



KSZ9031RNX Errata Sheet

The following errata apply to the following product (silicon revisions):

- KSZ9031RNX (rev-A, A2)

Item #	Erratum (description of problem)	Solution / Workaround
1	KSZ9031RNX fails to link up after register 4h, bit [11] (Asymmetrical Pause) is set.	Do not enable (set to 1) register 4h, bit [11] for Asymmetric PAUSE support. or Disconnect and re-connect cable after setting register 4h bit [11] to 1.
2	The 125MHz reference clock (CLK125_NDO pin) output has duty cycle variation when the KSZ9031RNX links up in 1000Base-T Slave mode, resulting in wide variation on the falling clock edge.	Use only rising edge of CLK125_NDO output for PLL locking. or Set KSZ9031RNX to always link up in 1000Base-T Master mode by setting register 9h, bits [12:11] to '11'.
3	For Tri-color Dual-LED mode, the LED[2:1] pins' toggle rate for transmit/receive activity indication is tied to the data rate. At low data rate, the LED[2:1] pins still toggle but the on/off toggling of the LED indicators is not visible to the eye.	Use external circuits to stretch the high assertions (LED indicator off periods) of the LED[2:1] outputs to make them visible to the eye. The LED[2:1] outputs are low when there is link-up and no activity. or Use Single-LED Mode
4	For RGMII Energy Efficient Ethernet (EEE) mode, the KSZ9031RNX may drop link when it exits low-power idle (LPI) mode and returns to normal PHY operation mode. The link drop is applicable for 100Base-TX and 1000Base-T modes only.	Application hardware and software need to account for a possible link drop that occurs during the transition from LPI mode to normal PHY operation mode. Use RGMII EEE mode only in those applications where the PHY remains continuously in LPI mode for an extended period.
5	The NAND tree function fails to work when internal pins (CRS, COL) in the NAND tree path float to the low state.	Use functional tests (RGMII data access, MDC/MDIO management access, LED status indication, interrupt status indication) to verify digital I/O connections to board.

For any questions about this errata and sample request, please contact your Micrel FAE or local Sales Representative.