**CE 4951 COURSE PROJECT**

**MESSAGE-EXCHANGING NODES ON CSMA/CD BUS USING MANCHESTER LINE CODING WITH BUS THAT IDLES HIGH**

**TEST PROCEDURE FOR THIRD MILESTONE DEMONSTRATING RECEIVER FUNCTION**

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**SETUP TEST:**

The unit under test (UUT) is message-exchange node being tested and should be configured with the receiver, transmitter, and channel monitor software.

The test setup will be a loop-back system where the channel monitor, transmitter, and receiver are connected to the same node. The user can enter characters to send in the terminal and the received characters will be displayed in the console as well. **DESCRIBE THIS SETUP (Diagram/Picture?).**

**BEGIN TEST:**

Some setup tests like powering on the system and checking the state of the channel monitor on startup.

**1.** Upon startup of the UUT, ensure that the line is IDLE. **Indicate Pass or Fail here: \_\_\_\_\_\_\_\_**

**RECEIVE 30 BYTES:**

We need to demonstrate that we can receive 30 bytes (30 characters) correctly.

The transmitted signal must be 1 kHz with 1.32% tolerance (986.8 Hz to 1013.2 Hz); we can check this by measuring the channel with cursors on the scope.

**CLOCK DRIFT:**

If clock drift were to exist, then a 40 byte (40 character) or more transition would be received incorrectly because the sampling would shift to another half-bit period causing a read of incorrect data.

**OTHER:**

If you come up with another set of tests to run, then we can include them here and rename “OTHER” to the name of such test(s).