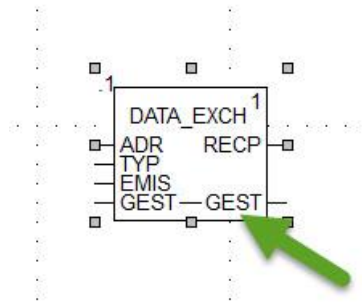
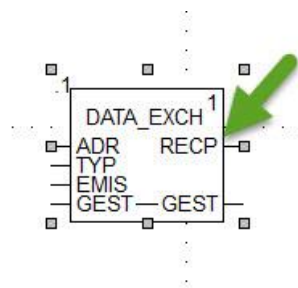


Error Checking in the DATA_EXCH Function Block

There can be a confusion checking for errors when the DATA_EXCH block is used to issue CIP Explicit Messages. The problem arises because, unlike similar function blocks, errors are reported in separate ways depending on whether the error originates in the function block itself or the error is reported back from the BMENOC030xx. If the error originates in the block, for example an invalid address, it will be reported in the second word of the DATA_EXCH GEST, or management block.



If the error originates with the communications module the error is reported in the receive message buffer, the RECP in the block.



The user MUST check for errors in both locations. First check for a function block problem. Simply see if the value in the second word of the management block (GEST) is greater than zero. Then check for errors returned by the communication module. Examine the high byte (in the raw – Little Endian) receive buffer. If that byte is greater than zero, then there is an error in the second word of the buffer. The bytes of that word must be swapped and the errors can be found in **Appendix B** of the **Modicon M580 BMENOC03•1 Ethernet Communications Module Installation and Configuration Guide**.