

### Test cases for DUT - MULT

1. Valid data are given at the input - *arg\_a*, *arg\_a\_parity*, *arg\_b*, *arg\_b\_parity*.
2. Invalid data are given at the input - parity bits (*arg\_a\_parity*, *arg\_b\_parity*) are invalid for *arg\_a* and *arg\_b*.
3. Invalid data **a**, valid data **b** are given at the input - *arg\_b\_parity* is invalid for *arg\_b*, *arg\_a\_parity* is valid for *arg\_a*.
4. Invalid data **b**, valid data **a** are given at the input - *arg\_a\_parity* is invalid for *arg\_a*, *arg\_b\_parity* is valid for *arg\_b*.
5. *ack* signal is checked after *req* set to 1'b1.
6. Check if *result\_rdy* signal is high after data is converted.
7. Check if data is available for one clock cycle *result\_rdy*.