PM5342

SPECTRA-155

SONET/SDH NODE OPTICAL INTERFACE FOR WAN NETWORKS REFERENCE DESIGN (SNOW BOARD)

REFERENCE DESIGN ERRATA

RELEASED

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1 ISSUE 2 ERRATA

This document is the errata notice for Issue 1 of the PM5342 SPECTRA-155 SONET/SDH Node Optical Interface for WAN Networks Reference Design (SNOW BOARD) Rev 2.0 (document number PMC-970285).

2 SNOW BOARD REFERENCE DESIGN SCHEMATIC ERRORS

This section describes errors and required corrections on the schematics provided with the SNOW Board Reference Design.

2.1 Colliding Signals on Expansion Interface

An error occurs when two SNOW boards are mated through the ring expansion interface. On page 10 of the SNOW Board Reference Design schematics, pins SS28, SS29, SS30, and SS31 are connected to an octal buffer/line driver (U2). The output signals GDAT3/SDMTOCLK2, GDAT4/SDMTOCLK3, GDAT5, and GDAT6 connect to signals 15 to 18 of SYS_ADD<21..0> on page 11. These signals connect to pins A74, A73, A67, and A68 of the expansion interface connector as shown on page 13. A mated SNOW board will receive these signals on the mirror image of the expansion interface. Pins A28, A29, A33, and A34 of the mated SNOW Board's ring expansion connector will receive the output signals of A74, A73, A67, and A68 of the first SNOW Board. Pins A28, A29, A33, and A34 are signals EXP_GDAT3/SDMTOCLK2, EXP_GDAT4/SDMTOCLK3, EXP_GDAT5, and EXP_GDAT6 which change name to SS_I<28>, SS_I<29>, SS_I<30>, and SS_I<31> as shown on page 12. On page 10, these signals connect to the output of an octal buffer/line driver (U2). Notice that the output of octal buffer/line driver (U2) of one SNOW board is connected to the output of octal buffer/line driver (U2) of a mated SNOW board. A collision occurs between the two buffers, where both buffers drive signals to each other. This causes unusual power consumption by the board and sporadic bit errors, pattern loss, loss of pointer, and other unusual error signals when two SNOW boards are connected together. Since SS28, SS29, SS30, and SS31 are not crucial to the reference design, they can be removed from the ring expansion interface by either removing the octal buffer/line driver (U2) or disabling the buffer (U2) by connecting either pin 1 or pin 19 to high.

NOTES

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