# DUT specification

General test specification:
- completely test MULT functionality
- execute all lines of MULT code.

Detailed test specification:
  A. Operations and sequences:
      1. Check the result when data and parity values are valid for both inputs.
      2. Check the result when input parity value is valid for A input and invalid for B input.
      3. Check the result when input parity value is valid for B input and invalid for A input.
      4. Check the result when input parity is invalid for both inputs.
      5. Check if ack signal is returned after inputs and req signals are set.
      6. Check if result_ready is set when MULT data is returned.
      7. Check if MULT data is ready for one clock cycle.
  B. Specific data corners:
      1. Simulate all zeros on an input.
      2. Simulate all ones on an input.