Test case:

1. Input: **valid** arg_a, arg_b, arg_a_parity, arg_b_parity- this test case compares DUT result with expected result.
2. Input: **valid:** arg_a, arg_b, arg_a_parity, **invalid:** arg_b_parity- this taste case check if arg_parity_error and result_rdy will be set. If result == 0 test result == PASSED.
3. Input: **valid:** arg_a, arg_b, arg_b_parity, **invalid:** arg_a_parity- this taste case check if arg_parity_error and result_rdy will be set. If result == 0 test result = PASSED.
4. Input: **valid:** arg_a, arg_b, **invalid:** arg_a_parity and arg_b_parity- this taste case check if arg_parity_error and result_rdy will be set.
5. Test the marginal value. Input: arg_a = 16'sh8000 and arg_b = 16'sh8000. This test case compares DUT result with expected result.
6. Test the marginal value. Input: arg_a = 16'sh7FFF and arg_b = 16'sh7FFF. This test case compares DUT result with expected result.
7. Test the marginal value. Input: arg_a = 16'sh7FFF and arg_b = 16'sh8000. This test case compares DUT result with expected result.
8. Test the marginal value. Input: arg_a = 16'sh8000 and arg_b = 16'sh7FFF. This test case compares DUT result with expected result.