

TLK3114SB Errata

High Performance Analog

Description	Identification of Affected Devices	Change or Fix Detail
TXFIFO Out of Step	All TLK3114SB	<p>General description: When the device was brought out of reset in 10-Gpbs Ethernet Transceiver Mode it is possible for the TX FIFO to induce one byte of skew across lanes. Data would be encoded incorrectly as a result and could not be recovered on the other end of the link.</p> <p>Technical description: In 10-Gbps Ethernet Transceiver Mode, it was possible, at a particular phase relation between TCA and (RFCP/RFCN), for the TXFIFO to induce skew across lanes when the device was brought out of reset. The problem occurs because the four TXFIFOs went out of step as a result of failure on the synchronization logic across four FIFOs.</p> <p>Interim Workaround: In 10-Gbps Ethernet Transceiver Modes, design the TCA and (RFCP/RFCN) relationship to be away from the fail region.</p> <p>As the phase difference between TCA and (RFCP/RFCN), there are two zones which are susceptible to failure. Each is each roughly 600ps wide and 180 degrees separated from each other, leading to 1.2ns of keepout zone out of a 6.4ns interval.</p>

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