

chain replication^{11,40}

DIR: chain_master_object_directory

DIR: chain_sys_object_directory

STM: chain_sys-cases

DIR: chain_config_object_directory

STM: decidable_exists-fail

ABS: fail-dcdr{i:l}(es;Fail) **fail-dcdr**

STM: fail-dcdr_wf

ABS: alive(X) **alive**

STM: alive_wf

STM: es-is-alive

STM: es-alive-val

ABS: sys_cmds(x) **sys_cmds**

STM: sys_cmds_wf

ABS: valid_sys(es;Config;Sys;e) **valid_sys**

STM: valid_sys_wf

STM: decidable_valid_sys

ABS: valid_sys-dcdr{i:l}(es;Config;Cmd;Sys) **valid_sys-dcdr**

STM: valid_sys-dcdr_wf

ABS: Sys(valid) **sys-valid**

STM: sys-valid_wf

STM: is-sys-valid

STM: sys-valid-subtype

STM: decidable_input

ABS: input-dcdr{i:l}(es;Cmd;Sys) **input-dcdr**

STM: input-dcdr_wf

ABS: Input **cr-input**

STM: cr-input_wf

STM: cr-input-subtype

STM: is-cr-input

STM: decidable_is-tail

ABS: tail-dcdr{i:l}(es;Config) **tail-dcdr**

STM: tail-dcdr_wf

ABS: Output **cr-output**

STM: cr-output_wf

STM: cr-output-subtype

ABS: cmd-history(e) **cmd-history**

STM: cmd-history_wf

STM: nonempty-cmd-history

ABS: master-constraints(es;Master) **master-constraints**

STM: master-constraints_wf

ABS: config-antecedent(es;Master;Config;c) **config-antecedent**

STM: config-antecedent_wf

ABS: master-antecedent{i:l}(es;Cmd;Master;Config;Sys;m) **master-antecedent**

STM: master-antecedent_wf

ABS: update-antecedent{i:l}(es;Cmd;Sys;Config;u) **update-antecedent**

STM: update-antecedent_wf

ABS: chain-replication{i:l}(es;Cmd;Sys;Config;Master;u) **chain-replication**

STM: chain-replication_wf

STM: update-antecedent-lemma1

ABS: cr-antecedent{i:l}(es;Config;Cmd;Sys;u) **cr-antecedent**

STM: cr-antecedent_wf

http://www.nuprl.org/FDLcontent/p0_963683_/p12_1784494_{chain!replication}.html