

worlds^{11,40}

ABS: $\text{Action}(dec)$ **action**

STM: `action_wf`

ABS: `null` **null-action**

STM: `null-action_wf`

ABS: $\text{doact}(k;v)$ **doact**

STM: `doact_wf`

ABS: $\text{w-action-dec}(TA;M;i)$ **w-action-dec**

STM: `w-action-dec_wf`

ABS: $\text{w-kindtype}(TA;M;i)$ **w-kindtype**

ABS: $\text{w-automaton}(T;TA;M)$ **w-automaton**

STM: `w-automaton_wf`

ABS: `NullMachine` **w-null**

STM: `w-null_wf`

ABS: `World` **world**

STM: `world_wf`

ABS: $w.T$ **w-T**

STM: `w-T_wf`

ABS: $w.TA$ **w-TA**

STM: `w-TA_wf`

ABS: $w.M$ **w-M**

STM: `w-M_wf`

ABS: $\text{vartype}(i;x)$ **w-vartype**

STM: `w-vartype_wf`

ABS: $\text{Action}(i)$ **w-action**

STM: `w-action_wf`

ABS: $\text{isnull}(a)$ **w-isnull**
 STM: w-isnull_wf
 ABS: $\text{kind}(a)$ **w-kind**
 STM: w-kind_wf
 ABS: $\text{valtype}(i;a)$ **w-valtype**
 STM: w-valtype_wf
 ABS: $\text{val}(a)$ **w-val**
 STM: w-val_wf
 ABS: $\text{isrcv}(l;a)$ **w-isrcvl**
 STM: w-isrcvl_wf
 STM: assert-w-isrcvl
 ABS: Msg **w-Msg**
 STM: w-Msg_wf
 ABS: $s(i;t).x$ **w-s**
 STM: w-s_wf
 ABS: $a(i;t)$ **w-a**
 STM: w-a_wf
 ABS: $m(i;t)$ **w-m**
 STM: w-m_wf
 ABS: $\text{onlnk}(l;ms)$ **w-onlnk**
 STM: w-onlnk_wf
 STM: w-onlnk_wf2
 STM: w-onlnk-m
 ABS: $\text{withlnk}(l;ms)$ **w-withlnk**
 STM: w-withlnk_wf
 ABS: $\text{w-tagged}(tg;ms)$ **w-tagged**
 STM: w-tagged_wf

ABS: $m(l;t)$ **w-ml**
 STM: w-ml_wf
 ABS: $snds(l;t)$ **w-snds**
 STM: w-snds_wf
 ABS: $rcvs(l;t)$ **w-rcvs**
 STM: w-rcvs_wf
 ABS: $queue(l;t)$ **w-queue**
 STM: w-queue_wf
 STM: w-queue_wf2
 ABS: $msg(a)$ **w-msg**
 STM: w-msg_wf
 ABS: $w-machine(w;i)$ **w-machine**
 STM: w-machine_wf
 ABS: $discrete(i;x)$ **w-discrete**
 STM: w-discrete_wf
 ABS: $w-atom-constraint(w)$ **w-atom-constraint**
 STM: w-atom-constraint_wf
 ABS: $w-machine-constraint(w)$ **w-machine-constraint**
 STM: w-machine-constraint_wf
 ABS: $w-machine-independent(w;i;k;x)$ **w-machine-independent**
 STM: w-machine-independent_wf
 ABS: $w-discrete-constraint(w)$ **w-discrete-constraint**
 STM: w-discrete-constraint_wf
 ABS: FairFifo **fair-fifo**
 STM: fair-fifo_wf
 ABS: E **w-E**
 STM: w-E_wf

ABS: $p = q$ **w-eq-E**
 STM: w-eq-E_wf
 STM: assert-w-eq-E
 STM: assert-w-eq-E-iff
 ABS: $\text{loc}(e)$ **w-loc**
 STM: w-loc_wf
 ABS: $\text{act}(e)$ **w-act**
 STM: w-act_wf
 STM: w-act-not-null
 ABS: $\text{kind}(e)$ **w-ekind**
 STM: w-ekind_wf
 ABS: $\text{w-knum}(w; i; k; t)$ **w-knum**
 STM: w-knum_wf
 ABS: $V(i; k)$ **w-V**
 STM: w-V_wf
 ABS: $\text{val}(e)$ **w-eval**
 STM: w-eval_wf
 ABS: $\text{time}(e)$ **w-time**
 STM: w-time_wf
 STM: w-a-not-null
 ABS: $(x \text{ when } e)$ **w-when**
 STM: w-when_wf
 ABS: $(x \text{ after } e)$ **w-after**
 STM: w-after_wf
 ABS: $\text{w-pred}(w; e)$ **w-pred**
 STM: w-pred_wf
 STM: w-pred-wf2

ABS: $e <_{\text{loc}} e'$ **w-locl**
 STM: w-locl_wf
 ABS: $\text{sends}(l;e)$ **w-sends**
 STM: w-sends_wf
 ABS: $\text{match}(l;t;t')$ **w-match**
 STM: w-match_wf
 STM: assert-w-match
 STM: w-match-exists
 STM: better-w-match-exists
 STM: w-match-unique
 STM: w-match-property
 STM: w-match-member-property
 ABS: $\text{sender}(e)$ **w-sender**
 STM: w-sender_wf
 ABS: $\text{w-info}(w;e)$ **w-info**
 STM: w-info_wf
 STM: w-loc-lemma
 STM: w-loc-w-pred
 STM: w-loc-pred
 STM: w-loc-rcv
 STM: w-loc-sender
 STM: w-pred-decreases
 STM: w-pred-bound
 STM: w-pred!-decreases
 STM: w-cless-loc
 STM: w-cless-decreases
 ABS: $\text{w_locl}(w;x;y)$ **w_locl**

STM: w_locl_wf
 STM: w_locl-lemma
 ABS: w_locle($w;x;y$) **w_locle**
 STM: w_locle_wf
 STM: w_locle-lemma
 STM: w-snd-rcv
 STM: w-match-sender
 STM: w-order-axioms
 STM: w-kind-lemma
 STM: w-stutter
 STM: w-first-null
 STM: w-pred-null
 STM: w-when-after
 ABS: state_when(e) **w_state_when**
 STM: w_state_when_wf
 STM: w-state-when
 STM: read-w-state-when
 STM: w-when-lemma
 STM: w-when-lemma2
 ABS: state_after(e) **w_state_after**
 STM: w_state_after_wf
 STM: w-state-after
 STM: w-after-lemma
 STM: w-after-lemma2
 STM: w-rcv-msg
 ABS: w_sends($e;l$) **w_sends**
 STM: w_sends_wf

ABS: $\text{index}(e)$ **w-index**
 STM: w-index_wf
 ABS: $e <_c e'$ **w-causl**
 STM: w-causl_wf
 STM: w-causl-time
 STM: w-causl-time2
 STM: w-locl-iff
 STM: w-E_sq
 STM: world-es-val
 STM: world-es-atom
 STM: world-es-const
 ABS: $\text{ES}(\text{the_w})$ **w-es**
 STM: w-es_wf
 STM: w-sends-reliable
 STM: w-sends-nil
 STM: w-sends-fifo1
 STM: w-sends-fifo
 STM: w-sends-msg
 STM: no_repeats_eventlist
 STM: w-sends-lemma
 STM: w_sends_wf2
 STM: mlnk-hd-w-queue
 STM: es-valtype-w-valtype
 STM: es-kind-index-w-knum