

RapidIO Trade Association

Suite 325, 3925 W. Baker Lane

Austin, TX 78759

512-305-0070 Tel.

512-305-0009 FAX.

TWG Second Showing

Item 10-04-00001.001

Subject: Addition of port-write notification mask to the specification.

Background: This showing proposes the addition of a control bit to turn off all port-write notification from a device.

Contributors: Barry Wood, IDT

Comment Expiration Date: None

Distribution: RapidIO TA Technical Working Group members



1.0 Discussion

Port-writes are the basis for event notification over a RapidIO network. Typically, handling an event uses the following algorithm:

- Stop event notification
- Handle and clear all events
- Enable event notification

The idea behind the algorithm above is that any event notifications received after event notification is enabled again are new events which have not previously been handled.

The specification currently supports enabling/disabling of individual events, but does not provide an efficient means of disabling port-write notification for a device.

1.1 Proposal

The Gen 3 Error Management specification should be extended to incorporate a single control bit for enabling/disabling port-write notification for a device.

1.2 Resolution

It is proposed that a new “Port-Write Transmission CSR” be added at offset 0x34 in the Error Management Extensions register block. The register is defined as follows:

2.3.2.10 Port-Write Transmission Control CSR

The Port-Write transmission control CSR determines whether or not port-write notification of enabled errors is enabled or disabled for the device.

Bits 0-30 are reserved with a reset value of 0.

Bit 31, named Port-write Transmission Disable, has a reset value of 0, and the following description:

0 - Enabled events for the device cause port-writes to be generated

1 - Enabled events for the device do not cause new port-writes to be generated. Previously generated port-writes may be transmitted after this bit is set.