[MPC5xxx] Why are certain messages sometimes missing from the trace?

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The collision priority management of the MPC5500 family causes lower-priority messages to be canceled by higher-priority messages if they occur at the same time. Refer to the chip documentation for details.

The messages have the following priority, from highest to lowest:

WPM → OTM → BTM → DTM

A **BTM** message that attempts to enter the queue at the same time as a Watchpoint Message (WPM) or Ownership Trace Message (OTM) is lost. An error message is generated indicating that the BTM was lost.

The following direct or indirect branch then queues a **direct/indirect branch with sync** message. The count value in this message represents the number of sequential instructions executed after the last successfully generated BTM message. This count includes the branch that did not generate a message due to the collision.

A **DTM** message that attempts to enter the queue at the same time as a WPM, OTM, or BTM message is lost. A subsequent read or write operation then queues a **data trace read/write with sync** message

- Tags
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