tb_wishbone_slave.v

AUTHORS

JAY CONVERTINO

DATES

2025/01/17

INFORMATION

Brief

Test bench for wishbone_slave

License MIT

Copyright 2025 Jay Convertino

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

tb_wishbone_slave

```
module tb_wishbone_slave #(
parameter
ADDRESS_WIDTH
=
32,
parameter
BUS_WIDTH
=
4,
parameter
DEPTH
=
512,
parameter
```

```
RAM_TYPE

= "block",
parameter
HEX_FILE
= """
)
```

Test bench for wishbone slave

Parameters

ADDRESS_WIDTH Width of the axi address bus in bits.

parameter

BUS_WIDTH Bus width for data paths in bytes.

parameter

DEPTH Depth of the RAM in terms of data width words.

parameter

RAM_TYPE Used to set the ram_style atribute.

parameter

HEX_FILE Hex file to write to RAM.

parameter

inst_dc_block_ram

Module instance of dc_block_ram