

# RMII Issues: Response From Vendor

Karl Reinke, Bay Networks, 10/31

The HSTRA requirements for reduced MII devices were presented to a vendor with the following response:

Requirements	Vendor Response
Programmable Auto-negotiation selector field	Bits [10:0] of REG 07 (ANNPTR)Auto-Negotiation Next Page Transmit Register are available to program as you wish per the Standard
Token Ring Mode enable bit	Without knowing the availability of unused register bits, no commitment can be made. However, if there are unused bits, and notice is given with sufficient time prior to tape-out, yes; it can be done...
Larger Elastic Buffer (40 bits?)	an additional depth to 32-64 would not be an issue.
CRS_DV is DV only	Yes
Don't trash rest of frame after code violation	I believe that the 100baseX PCS does not "'trash' the rest of the frame". An assertion of RX_ER signals a code violation and the CRC at the end of the packet invalidates the frame contents at the MAC level. If bits are either dropped or picked up such that another valid data code is produced, the responsibility again falls upon the CRC at the MAC layer to resolve the error.
Add TX_ER. If not, another Mechanism to do TX_ER (out-of-band RMII signal?)	Yes to both. TX_ER could conceivably be restored by combining with TX_EN and used as a method of encoding as the fifth bit via the bypass 4B/5B feature. Again, dependent upon a 'TR' enable bit.