

This document addresses known errata and documentation issues for the Triple Speed Ethernet MegaCore function version 7.1 SP1. Errata are functional defects or errors, which may cause the Triple Speed Ethernet MegaCore function to deviate from published specifications. Documentation issues include errors, unclear descriptions, or omissions from current published specifications or product documents. [Table 1](#) shows the issues that affect the Triple Speed Ethernet MegaCore function version 7.1 SP1.

Table 1. Triple Speed Ethernet MegaCore Function Version 7.1 SP1 Issues

Issue	Page
Incorrect Statistics Reported	1
Missing section in the User Guide—Upgrading to Triple Speed Ethernet MegaCore Function Version 7.1 and Above	2



For the most up-to-date errata for this release, refer to the errata sheet on the Altera website:

www.altera.com/literature/lit-es.jsp

Triple Speed Ethernet MegaCore Function v7.1 SP1 Issues

This section describes the Triple Speed Ethernet MegaCore function version 7.1 SP1 issues.

Incorrect Statistics Reported

The statistics showing the traffic received on the receive datapath, as reported in the `etherStatsDropEvent` register might be incorrect when the Triple Speed Ethernet MAC function is subjected to the following traffic pattern:

- 1 Gigabit link speed
- Preamble less than 8 bytes
- Inter-packet gap less than 96 bit times

Affected Configuration

This issue affects all configurations that contain the Triple Speed Ethernet MAC function with statistics counters enabled.

Solution Status

This issue will be fixed in a future version of the Triple Speed Ethernet.

Missing section in the User Guide—Upgrading to Triple Speed Ethernet MegaCore Function Version 7.1 and Above

In compliance with the Avalon Streaming Interface Specifications, symbol ordering and data modulo signals in the Triple Speed Ethernet version 7.1 have been redefined. When upgrading to Triple Speed Ethernet 7.1 and above, Altera recommends existing customers who are using the following cores to add a conversion module as described in the section “Required Conversion”:

- Altera Triple Speed Ethernet version 6.1 in 32-bit standalone mode.
- MoreThanIP 32-bit MAC core.

Required Conversion

To upgrade the Triple Speed Ethernet MegaCore function in your design to version 7.1 and above while maintaining compatibility with existing custom logic, add a conversion module as illustrated in [Figure 1](#).

Figure 1. Triple Speed Ethernet MegaCore Function Wrapper

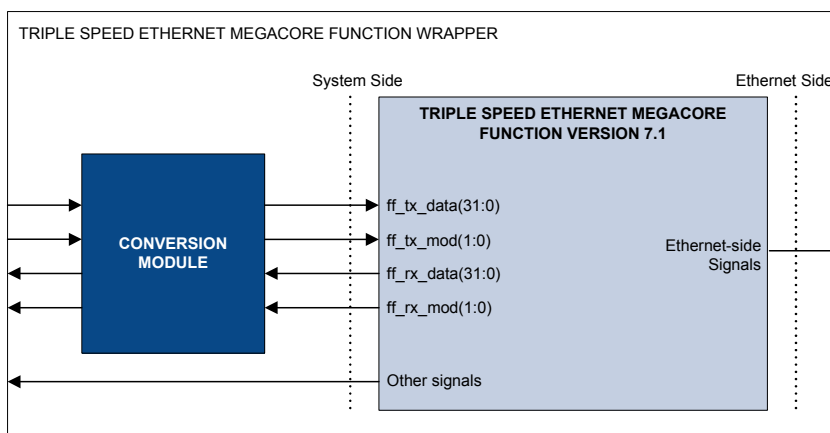


Table 2 lists the required transmit and receive data conversions.

Table 2. Transmit and Receive Data Conversion	
Triple Speed Ethernet MegaCore Function Version 7.1 and Above	Triple Speed Ethernet Endian Conversion Wrapper
ff_tx_data(7:0)	ff_tx_data(31:24)
ff_rx_data(7:0)	ff_rx_data(31:24)
ff_tx_data(15:8)	ff_tx_data(23:16)
ff_rx_data(15:8)	ff_rx_data(23:16)
ff_tx_data(23:16)	ff_tx_data(15:8)
ff_rx_data(23:16)	ff_rx_data(15:8)
ff_tx_data(31:24)	ff_tx_data(7:0)
ff_rx_data(31:24)	ff_rx_data(7:0)

Table 3 lists the required data modulo signals conversions.

Table 3. Transmit and Receive Data Modulo Signals Conversion		
Number of valid bytes	Modulo Signals in Triple Speed Ethernet Version 7.1 and Above	Modulo Signals in Triple Speed Ethernet Version 6.1 and MoreThanIPMAC
1	2'b11	2'b01
2	2'b10	2'b10
3	2'b01	2'b11
4	2'b00	2'b00

Contact Information

For more information, contact Altera's mySupport website at www.altera.com/mysupport and click **Create New Service Request**. Choose the **Product Related Request** form.

Revision History

Table 4 shows the revision history for the *Triple Speed Ethernet MegaCore Function v7.1 SP1 Errata Sheet*.

Table 4. Triple Speed Ethernet MegaCore Function version 7.1 SP1 Errata Sheet Revision History		
Version	Date	Errata Summary
1.1	July 2007	Added Upgrading to Triple Speed Ethernet MegaCore Function Version 7.1—Missing Section in the User Guide.
1.0	May 2007	First Release.



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