

IOPMP Task Group Meeting July 20, 2023

<u>Video link</u>

Topics

- Lite configuration extension
 - Start writing down the register table
- Parallel rule match extension
 - Need more discussion
- Domain ID translation (Appendix.A2)
 - Need more examples to show why we really need its
- Error reporting on multi-hart
 - Need more detail for programming model
 - Post it separately.



Why Do We Need Domain ID Translation?

- Run out of the Memory Domains in an IOPMP:
 - The maximal number of memory domains is 63.
- Integrate multiple existing systems:
 - o Domain IDs have been assigned. Don't want to reassign.
 - The need for the number of Memory Domains is increased.

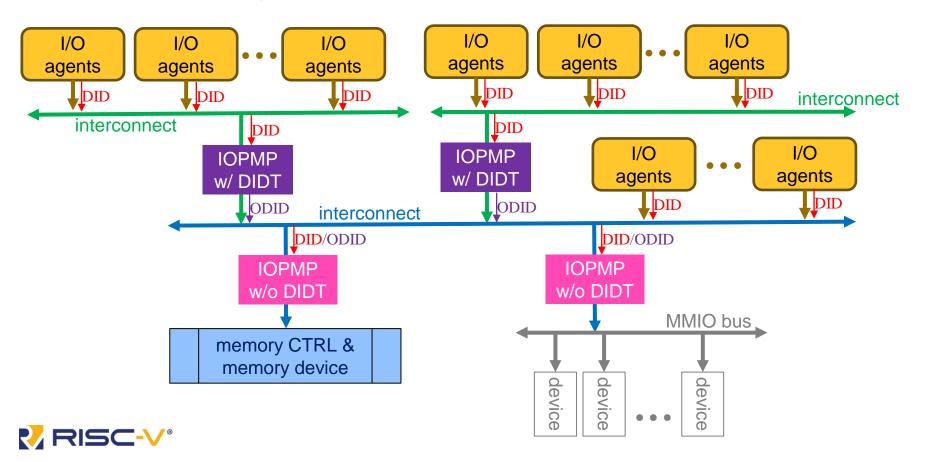


Domain ID Translation Extension, DIDT

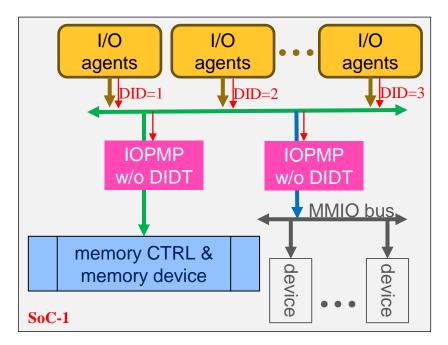
- In the original IOPMP, a transaction <u>doesn't carry any Domain ID</u> after IOPMP's checks.
- In the IOPMP with DIDT, a transaction <u>carries the outgoing Domain ID</u> after IOPMP's checks.
 - The original DID will be replaced by an "outgoing DID" for an outgoing transaction.
 - The outgoing DID is specified in the register, *ODID*.

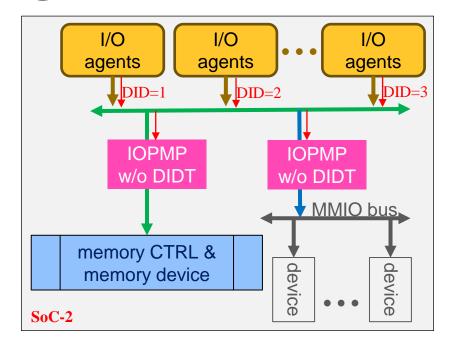


Scenario 1: Run Out of MDs



Scenario 2: SoCs to Merge





Scenario 2: Merged SoCs

