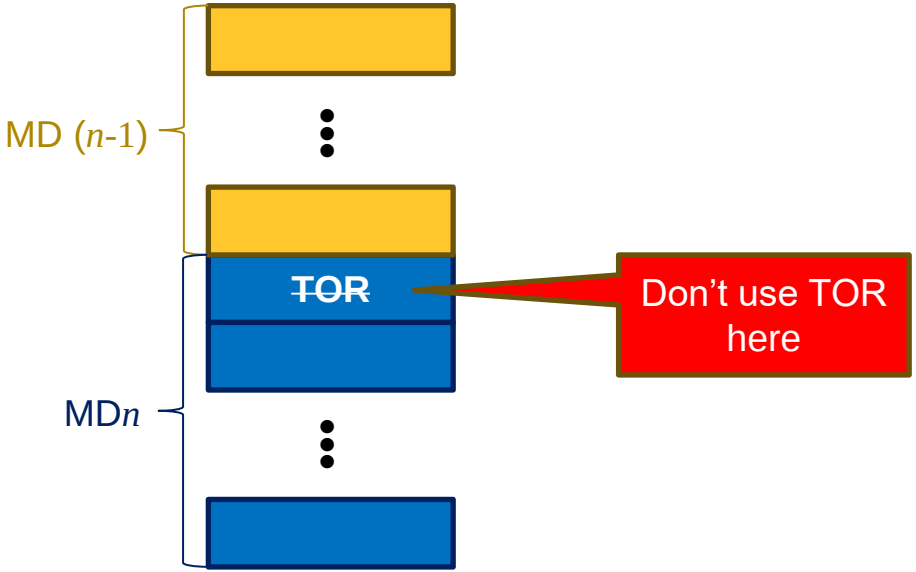
- For IOPMP ratification plan, testcases are required:
  - QEMU with IOPMP: by Andes
  - SystemC stimulus and testbench: by NVidia
- The first entry of a MD is TOR and refers its previous MD:
  - Cautions should be added in spec:
- Feedback:
  - Version 1.0.0-draft3
  - Error reporting on multiple faults

The first entry of MD is TOR

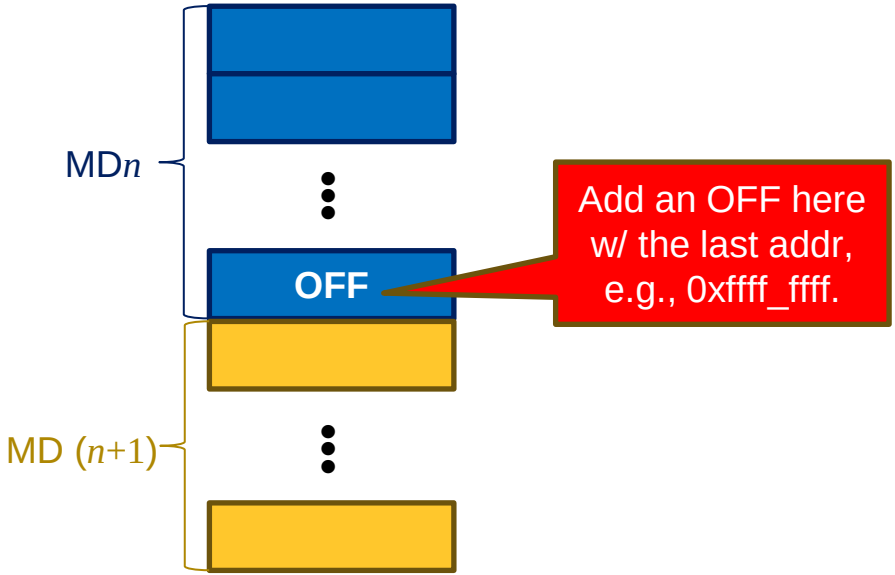
- When the first entry of a MD is TOR, the regions of the entry will be affected by the previous MD.
- To prevent accidentally reference, A notice should be added in spec:
  - If one doesn't want the entry referring to the previous MD ➔ avoid using the first entry as TOR.
  - If one doesn't want the entry referred by the following MD ➔ add an OFF entry with the last address in the last entry.
  - The last address is supposed to be all 1's in all programmable bits.



Suggestion: for MD n



To prevent MDn from referring to the previous MD



To prevent MDn from being referred by the next MD

Feedback on Version 1.0.0-draft3

- Typos:
  - Page 17: ERRREACT register, field name “ire” [8:8] should be “iwe.”
  - Page 18: MDCFGLCK register, the description of field “l” should Lock bit to MDCFGLCK register“ instead of “Lock bit to MDLCK and MDLCKH register.”
- Suggest:
  - Inconsistence:
    - HWCFG0.sid_num occupies 9 bits
    - The reset of SIDs occupy 16 bits

Feedback: multiple faults report

- Iterate each ERROR_SOURCE_GROUP in the ISR:
  - It always takes time to check but happens rarely: It only happens only after the first fault is caught but before its information is retrieved and cleaned.
  - Add a new RO bit, “ERR_REQINFO.sec_fault,” to indicate if any uncleaned second fault is recorded.
- We may need to describe how to program/use the mechanism in more detailed!
  - Scenarios and example usage
- Interrupt may not be needed.