

Structure of RIDECORE repository

Masashi Fujinami

2016/03/24

```
/
|-README.md \#Introduction, Quick Start and How to Use
|-LICENCE \#LICENCE of RIDECORE, vscale, and memgen
|-doc
|  |-document_jp.pdf \#Document of RIDECORE in Japanese
|  |-document_en.pdf \#Document of RIDECORE in English
|  |-RISC-V-subset.pdf \#executable instruction of RIDECORE
|
|-src
|  |-fpga \#RIDECORE source code and .xdc file for synthesizer
|  |-test
|      |-singlecyc \#RISC-V single cycle processor
|      |   |-sim \#Makefile Only
|      |   |-bin \#Binary of application
|      |   |-verilog \#Source code and testbench
|      |
|      |-ridecore \#RIDECORE testbench
|          |-sim \#Testbench and Makefile
|          |-app \#Applications for RIDECORE in C
|          |-bin \#Binary of application
|
|-toolchain
|  |-memgen-v0.9 \#memgen for RISC-V
```

図 1 Structure of RIDECORE repository

```

pipe(pipeline.v)
|-pipeline_if(pipeline_if.v)
| |-imem(imem.v)
| |-btb(btb.v)
| | |-ram_sync_1r1w(ram_sync.v)
| |
| |
| |-gshare_predictor(gshare.v)
| | |-true_dualport_ram(dualport_ram.v)
| |
|
|-tag_generator(tag_generator.v)
|-decoder(decoder.v)
|-sourceoperand_manager(srcopr_manager.v)
|-rrf_freelistmanager(rrf_freelistmanager.v)
|-arf(arf.v)
| |-ram_sync_nolatch4r2w(ram_sync_nolatch.v)
|
|-rrf(rrf.v)
|-src_manager(src_manager.v)
|-imm_gen(imm_gen.v)
|-brimm_gen(brimm_gen.v)
|-rs_requestgenerator(rs_reqgen.v)
|-allocateunit(prioenc.v)
|-oldest_finder8(oldest_finder.v)
|-rs_alu(rs_alu.v)
|-alloc_issue_ino(alloc_issue_ino.v)
| |-search_begin(search_be.v)
| |-search_end(search_be.v)
|
|-rs_ldst(rs_ldst.v)
|-rs_branch(rs_branch.v)
|-rs_mul(rs_mul.v)
|-exunit_alu(exunit_alu.v)
| |-src_a_mux(srcsel.v)
| |-src_b_mux(srcsel.v)
| |-alu(alu.v)
|
|-dmem(dmem.v)
|-storebuf(storebuf.v)
| |-search_begin(search_be.v)
| |-search_end(search_end.v)
|
|-exunit_ldst(exunit_ldst.v)
|-exunit_mul(exunit_mul.v)
| |-multiplier(multiplier.v)
|
|-exunit_branch(exunit_branch.v)
| |-alu(alu.v)
|
|-miss_prediction_fix_table(mpft.v)
|-reorderbuf(reorderbuf.v)

```

图 2 Source code tree of RIDECORE