ERRATA TO THE TSB11LV01 DATA SHEET

(TEXAS INSTRUMENTS LITERATURE NO. SLLS249, JUNE 30, 1996)

The following bulleted list contains corrections to the information contained in the TSB11LV01 data sheet (Texas Instruments literature number SLLS232A)

- TSB11LV01 reports itself as a 3-port phy in the NP field of Register address 2 with ports 2 and 3 not connected. TI plans to fix this in the next revision.
- Electrical isolation as described in Appendix J of IEEE 1394-1995 is not currently recommended by TI and the TSB11LV01 is not tested to a level that would be required to implement the isolation in Appendix J of the standard. TI has an improved isolation technique, which is the recommended isolation solution. In the next revision, TI plans to add bus holders to support its new isolation scheme.
- TSB11LV01 transmits data_end for 220 – 225 ns; the IEEE 1394-1995 standard requires 240 – 260 ns. There are no plans to fix this in the future.
- When LPS is switched from low to high and if CTRL 0 and CTRL 1 are high at this time, the phy-link interface hangs in the high-impedance state. TI plans to fix this in the next revision.
- Twisted-pair output terminals do not meet current source specifications at high common-mode voltages and low supply voltages. Minimum supply voltage for a single-port power sourcing implementation is 3.3 V. TI plans to fix this in the next revision.
- The current design of the TSB11LV01 has the gap times set to:
  - subaction-gap = ((gap_count × 16) + state_machine_delay) × BASE_RATE_PERIOD
  - arb-reset-gap = ((gap_count × 32) + state_machine_delay) × BASE_RATE_PERIOD

    where the BASE_RATE_PERIOD is 10 ns and the state_machine_delay for the TSB11LV01 is 8 ns for both subaction gap and arb-reset gap. This varies from the standard in that the state_machine_delay does not match the specification values of 28 and 52 for the respective gaps.
  - All phys have a hysteresis time (arbitration delay time) built in, which is set to
    delay time = ((gap_count × 4) + state_machine_delay) × BASE_RATE_PERIOD
  - After a subaction-gap or arb-reset-gap has been detected, the phy sends the appropriate status to the link. The TSB11LV01 waits for the delay-time period and then services any bus requests made to the link. There are no plans to fix this in the future.

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