

# QEMU support for Xtensa

Git tree: <http://jcmvbkbc.spb.ru/git/?p=dumb/qemu-xtensa.git;a=shortlog;h=refs/heads/xtensa>

## Things to do

- core/basic opcodes implementation;
  - [+] and/or/xor/neg/abs;
  - [+] shifts;
  - [+] add[x\*]/sub[x\*]/add.n/addi.n;
  - [+] call0, callx0, j, b\*;
  - [+] l32\*, s32\*;
  - [+] accurate SR write semantics;
  - [-] boolean registers/commands;
- windowed registers;
  - [+] call\*/callx\*, retw, rotw, rfwo, rfwu;
  - [+] simple overflow algorithm that's triggered from ENTER;
  - [-] accurate overflow triggering;
- [+] loop option;
- [+] extended L32R option;
- [-] floating point;
- MMU;
  - [+] no-mmu mode;
  - [-] region protection (with/without translation);
- gdbserver;
  - [+] xml register map, read/write register;
  - [-] correct SR mapping;
  - [+] debug exception, single step mode;
  - [+] hw/sw breakpoints;
- exceptions;
  - [+] debug (only external);
  - [+] window overflow/underflow;
  - [+] user/kernel (invalid insn, privileged insn, alignment, division by 0,...);
  - [-] relocatable vectors;
  - [-] external interrupts;
  - [-] timer interrupts;
- sample evaluation board;
  - [+] memory mapping, ELF loader;
  - [-] standard peripherals;
- [-] external configuration (a-la xtensa overlay)?
- [-] automatic regression test suite;

## Events

- 2011.04.20: C++ 'hello world' is working in qemu (stdio, stdlib, simcalls, windowed registers, loops, ext l32r) (:

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<http://wiki.osll.ru/> - **Open Source & Linux Lab**

Permanent link:  
<http://wiki.osll.ru/doku.php/etc:users:jcmvbkbc:qemu-target-xtensa?rev=1303470539>

Last update: **2011/04/22 15:08**

