# DCB BT-1 Bit Error Rate Test Set – Mirrored Bits Test

The MBit test in the BT-1 runs like a standard QBF test for the most part.

MBit can be set for 4-byte or 1-byte message lengths, and the inter-message delay can be set from 2 to 9ms.  RTS/CTS flow control is always enabled.  The BT-1 has a pull-up resister on CTS, so it is not necessary to have any connection to  CTS to transmit data.

The MBit test transmits bytes that increment with each byte sent, so the message contains all bytes between 00 and FF.  For instance, with the default settings a typical message looks like this:

 80 81 82 83 <2ms delay> 84 85 86 87 <2ms> 88 89 8A 8B <2ms> ...

When sending 4-byte messages the first byte in the message always has the least significant 2 bits set to 00.  In an 8-bit byte, the least significant 2 bits can only be 00, 01, 10 and 11.  This repeats in the next message, where the first byte again starts with 00 in the least significant 2 bit position.

If sending 1-byte messages, the delay is added after every byte.  The byte value is incremented after each byte is sent.

 80 <2ms> 81 <2ms> 82 <2ms> 83 <2ms> ...

While running, the MBit test watches for receive messages with the proper format and counts the blocks received.  Like the other QBF tests, it keeps track of block errors and bit errors.  It does not test for the inter-message pause.