Repository: https://github.com/Mikey597/VDIC

Test specification:

Data corner tests:
1. Multiply "normal" data and check result.
2. Multiply two maximum operands and check result.
3. Multiply two minimum operands and check result.
4. Multiply by zero.
5. Wrong parity bit input for first operand and check result.
6. Wrong parity bit input for second operand and check result.
7. Wrong parity bit input for both operands and check result.

Functional Tests:
1. Check if results have correct signs.
2. Check if reset works correctly.
3. Keep req signal always high and check result.
4. Req signal going high for one clock cycle, and check if dut acknowledges data.
5. Check if result_parity works correctly.
6. Check if output flags and result are active for the right amount of time.
7. Check if result is set to 0 when parity error occurs.