Extended Modes for READ/WRITE BUFFER

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Extension to Mode Field

- **Mode Field extended to four bits**
- **Read Data from logical buffer (1010b)**
  - In this mode the data is written or read from the logical buffer assigned to domain validation.
  - This buffer shall be the same buffer for both the WRITE BUFFER and READ BUFFER commands
  - The Buffer ID and Buffer Offset fields are ignored in this mode
- **Other four bits in Byte(1) Reserved for additional testing to be defined**

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Basic Premise

- Host issues a WRITE BUFFER command with a known data pattern to the selected device

- Host issues a READ BUFFER command to retrieve that data from the target

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Simple and Quick Test

- – 1) BUS RESET

- – 2) Select device

- – 3) Issue INQUIRY command

- – 4) Negotiate bus speed and width

- – 5) Issue READ BUFFER command

- – 6) If the command completes successfully, (i.e., no parity errors, CRC failures, or bus hangs) the bus speed and width are established.

- – 7) If the command fails the host performs another negotiation and retest.

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Data Pattern

- The data pattern is 128 bytes in length

- Transfers in less than 25 microseconds even at asynchronous speeds.

- The host provides a time-out to check for bus hangs due to REQ/ACK miscount.

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