

board test

date & test version:
date [<date>]
test version [v0.1.0]

system:
core [<core>]
cpu [<cpu>]
#n cpus [<#count>]
frequency [<cpu_freq>]
board [<board>]

versions:
linux [<#linux>+<#patch_id>]
rtai [<#rtai>+<#patch_id>]
gcc [<#gcc>]
toolchain [<toolchain>]

patch, configure, compile

linux:
1 linux patch [PASSED/FAILED]
1.1 successful hunks [<#count>]
1.2 failed hunks [<#count>]
1.3 configure [PASSED/BLOCKED/FAILED]
1.4 compile [PASSED/BLOCKED/FAILED]

rtai:
2 rtai patch [INTEGRATED/PASSED/FAILED]
2.1 successful hunks [<#count>]
2.2 failed hunks [<#count>]
2.3 configure [PASSED/BLOCKED/FAILED]
2.4 compile [PASSED/BLOCKED/FAILED]

basic tests

loading/unloading kernel modules:
(modules: rtai_hal.ko sched|lxrt msg sem mbx fifos shm)
3.1 kernel modules
3.1.1 load/unload (sched) [PASSED/FAILED]
3.1.2 load/unload (sched) [PASSED/BLOCKED/FAILED]
3.1.3 load/unload (lxrt) [PASSED/BLOCKED/FAILED]
3.1.4 load/unload (lxrt) [PASSED/BLOCKED/FAILED]

latency test:
(rtai_sched.ko, period: 1ms, sysload: dd /dev/urandom /dev/null)
3.2 latency: idle system
3.2.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.2.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.2.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.2.4 userspace, periodic [PASSED/BLOCKED/FAILED]
3.3 latency: system under load
3.3.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.3.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.3.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.3.4 userspace, periodic [PASSED/BLOCKED/FAILED]

preempt test:
(rtai_sched.ko, sysload: dd /dev/urandom /dev/null)
3.4 preempt: idle system

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3.4.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.4.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.4.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.4.4 userspace, periodic [PASSED/BLOCKED/FAILED]
3.5 preempt: system under load
3.5.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.5.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.5.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.5.4 userspace, periodic [PASSED/BLOCKED/FAILED]

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switch test:

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(rtai_sched.ko, sysload: dd /dev/urandom /dev/null)
3.6 switch: idle system
3.6.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.6.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.6.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.6.4 userspace, periodic [PASSED/BLOCKED/FAILED]
3.6 switch: system under load
3.7.1 kernelspace, oneshot [PASSED/BLOCKED/FAILED]
3.7.2 kernelspace, periodic [PASSED/BLOCKED/FAILED]
3.7.3 userspace, oneshot [PASSED/BLOCKED/FAILED]
3.7.4 userspace, periodic [PASSED/BLOCKED/FAILED]

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latency test, 12h (user/oneshot/load):

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3.8 latency: 12h [PASSED/BLOCKED/FAILED]

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performance

3.2/3.3 latency test [min___][avg___][max___]

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idle kernelspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
idle kernelspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]

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3.4/3.5 preempt test [min___][avg___][max___][j-fast][j-slow]

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-----
idle kernelspace oneshot [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
idle kernelspace periodic [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace oneshot [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace periodic [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace oneshot [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace periodic [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace oneshot [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace periodic [_____] [_____] [_____] [_____] [_____] / [BLOCKED/FAILED]

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3.6 switch test [susp/res][sem:sig/wait][rpc:rcv-ret]

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-----
idle kernelspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
idle kernelspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
idle userspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
load kernelspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]
load userspace periodic [_____] [_____] [_____] / [BLOCKED/FAILED]

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3.8 latency test, 12h [min___][avg___][max___]

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-----
load userspace oneshot [_____] [_____] [_____] / [BLOCKED/FAILED]

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