
MODULE *epos4*

CONSTANT *UNKNOWN*

NMT states

CONSTANT *NMT_Bootng*, *NMT_PreOperational*, *NMT_Operational*, *NMT_Stopped*

$NMT \triangleq \{NMT_Bootng, NMT_PreOperational, NMT_Operational, NMT_Stopped\}$

EPOS states

CONSTANT *EPOS_NotReadyToSwitchOn*, *EPOS_SwitchOnDisabled*, *EPOS_ReadyToSwitchOn*,
EPOS_SwitchedOn, *EPOS_OperationEnabled*, *EPOS_QuickStopActive*,
EPOS_FaultReactionActive, *EPOS_Fault*

$EPOS \triangleq \{EPOS_NotReadyToSwitchOn, EPOS_SwitchOnDisabled,$
EPOS_ReadyToSwitchOn, *EPOS_SwitchedOn*, *EPOS_OperationEnabled*,
EPOS_QuickStopActive, *EPOS_FaultReactionActive*, *EPOS_Fault* $\}$

VARIABLES *nmt_state*, *epos_state*

VARIABLES *nmt_requested*, *epos_requested*

$TypeOK \triangleq \wedge nmt_state \in (NMT \cup UNKNOWN)$
 $\wedge epos_state \in (EPOS \cup UNKNOWN)$

$Recv_BootUp \triangleq \wedge nmt_state = NMT_Bootng$
 $\wedge nmt_state' = NMT_PreOperational$
 $\wedge UNCHANGED\ epos_state$

$Go_NMT_Operational = \wedge nmt_state =$
 $\wedge UNCHANGED\ epos_state$

$Init \triangleq \wedge nmt_state = NMT_Bootng$
 $\wedge epos_state = EPOS_NotReadyToSwitchOn$

$Next \triangleq \vee Recv_BootUp$

$Live \triangleq \wedge \forall s \in NMT :$
 $(nmt_requested = s) \leadsto (nmt_state = s)$

* Modification History
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