

CONTEXT Core_SW_context

REFINES TCTM_context

CONSTANTS

TC_SERVICES
TM_SERVICES
TC_SUBSERVICES
TM_SUBSERVICES
TC_TYPES
TM_TYPES
MODE_CHANGING_TC
HK_on_TC
HK_off_TC
SCI_on_TC
SCI_off_TC
TM_Buffer_Reset_TC
Check_ok_TM
Check_fail_TM
Exec_ok_TM
Exec_fail_TM
HK_data_TM
SCI_data_TM
Type_of_TC
Type_of_TM

AXIOMS

axm1 : $TC_SERVICES \in \mathbb{P}_1(\mathbb{N}_1)$
axm2 : $TM_SERVICES \in \mathbb{P}_1(\mathbb{N}_1)$
axm3 : $TC_SUBSERVICES \in \mathbb{P}_1(\mathbb{N}_1)$
axm4 : $TM_SUBSERVICES \in \mathbb{P}_1(\mathbb{N}_1)$
axm5 : $TC_SERVICES \cap TM_SERVICES = \emptyset$
axm6 : $TC_TYPES \in \mathbb{P}_1(TC_SERVICES \times TC_SUBSERVICES)$
axm7 : $TM_TYPES \in \mathbb{P}_1(TM_SERVICES \times TM_SUBSERVICES)$
axm8 : $MODE_CHANGING_TC \subseteq TC_TYPES$
axm9 : $MODE_CHANGING_TC \neq \emptyset$
axm10 : $HK_on_TC \in TC_TYPES$
axm11 : $HK_off_TC \in TC_TYPES$
axm12 : $SCI_on_TC \in TC_TYPES$
axm13 : $SCI_off_TC \in TC_TYPES$
axm14 : $TM_Buffer_Reset_TC \in TC_TYPES$
axm15 : $Check_ok_TM \in TM_TYPES$
axm16 : $Check_fail_TM \in TM_TYPES$
axm17 : $Exec_ok_TM \in TM_TYPES$
axm18 : $Exec_fail_TM \in TM_TYPES$
axm19 : $HK_data_TM \in TM_TYPES$
axm20 : $SCI_data_TM \in TM_TYPES$
axm21 : $HK_on_TC \notin MODE_CHANGING_TC$
axm22 : $HK_off_TC \notin MODE_CHANGING_TC$
axm23 : $SCI_on_TC \notin MODE_CHANGING_TC$
axm24 : $SCI_off_TC \notin MODE_CHANGING_TC$

$axm25 : TM_Buffer_Reset_TC \notin MODE_CHANGING_TC$
 $axm26 : Type_of_TC \in TC_SET \leftrightarrow TC_TYPES$
 $axm27 : Type_of_TM \in TM_SET \rightarrow TM_TYPES$
 $axm28 : \forall tc. (tc \in TC_SET \Rightarrow Valid_TC(tc) = bool(tc \in dom(Type_of_TC)))$

END