KL15PwrSply_Ctrl

[COMP]

RB Internal

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I [KL15PwrSply_Ctrl]

1 Function Definition

1.1 Purpose

Power Distribution Mode Timing and Power Off Management After Abnormal Communication

1.2 Introduction

Timer Mode Timing and Communication Loss Timing and Network Sleep Timing

2 Function Description

2.1 Behavior in normal mode
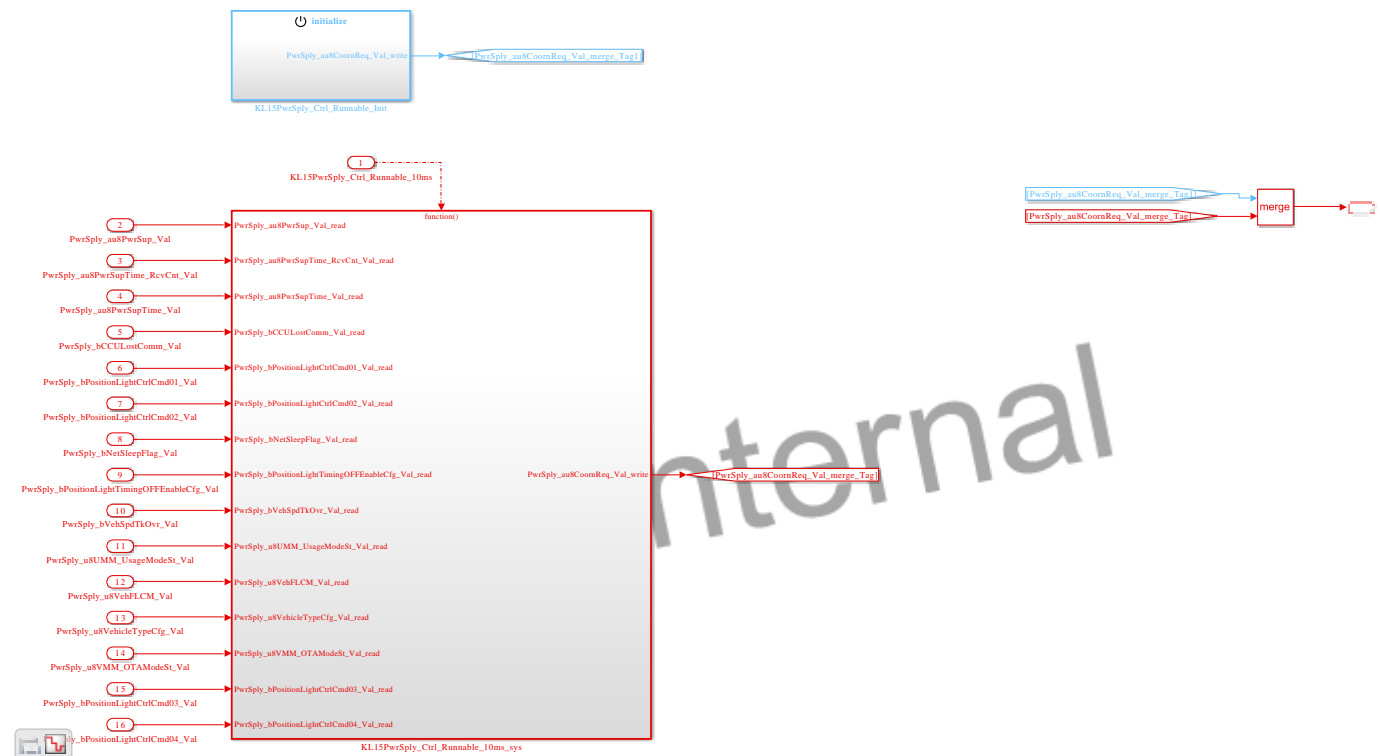
Figure 1 KL15PwrSply_Ctrl [KL15PwrSply_Ctrl]

Figure 2 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys]

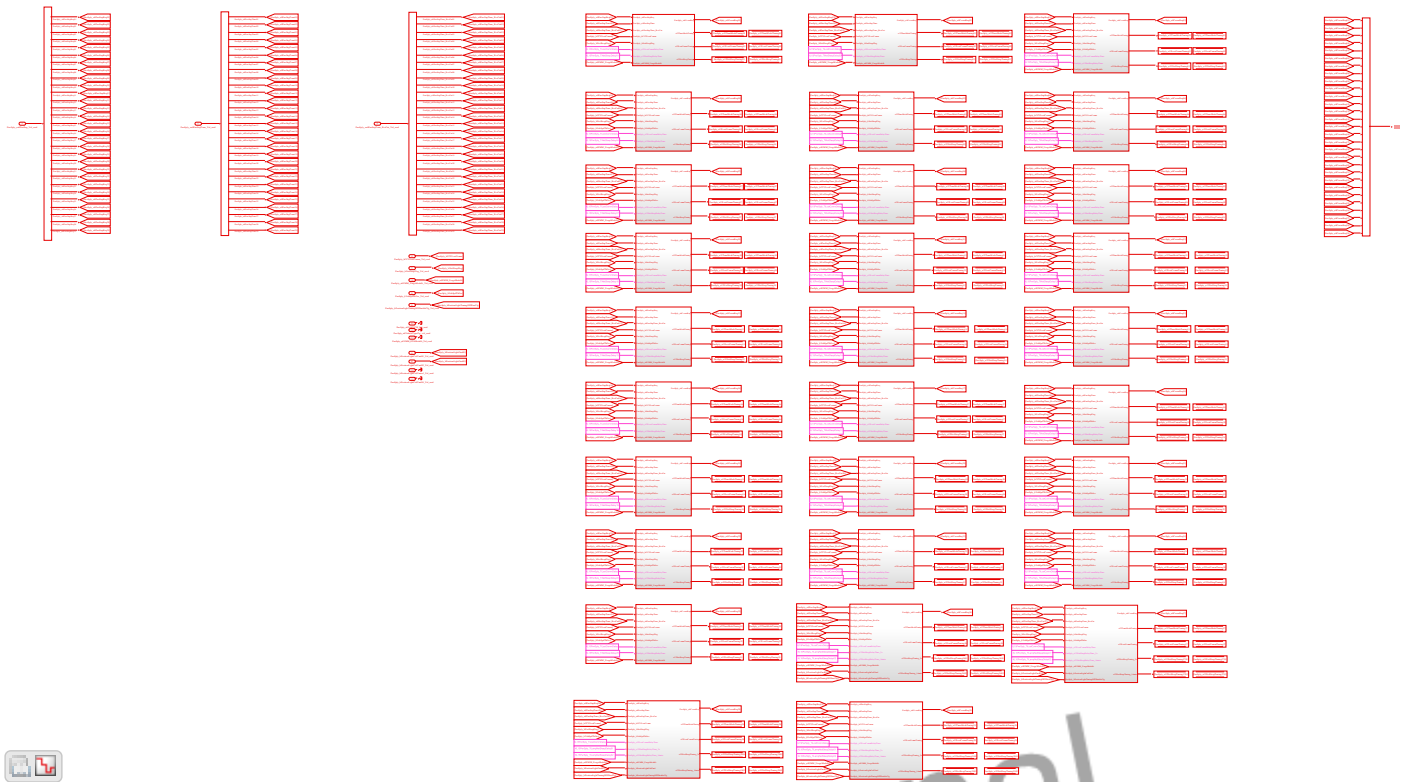Figure 3 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon03 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon03]

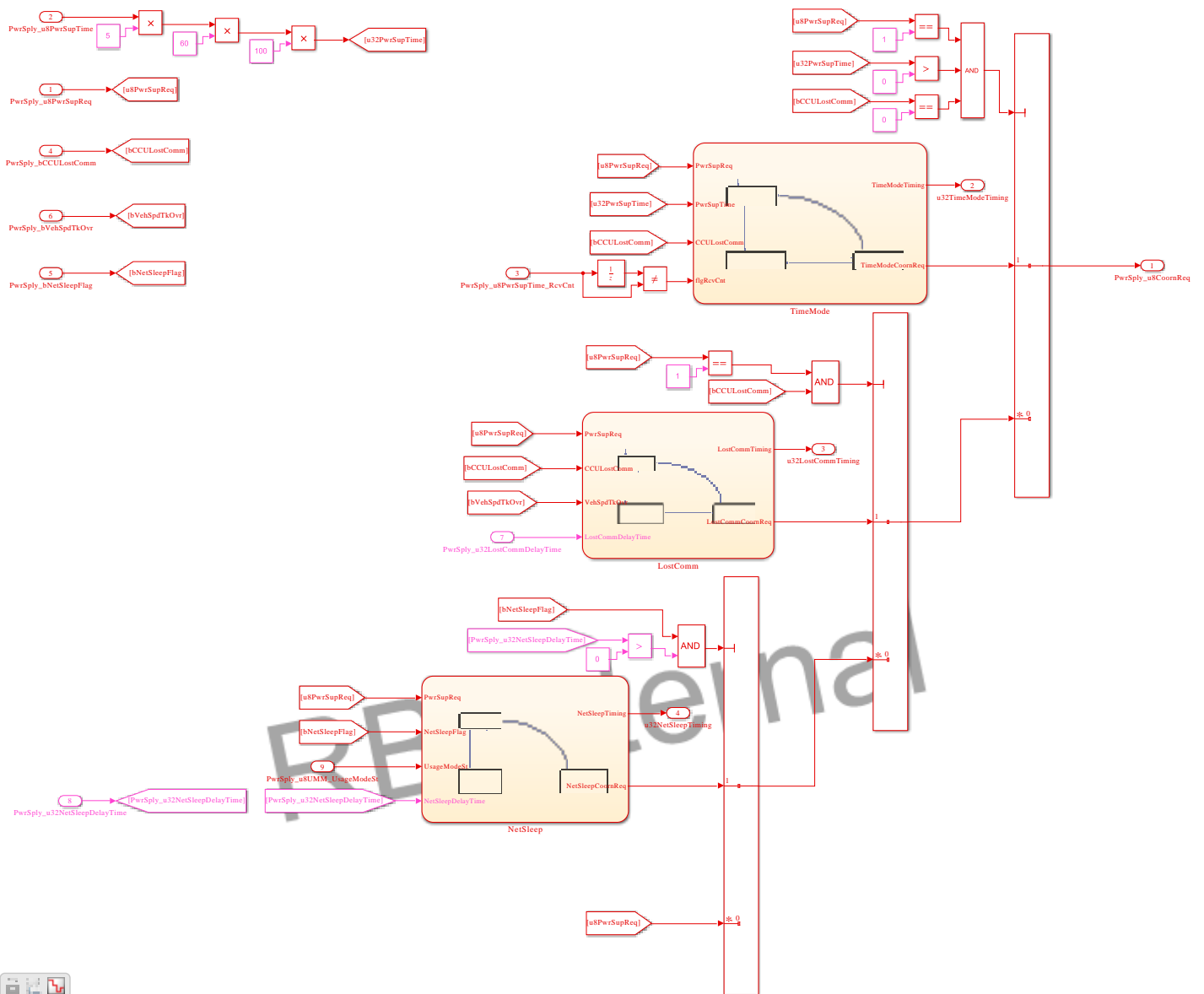Figure   4   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon04   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon04]
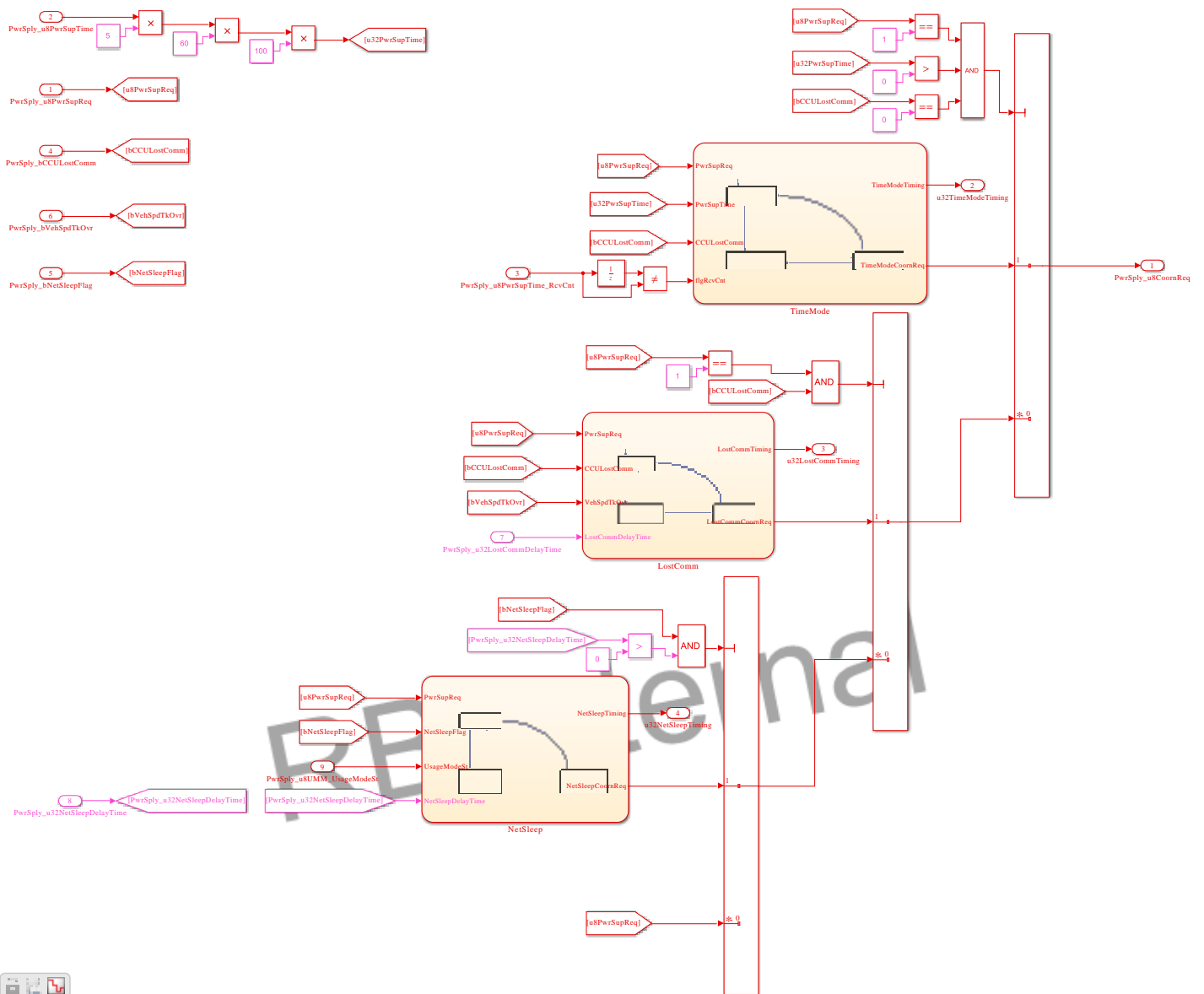
Figure 5 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon05 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon05]
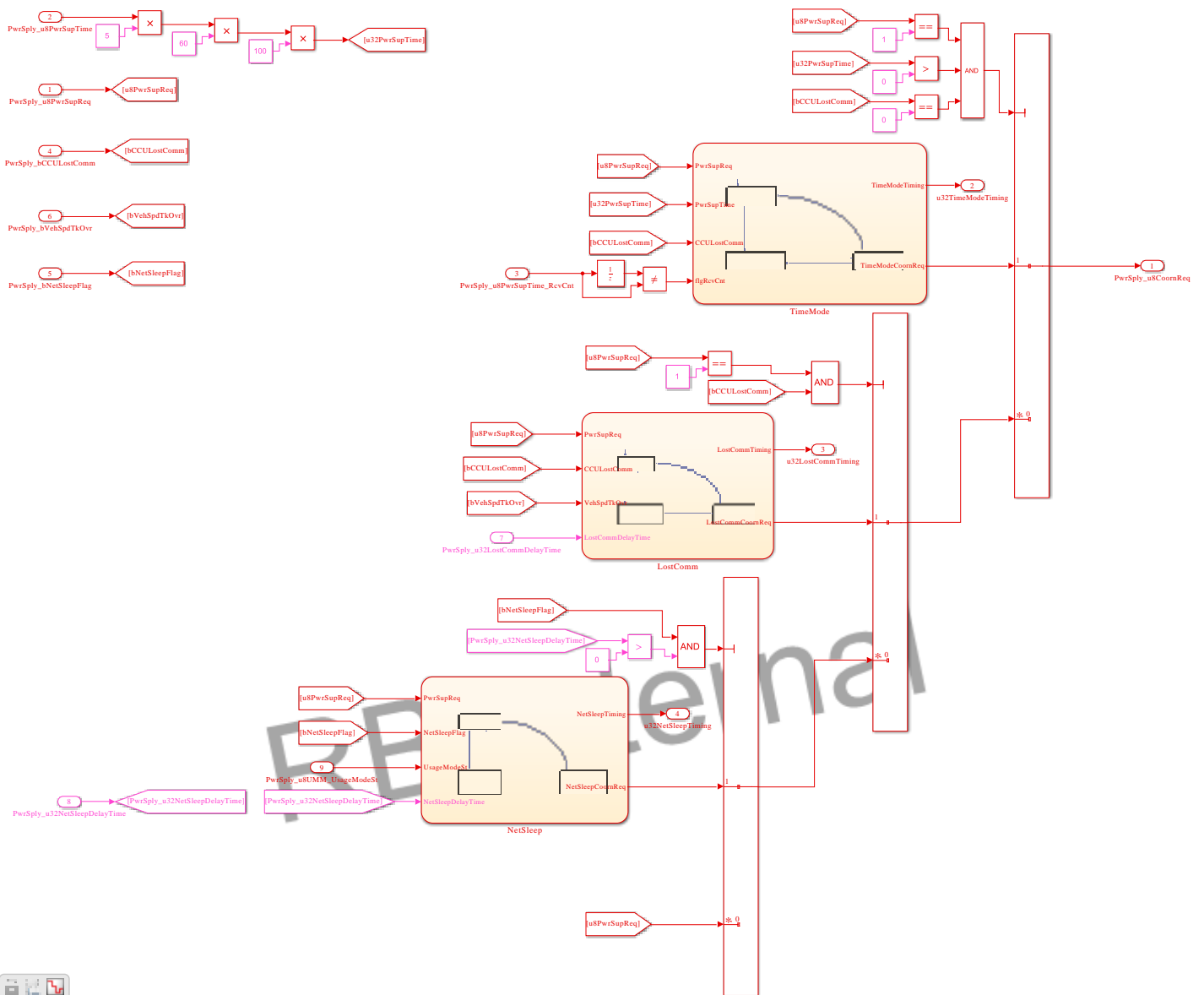
Figure 6 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon06 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon06]

Figure   7   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon07   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runna-
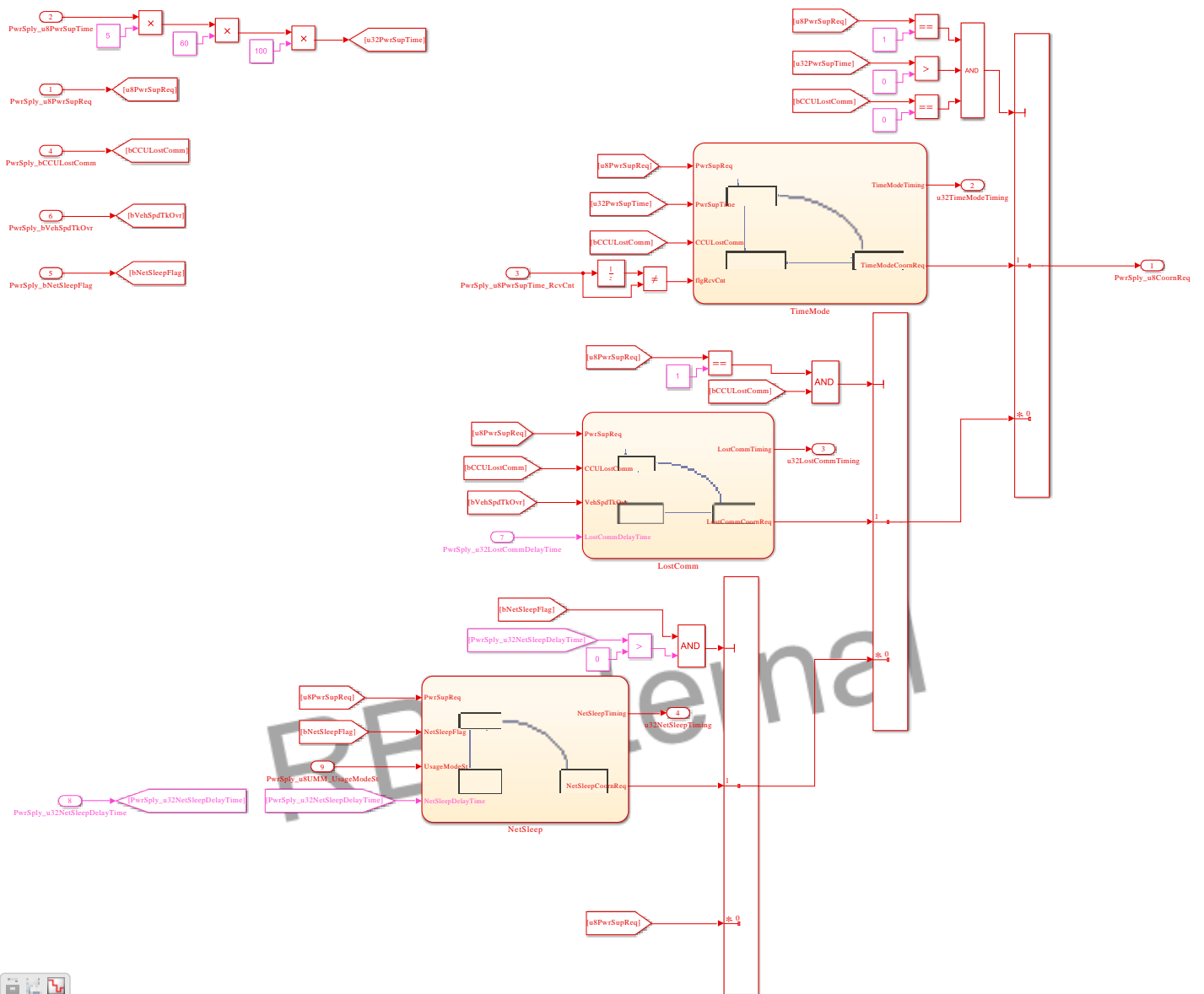ble_10ms_sys_PwrSplyDelayCommon07]

Figure   8   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon08   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon08]

Figure   9   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon09   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon09]

Figure 10 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon10 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon10]
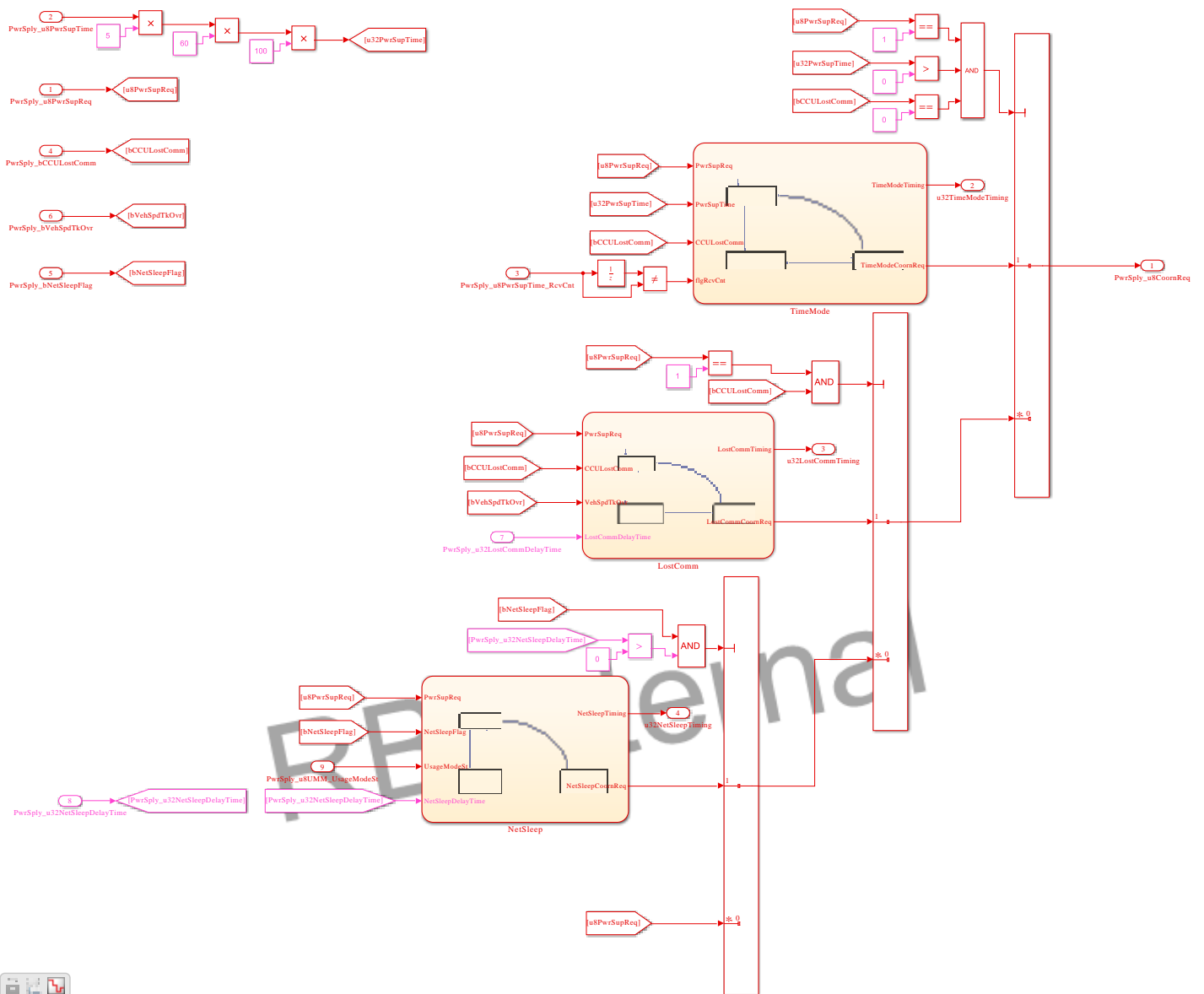
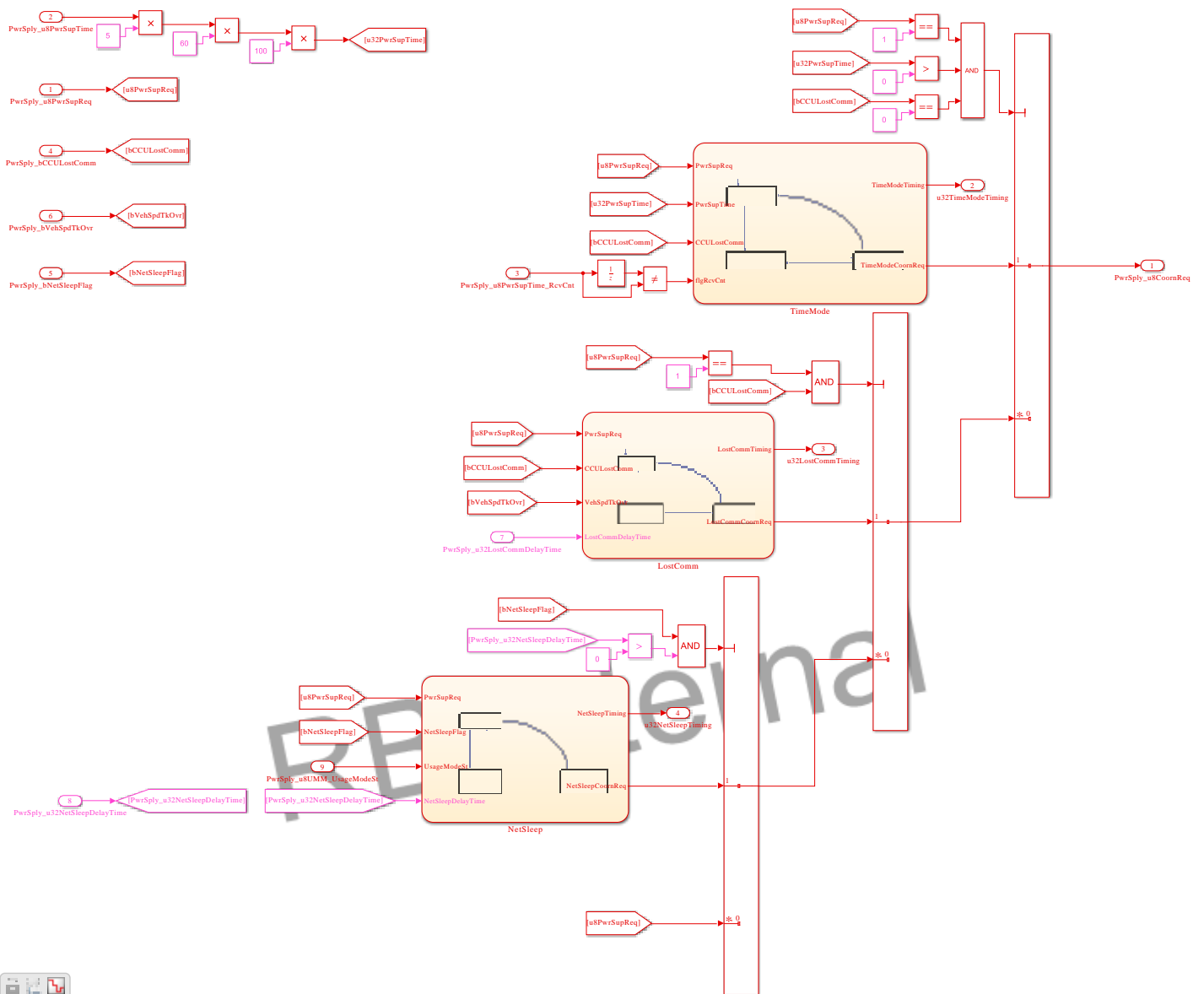Figure   11   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon11   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon11]
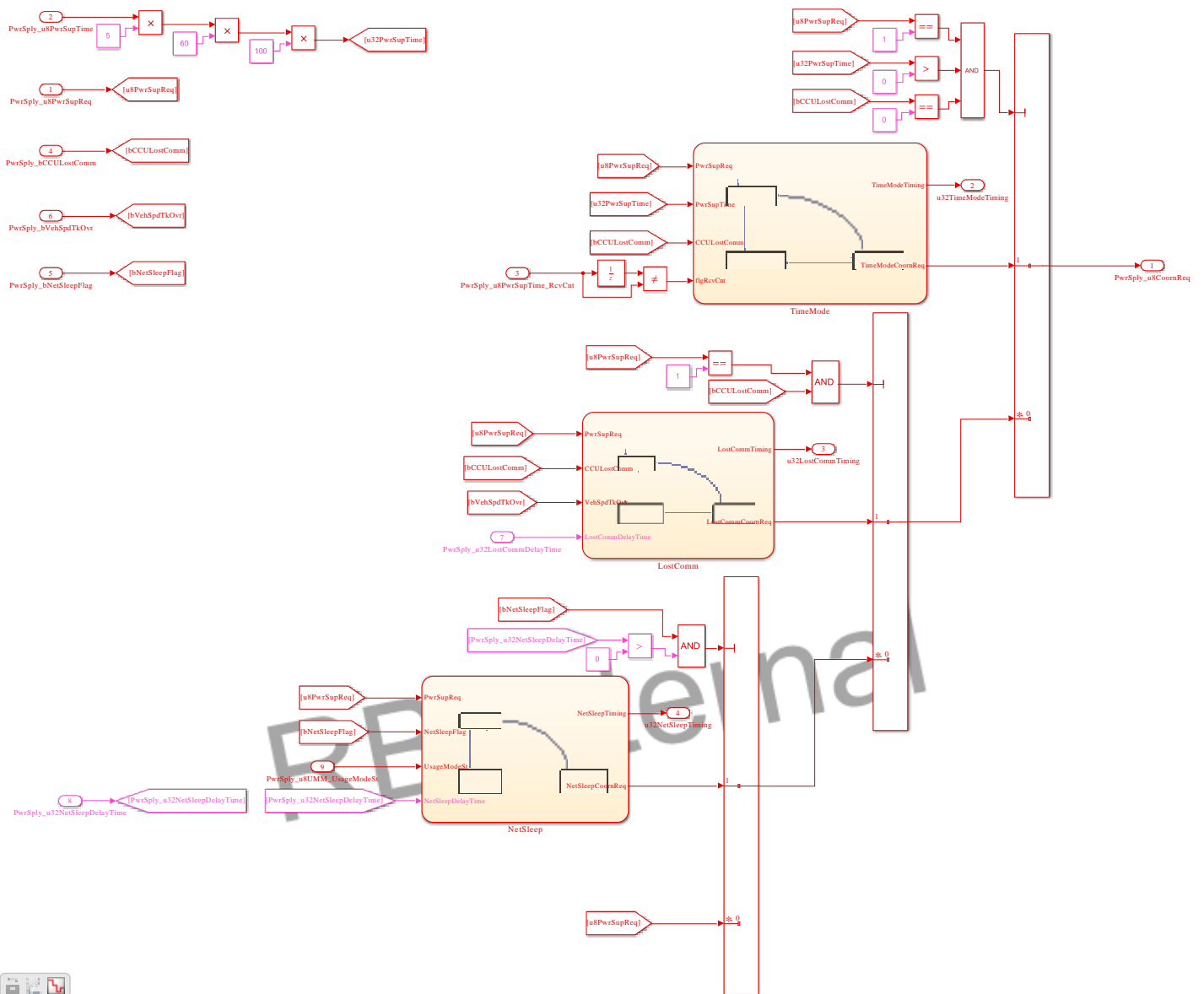
Figure 12 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon12 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon12]

Figure 13 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon13 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon13]

Figure   14   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon14   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon14]
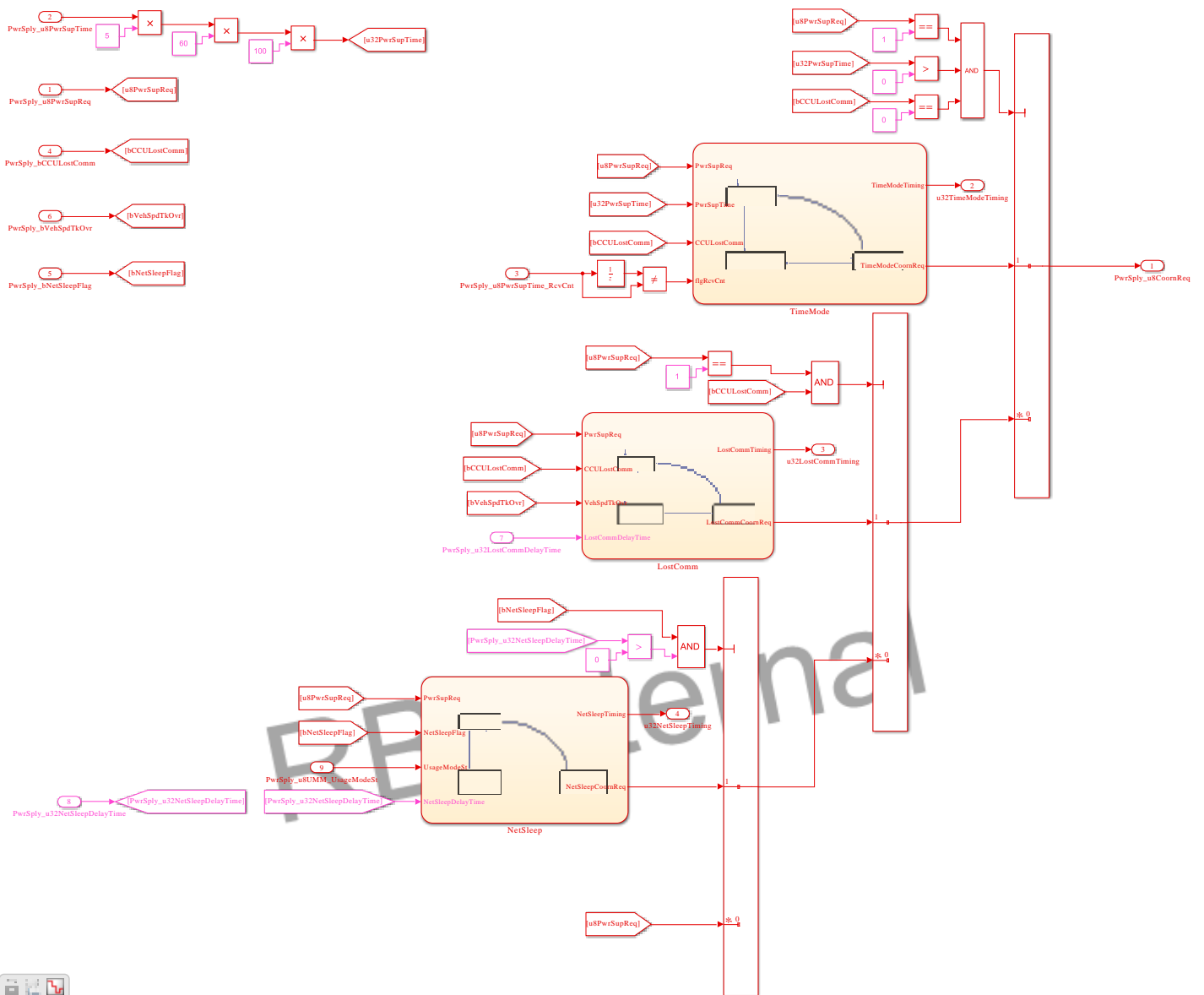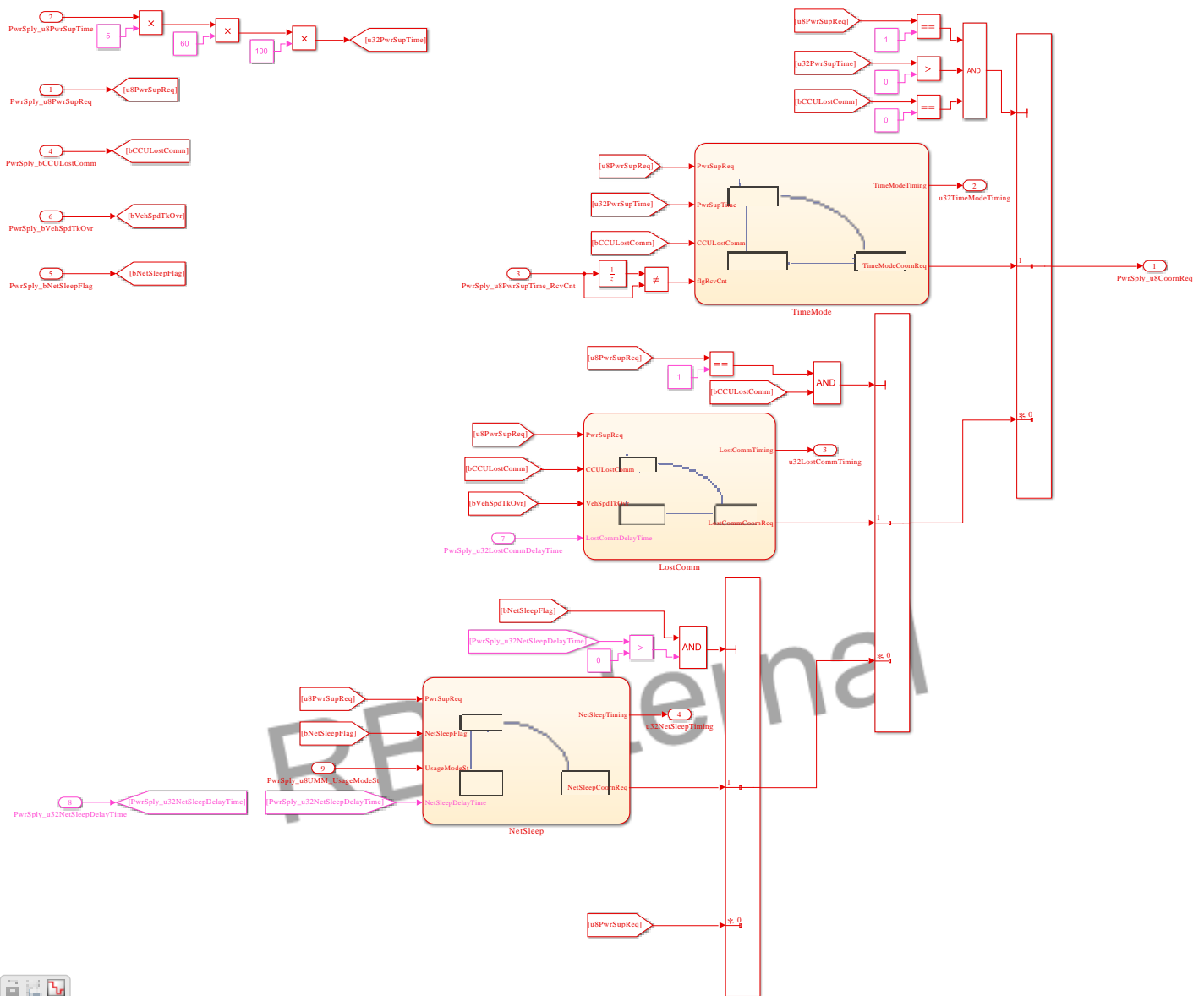
Figure 15 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon15 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon15]

Figure   16   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon16   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon16]
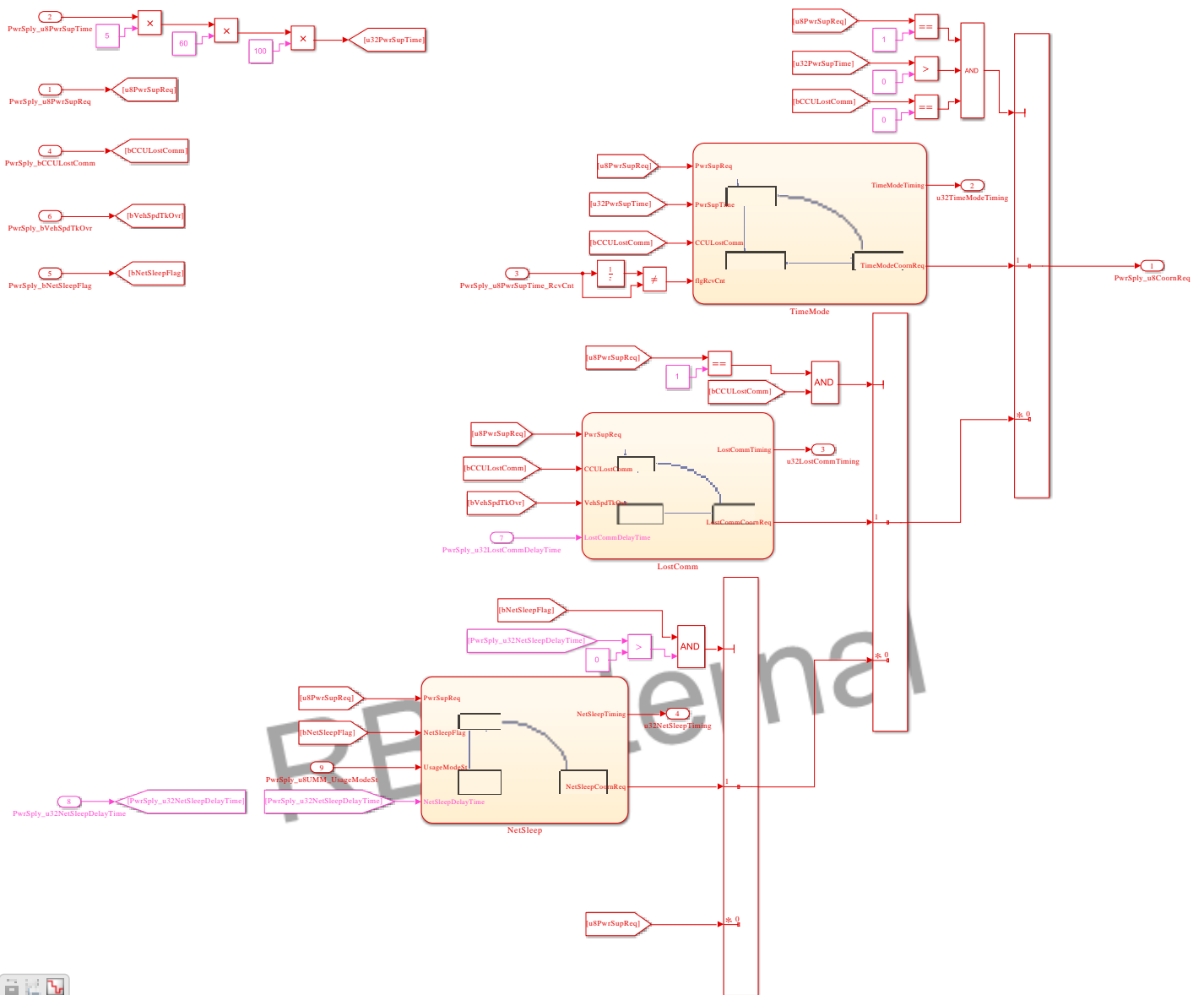
Figure   17   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon17   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runna-
ble_10ms_sys_PwrSplyDelayCommon17]

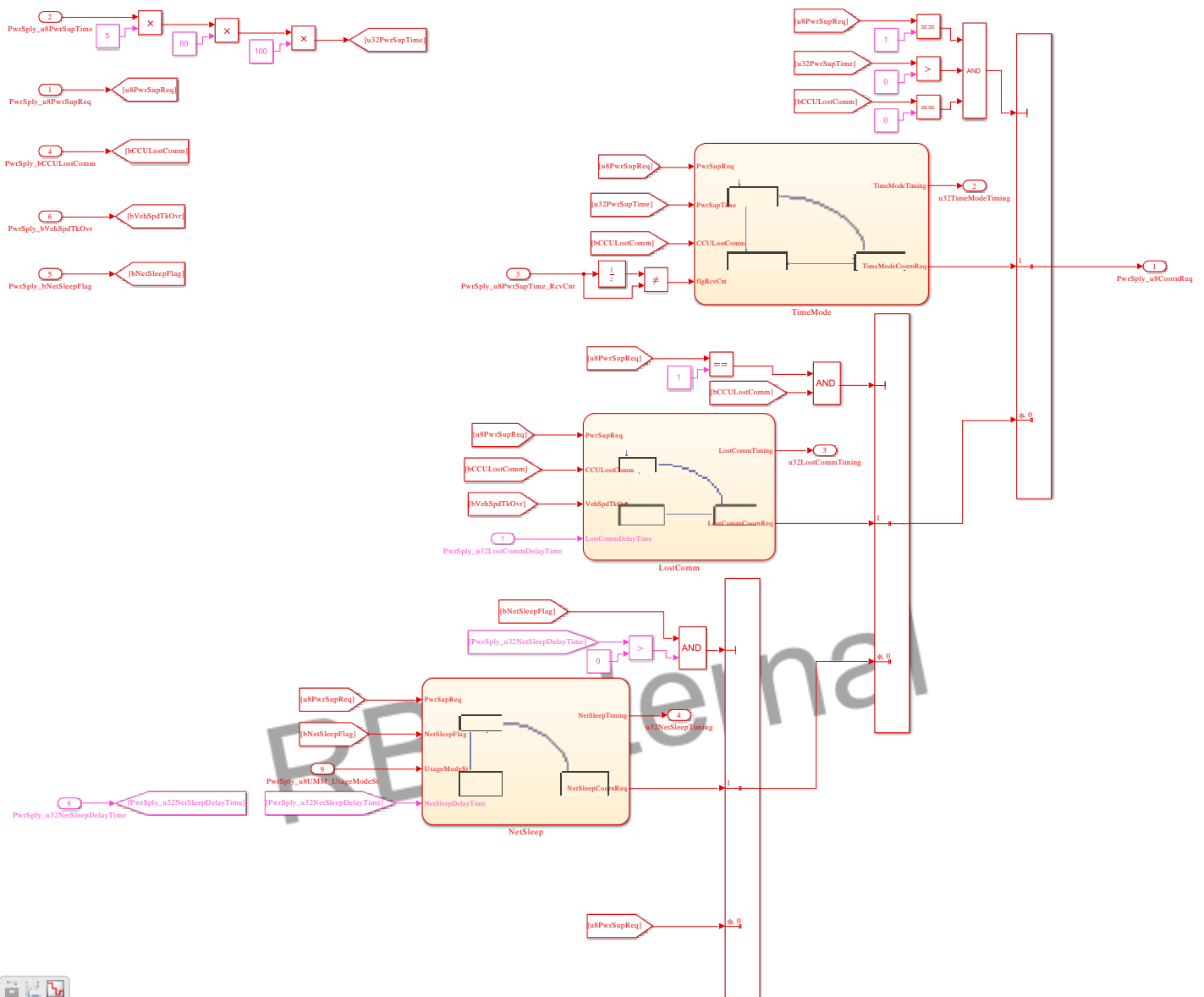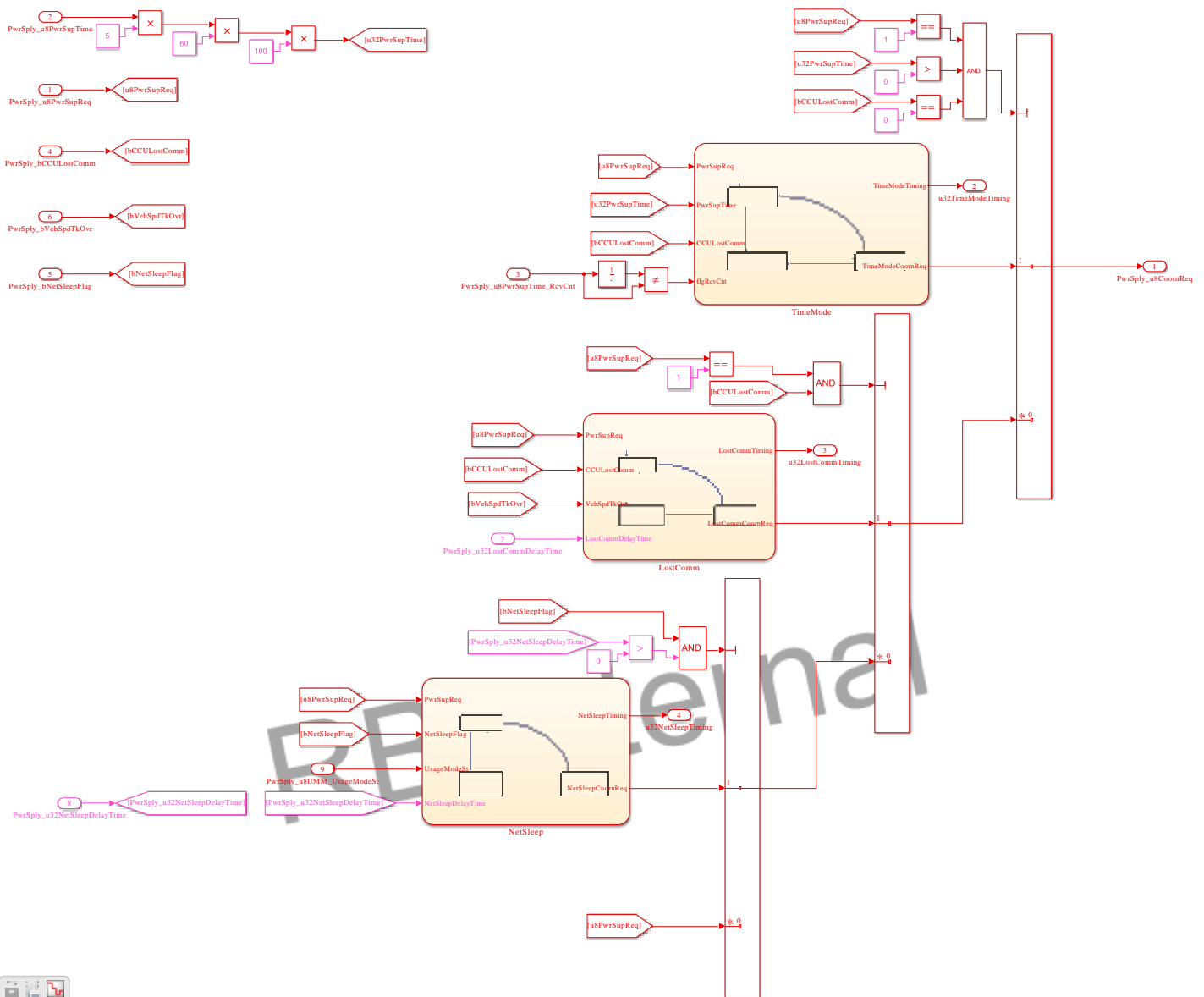Figure 18 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon18 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon18]

Figure 19 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon19 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon19]

Figure 20 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon20 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon20]

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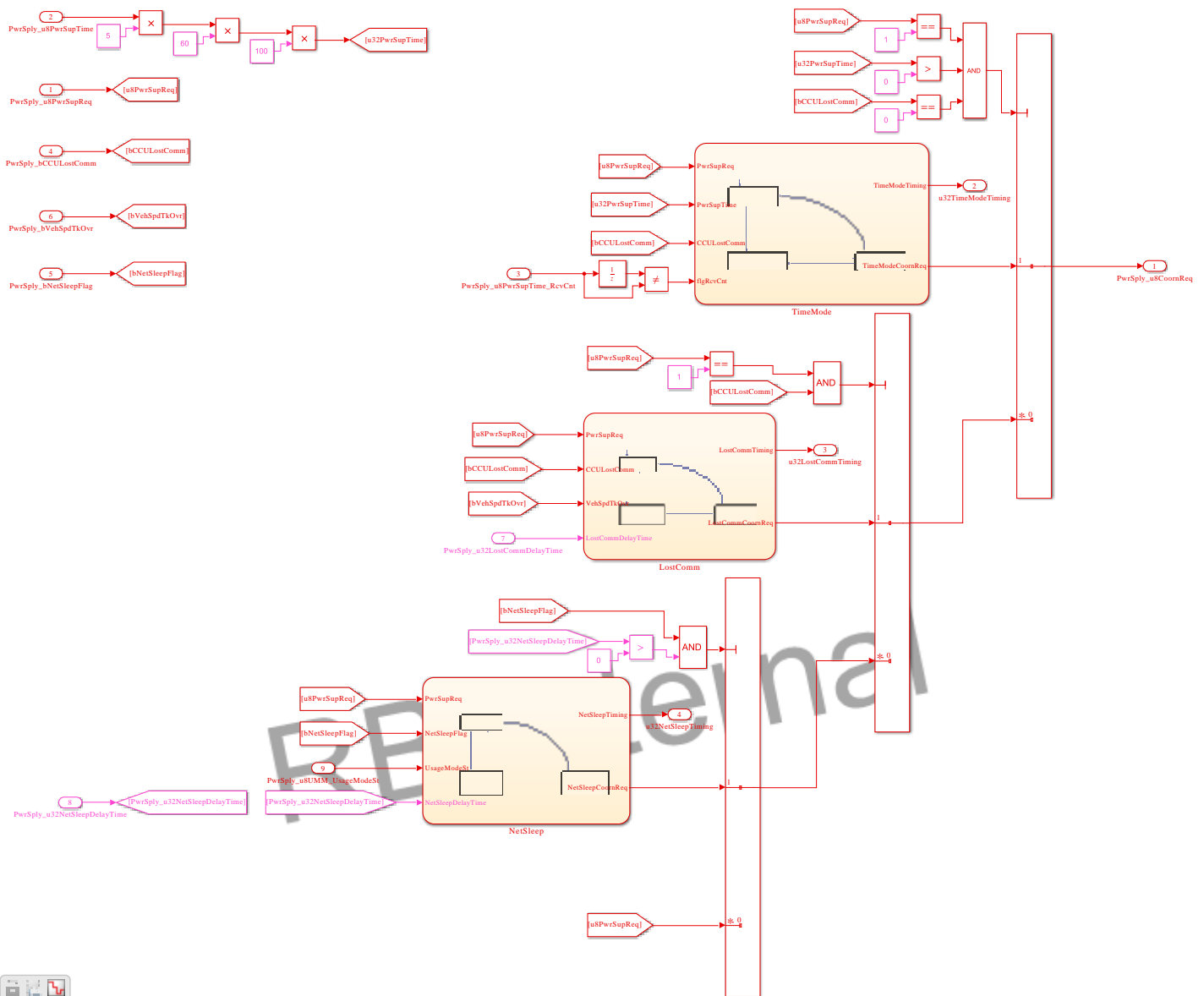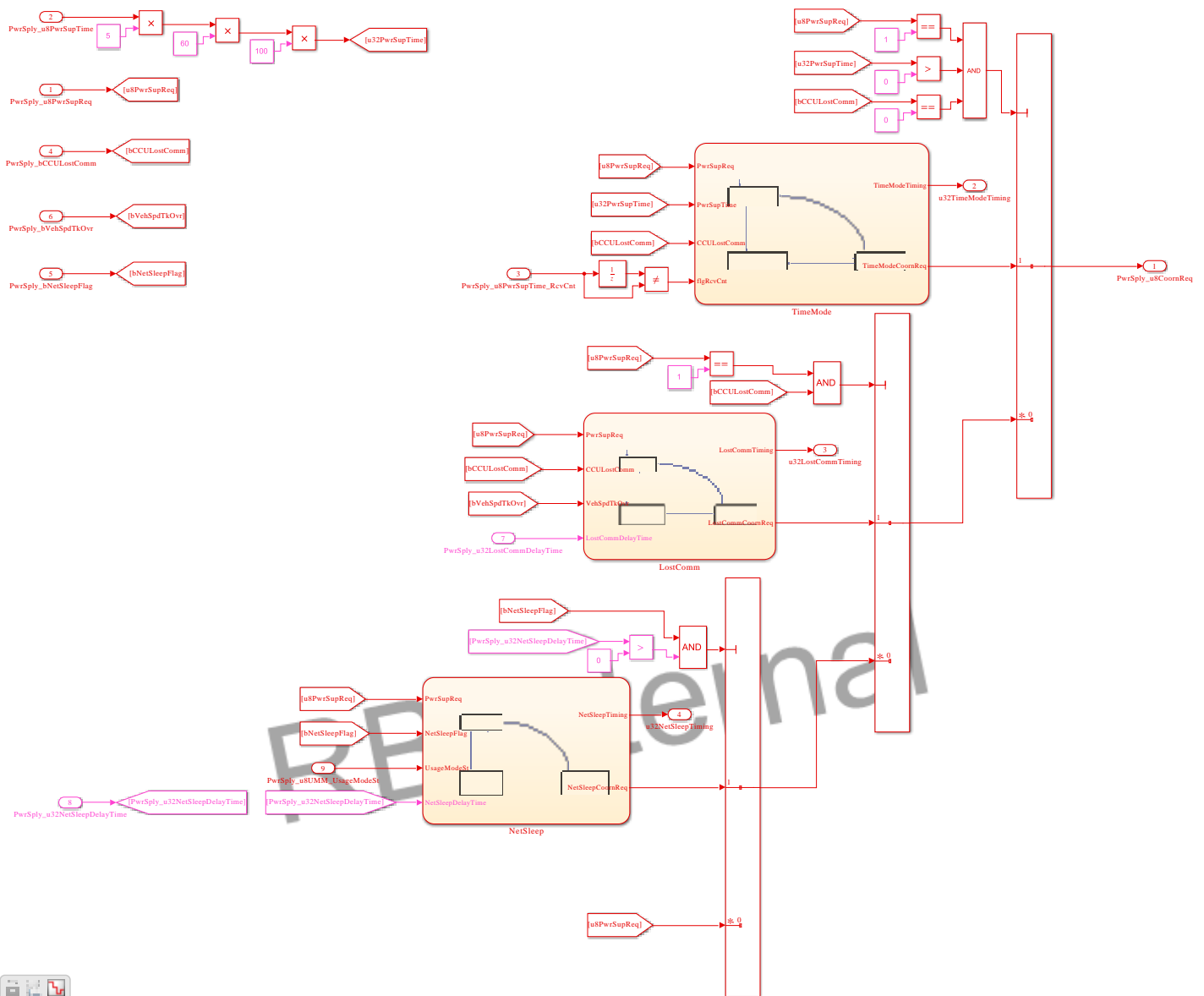Figure   21   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon21   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon21]

Figure 22 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon22 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon22]

Figure   23   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon23   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon23]
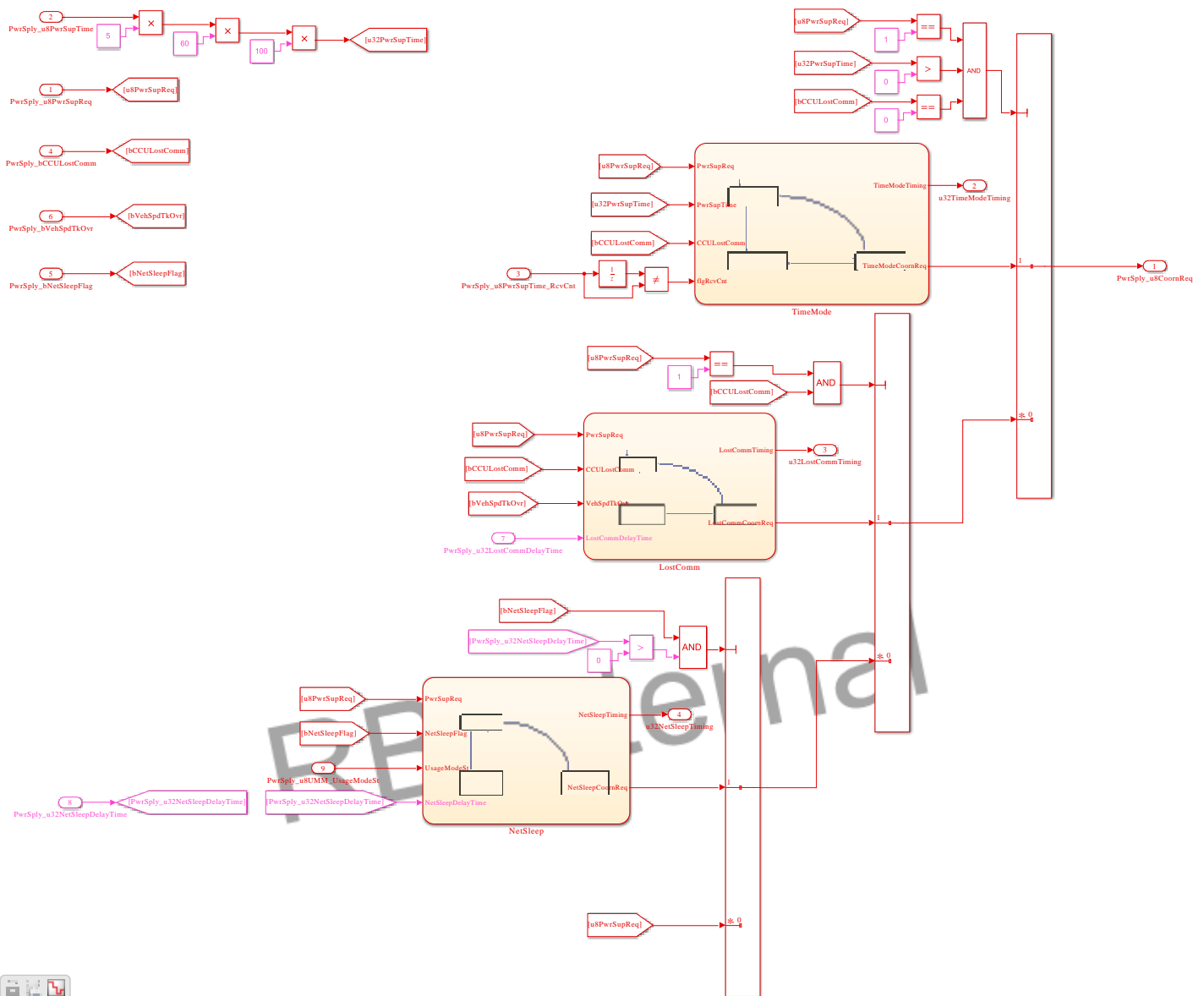
Figure   24   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon24   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon24]

Figure 25 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon25 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayCommon25]
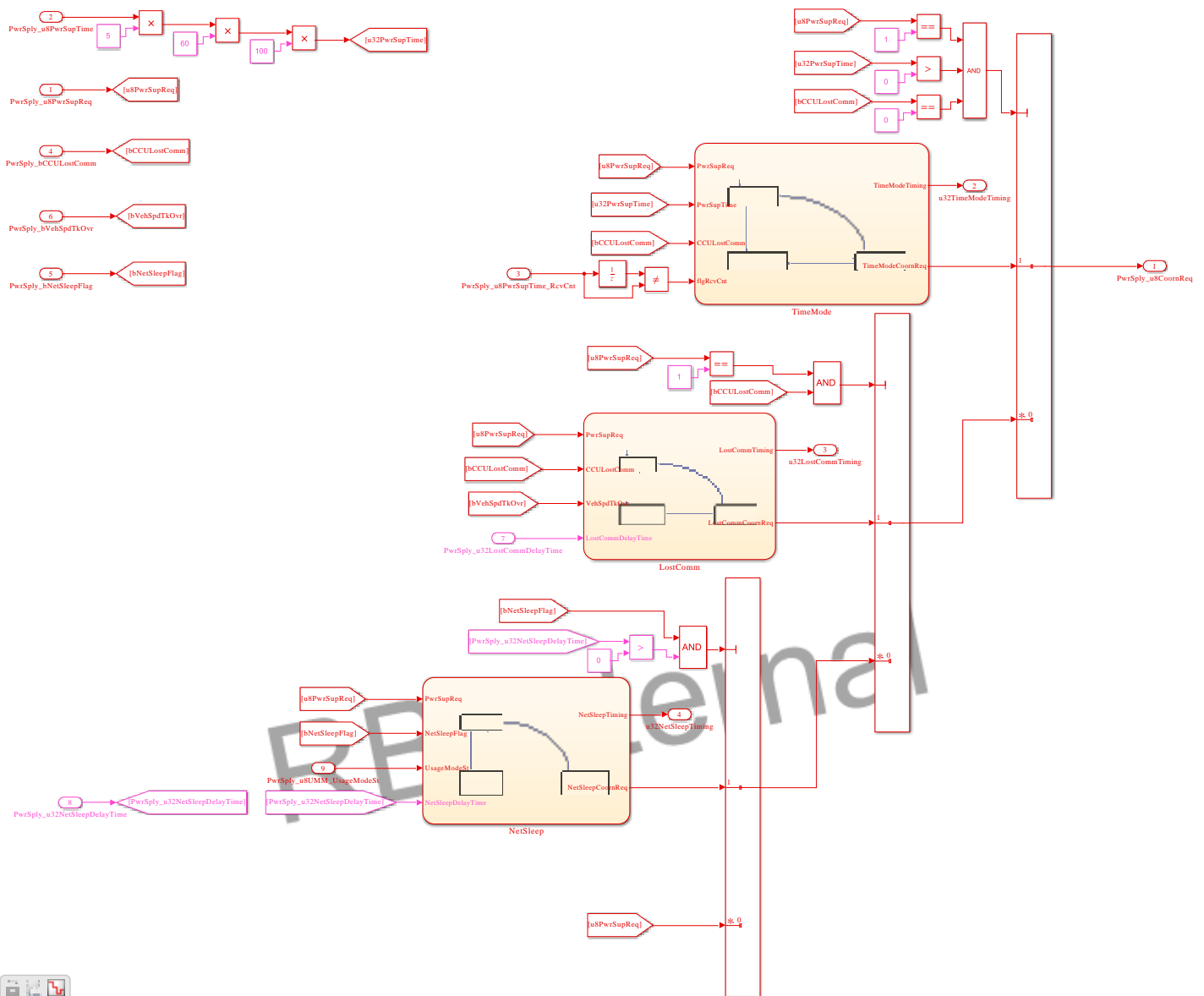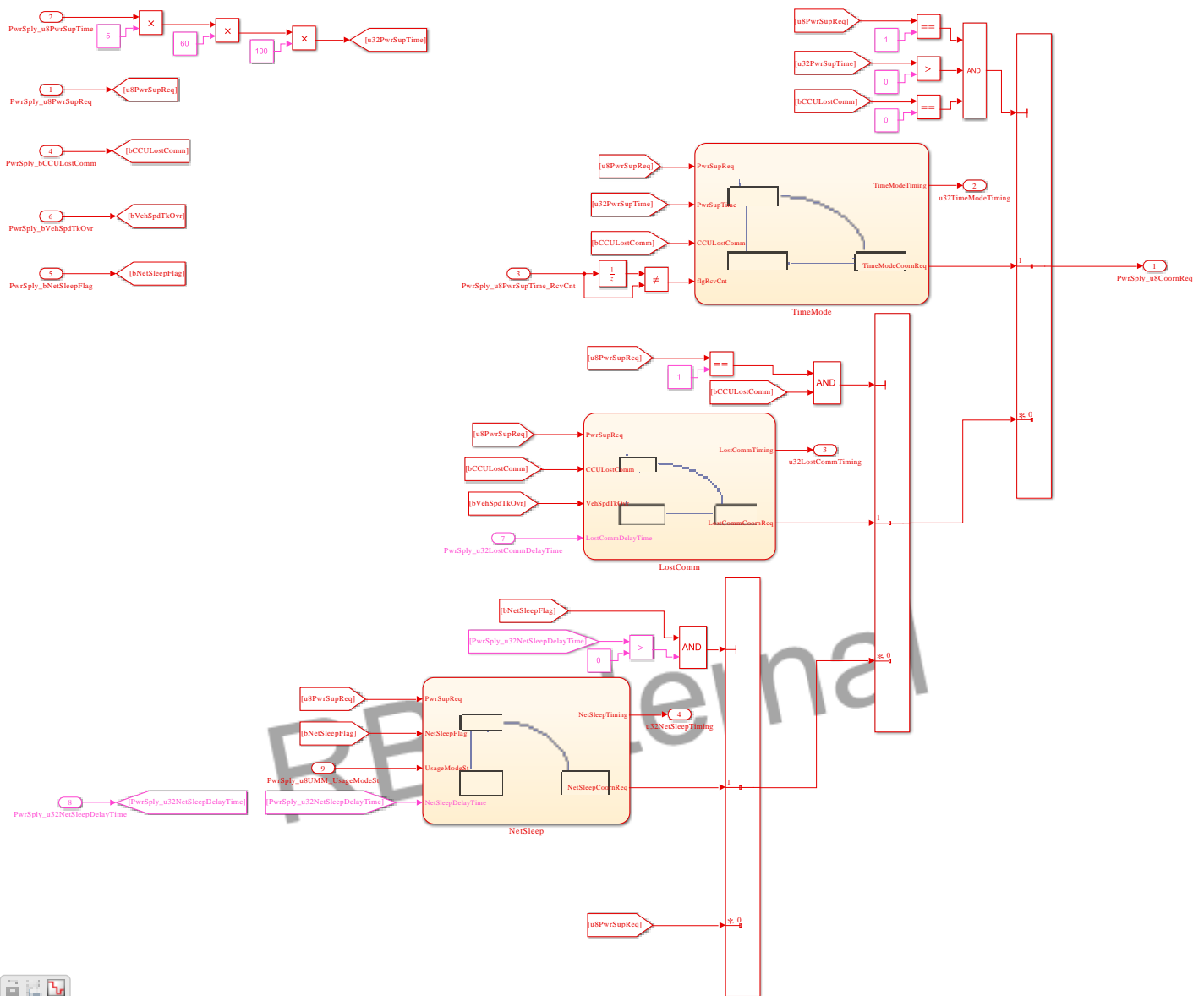
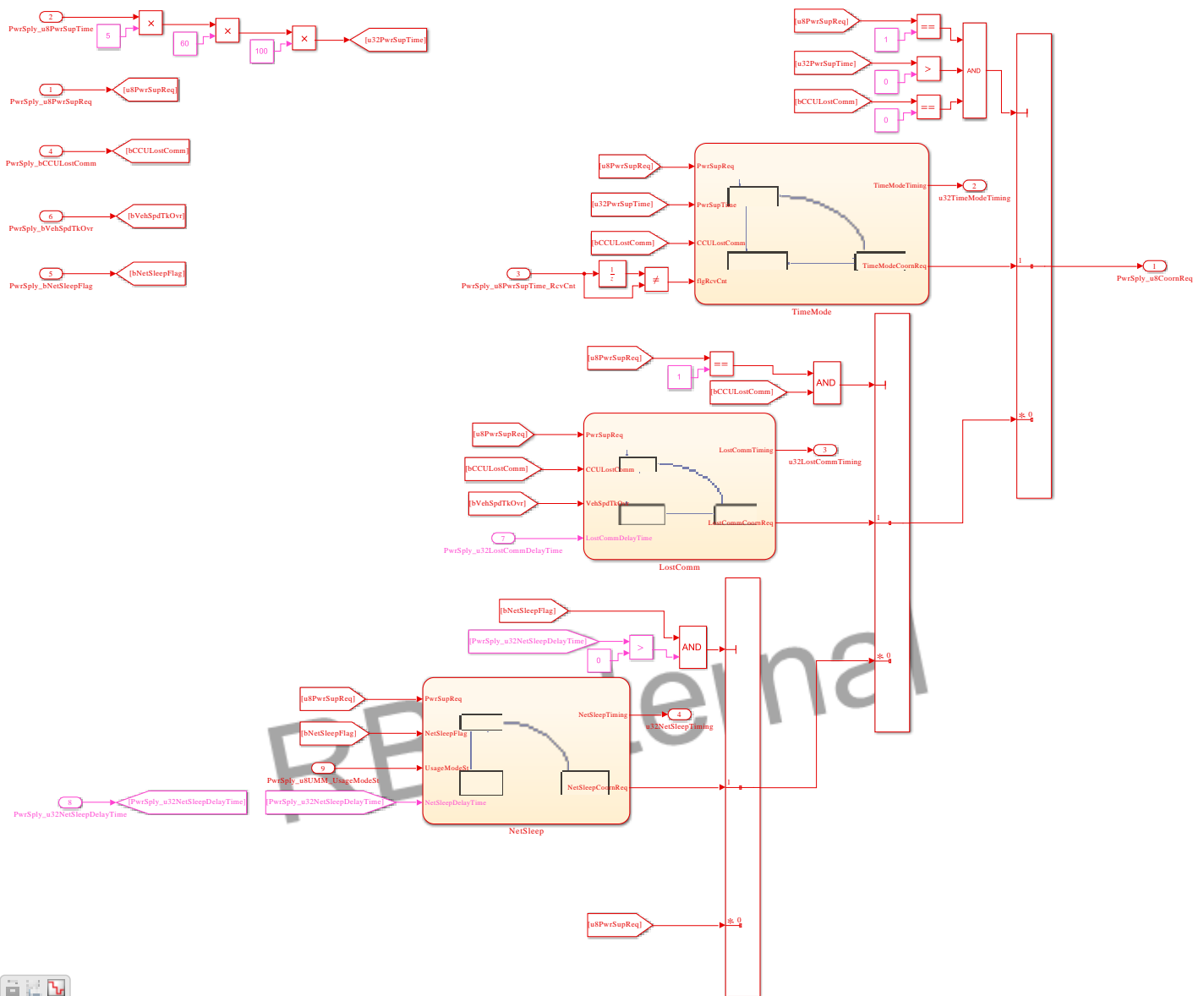Figure   26   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayKL1501   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runna-
ble_10ms_sys_PwrSplyDelayKL1501]

Figure   27   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayKL1502   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runna-
ble_10ms_sys_PwrSplyDelayKL1502]

Figure   28   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp26   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp26]
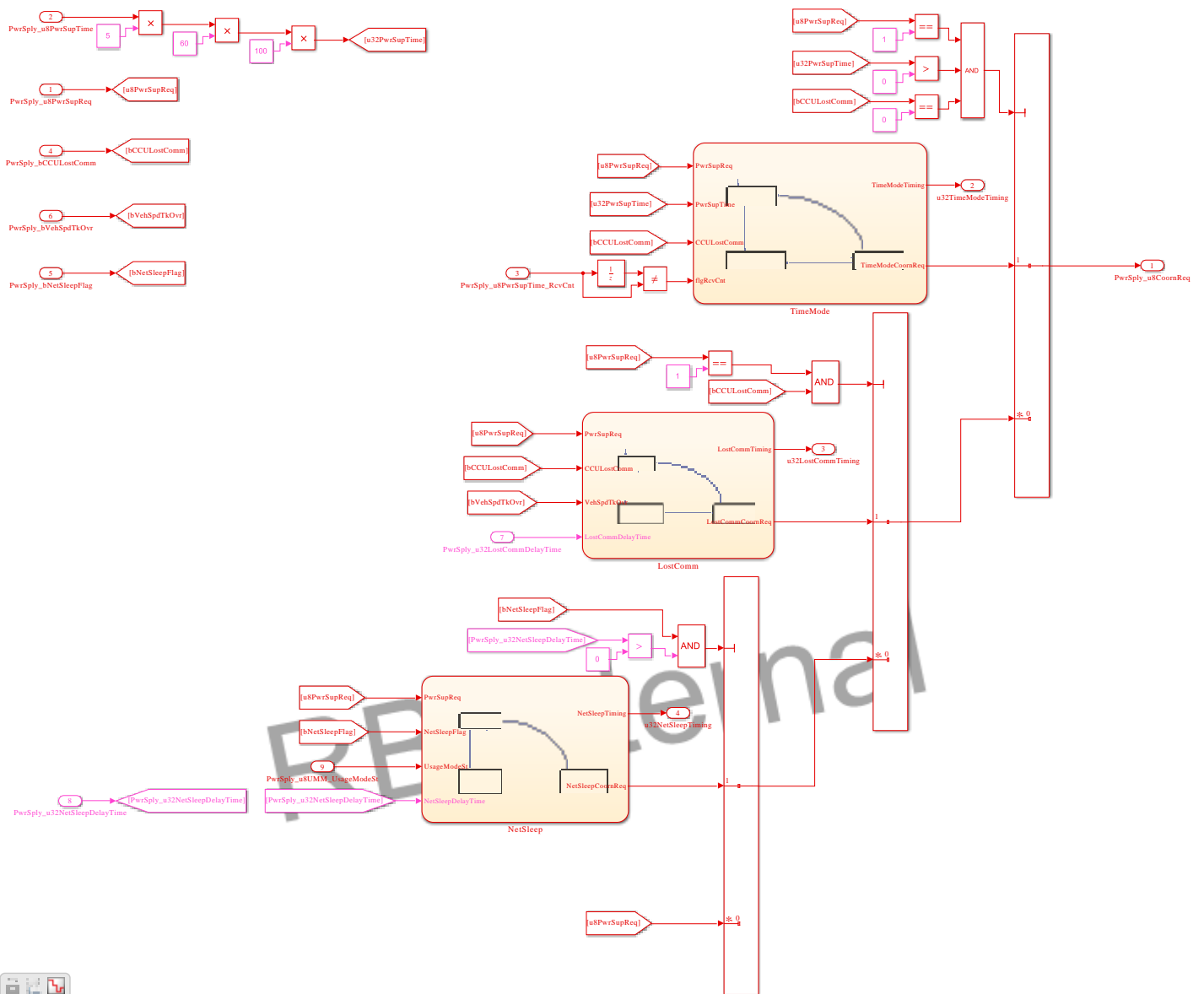

Figure   29   KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp27   [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp27]

Figure 30 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp28 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp28]
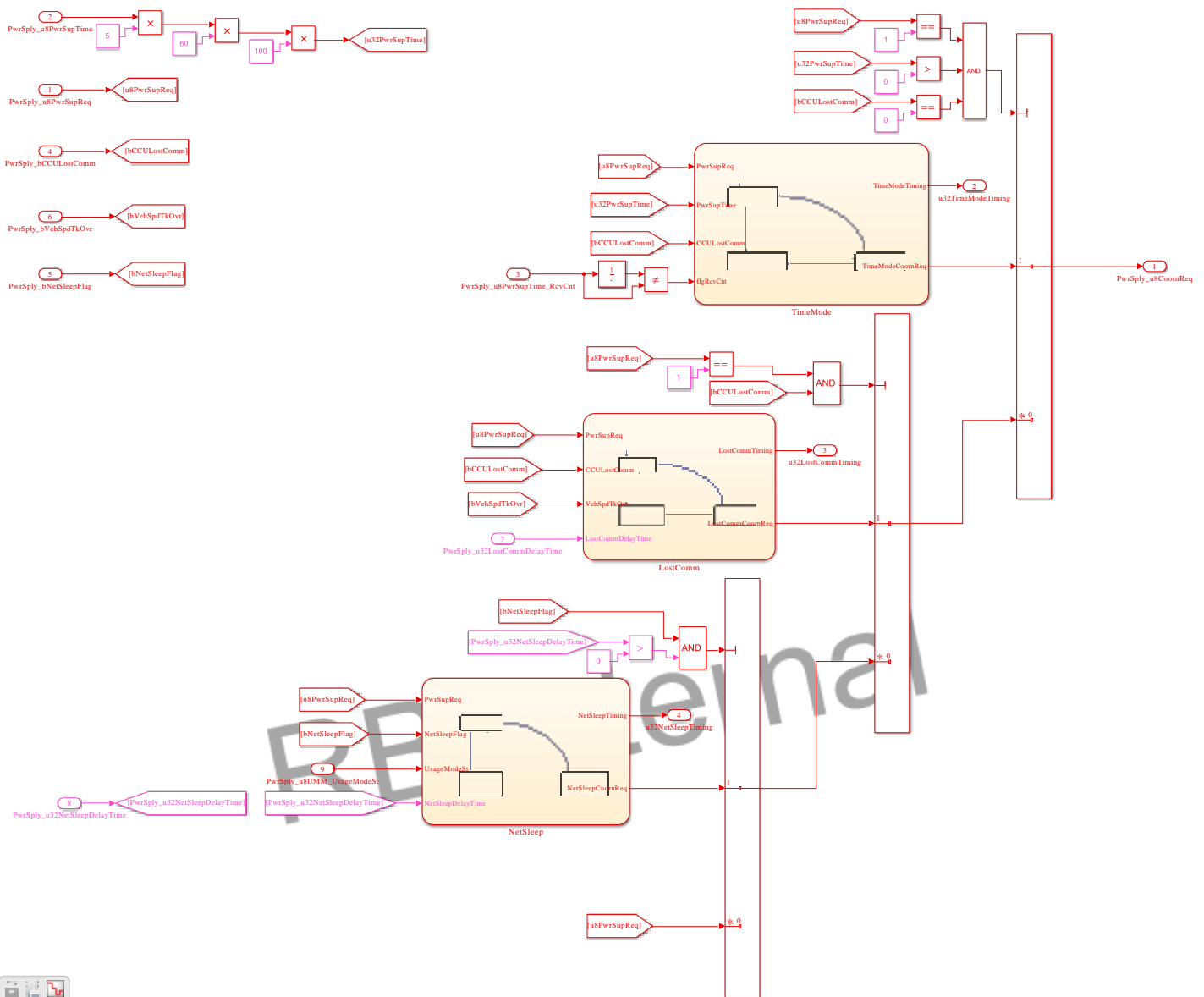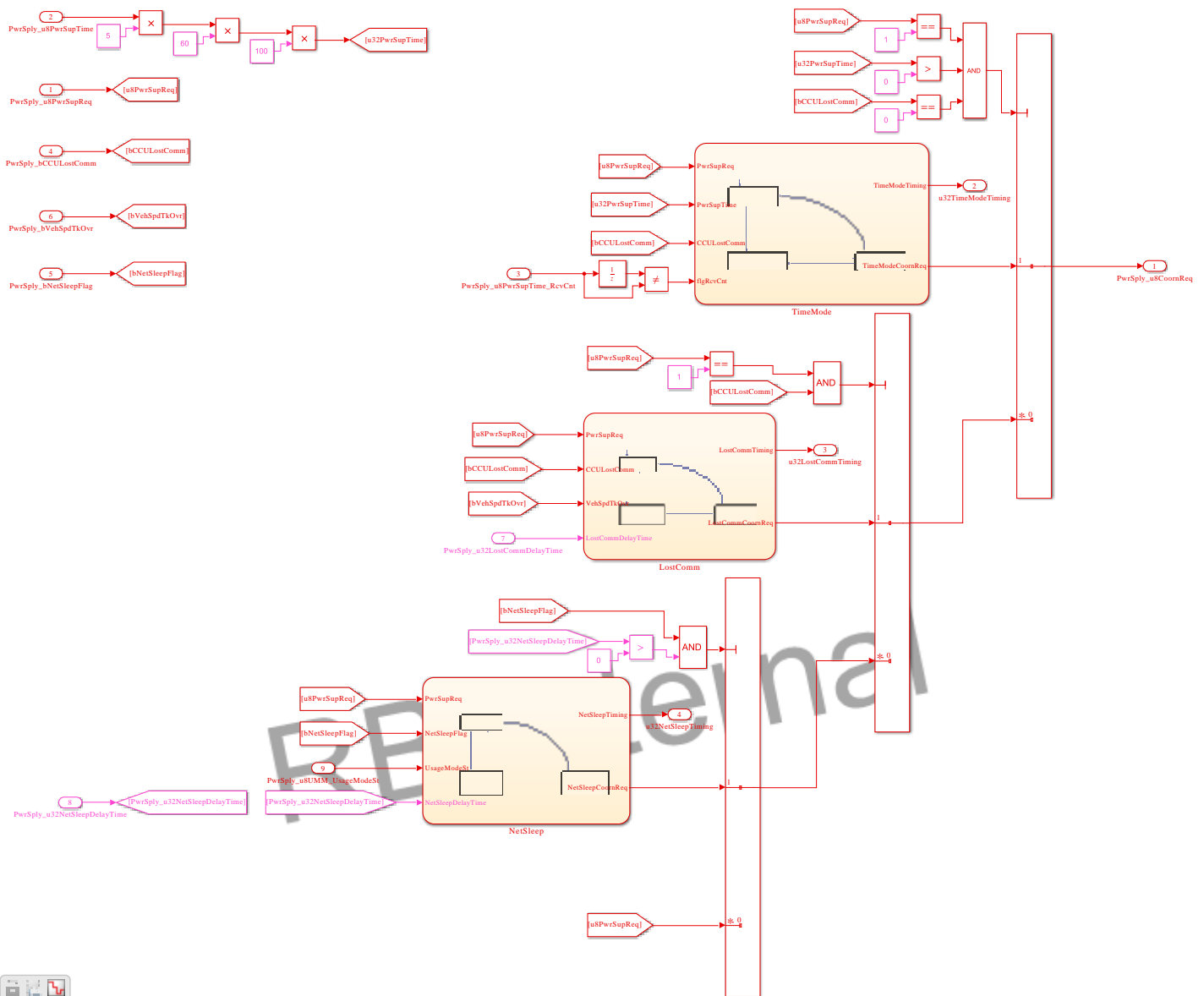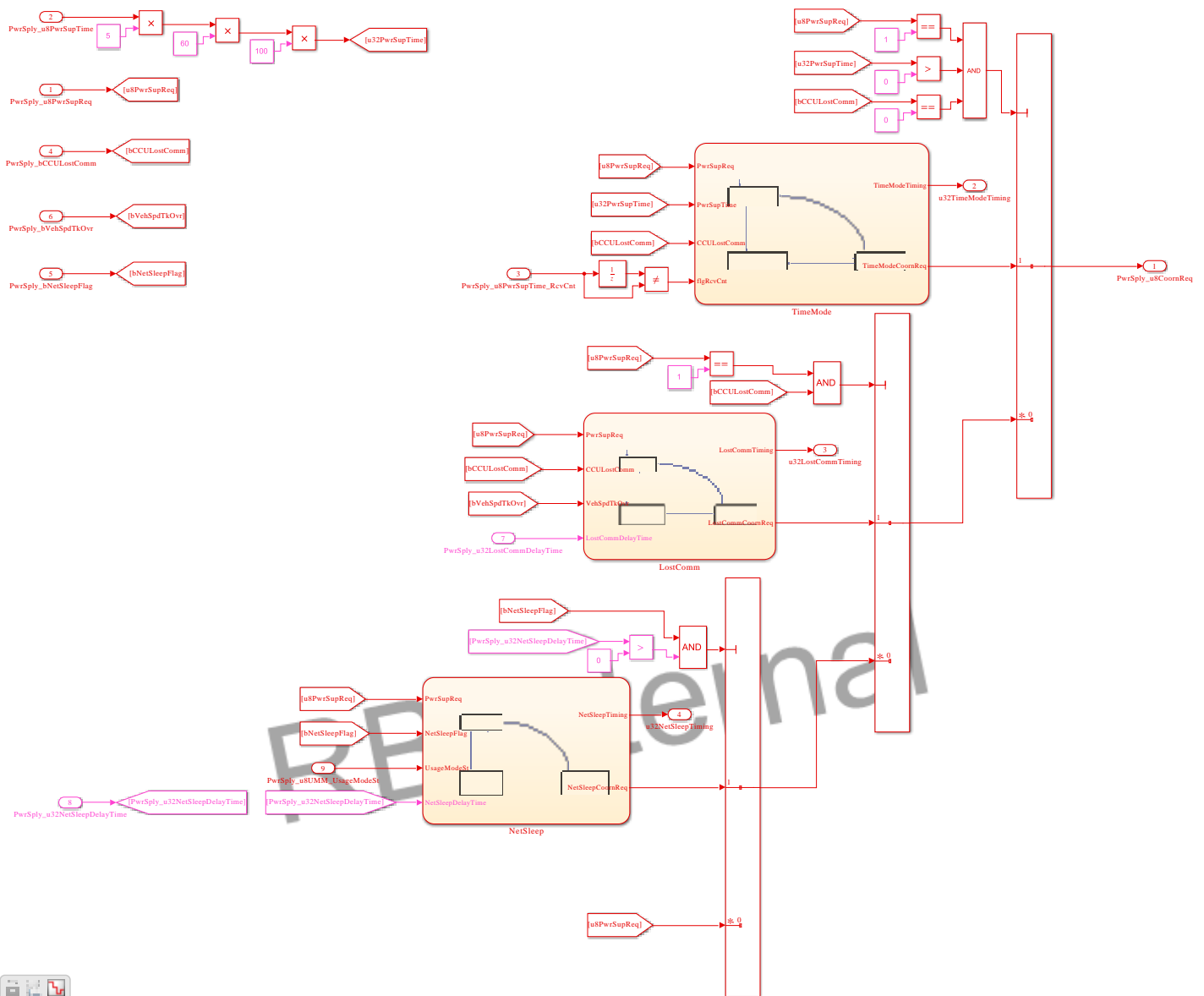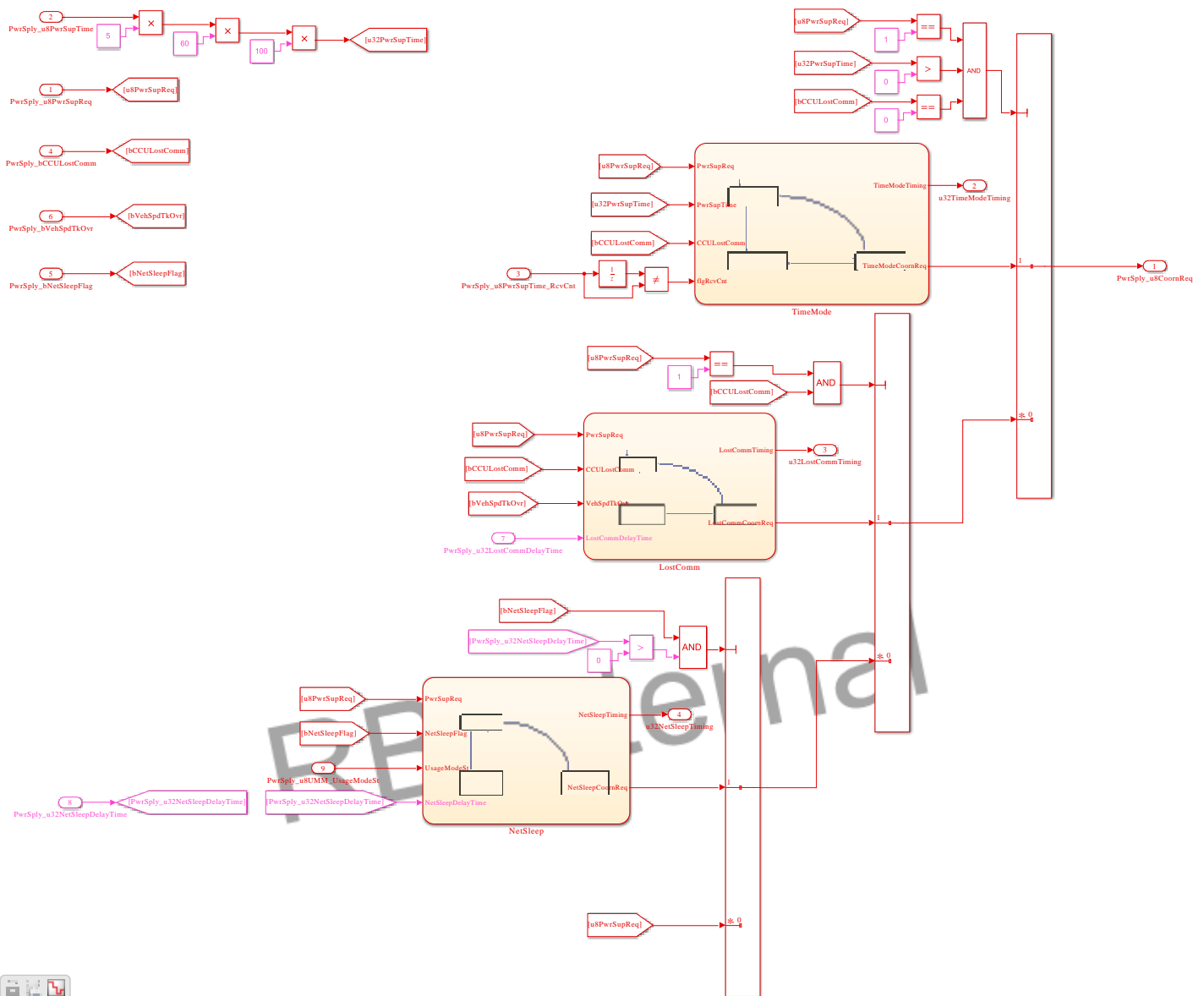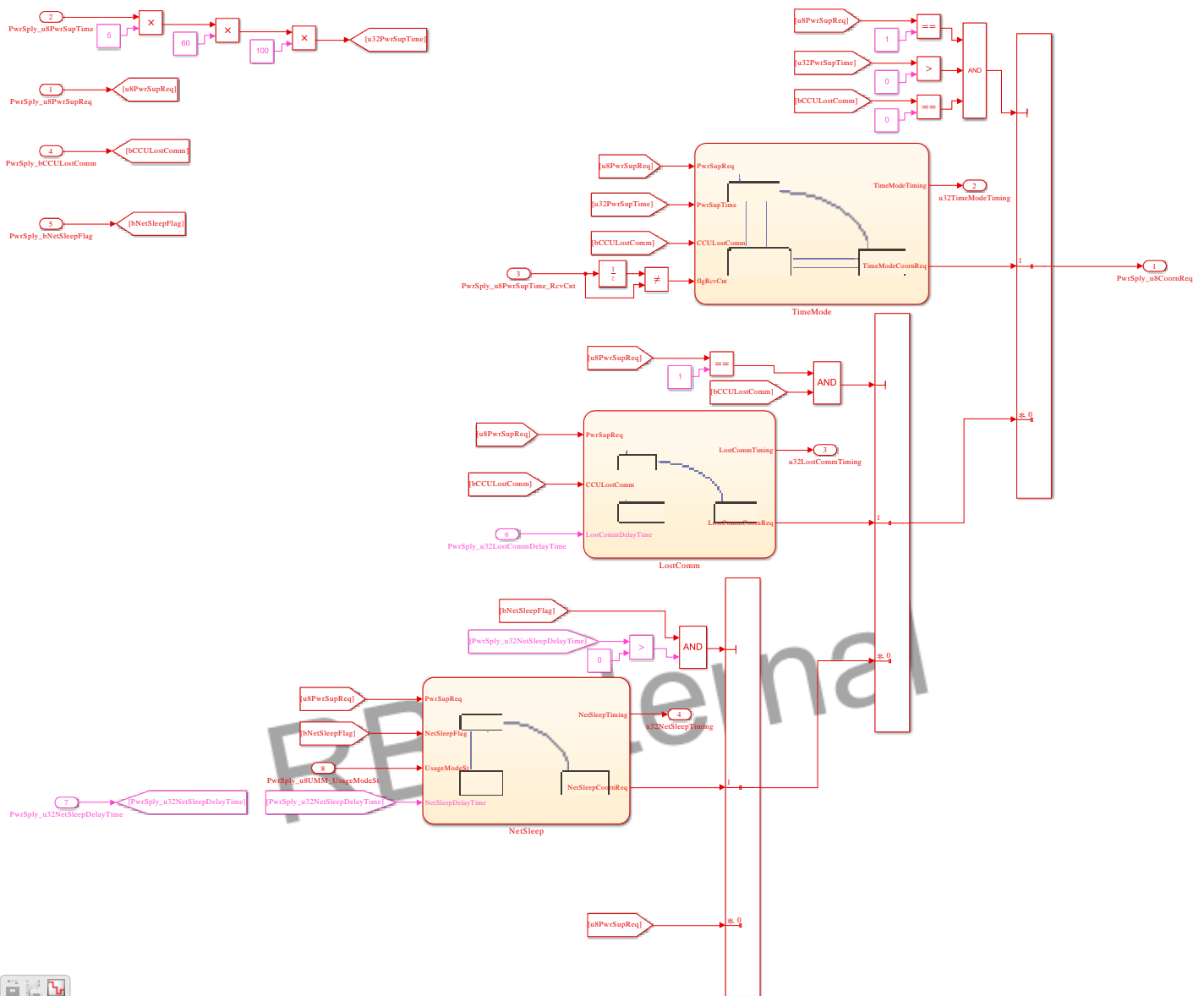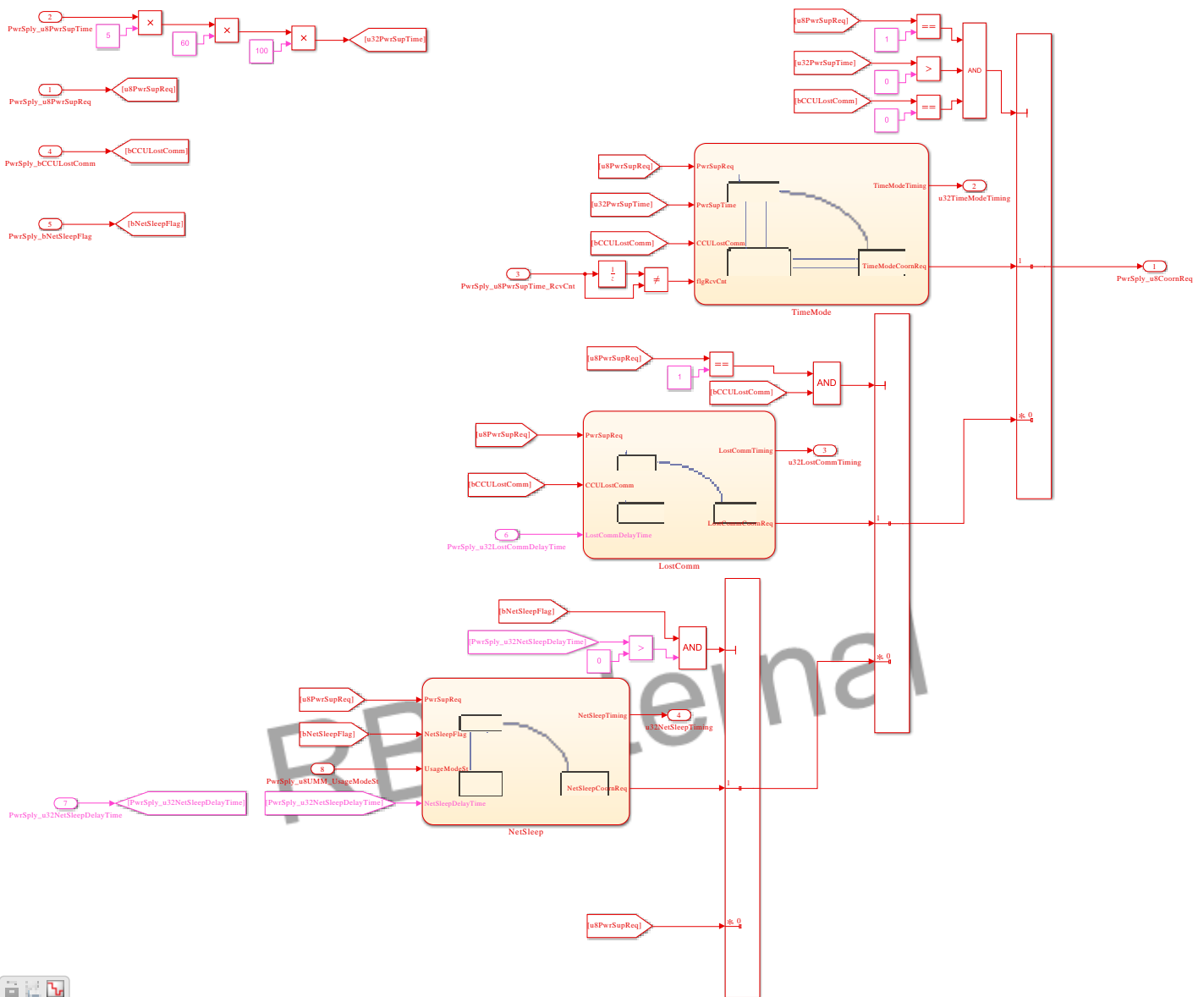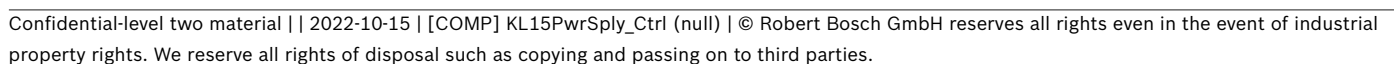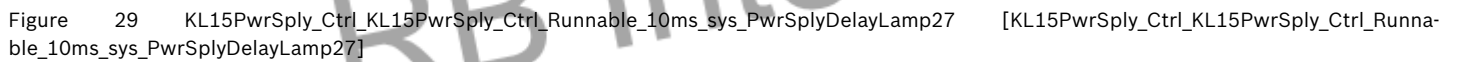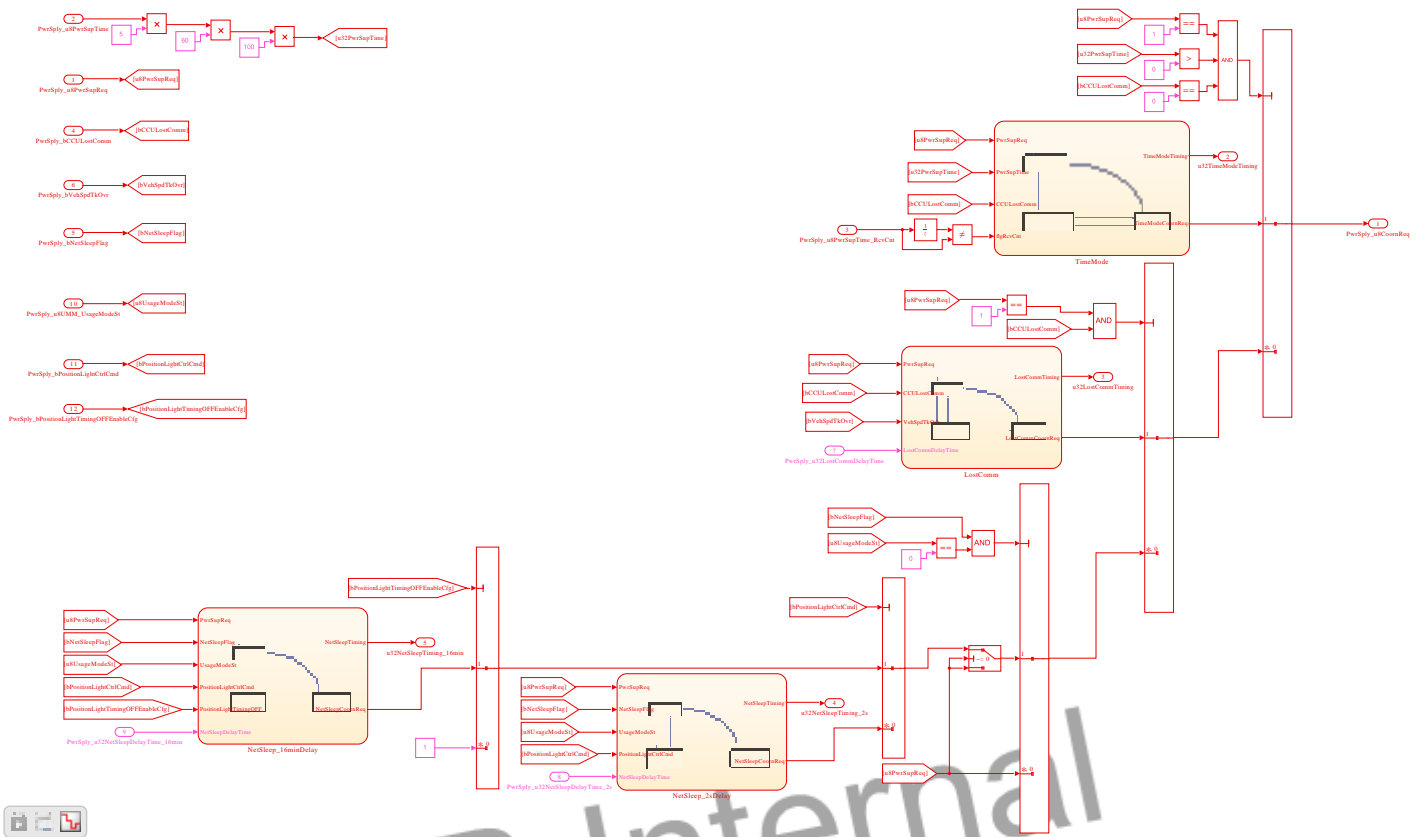

Figure 31 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp29 [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_10ms_sys_PwrSplyDelayLamp29]
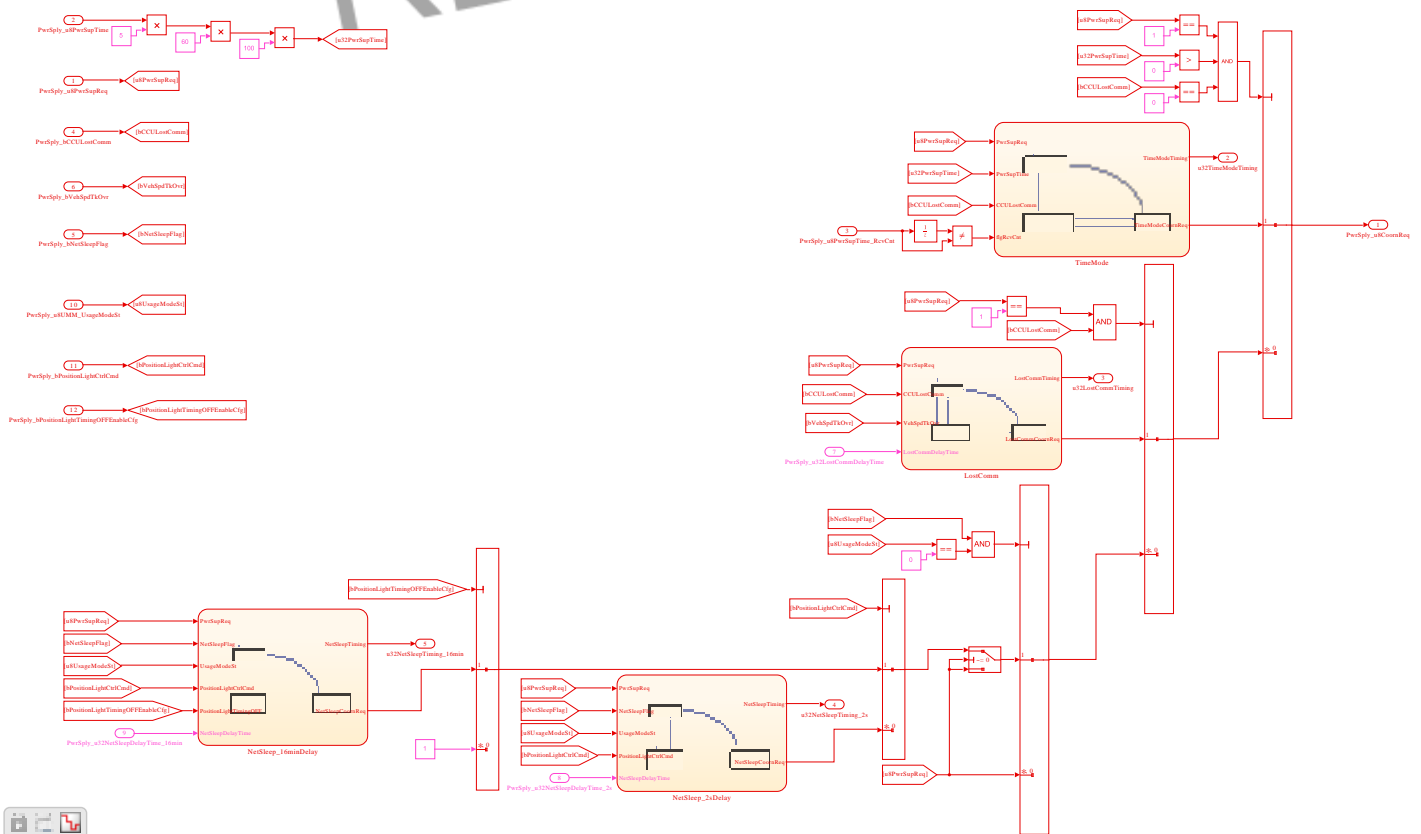
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Figure 32 KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_Init [KL15PwrSply_Ctrl_KL15PwrSply_Ctrl_Runnable_Init]

Table 1 Data Types for port interfaces [PortInterfaceDataTypes]

Port	AccessMode	Interface	DE	Datatype
PwrSply_au8PwrSup	ImplicitReceive	PwrSply_au8PwrSup	Val	uint8
PwrSply_au8PwrSupTime_RcvCnt	ImplicitReceive	PwrSply_au8PwrSupTime_RcvCnt	Val	uint8
PwrSply_au8PwrSupTime	ImplicitReceive	PwrSply_au8PwrSupTime	Val	uint8
PwrSply_bCCULostComm	ImplicitReceive	PwrSply_bCCULostComm	Val	boolean
PwrSply_bPositionLightCtrlCmd01	ImplicitReceive	PwrSply_bPositionLightCtrlCmd01	Val	boolean
PwrSply_bPositionLightCtrlCmd02	ImplicitReceive	PwrSply_bPositionLightCtrlCmd02	Val	boolean
PwrSply_bNetSleepFlag	ImplicitReceive	PwrSply_bNetSleepFlag	Val	boolean
PwrSply_bPositionLightTimingOFFEnableCfg	ImplicitReceive	PwrSply_bPositionLightTimingOFFEnableCfg	Val	boolean
PwrSply_bVehSpdTkOvr	ImplicitReceive	PwrSply_bVehSpdTkOvr	Val	boolean
PwrSply_u8UMM_UsageModeSt	ImplicitReceive	PwrSply_u8UMM_UsageModeSt	Val	uint8
PwrSply_u8VehFLCM	ImplicitReceive	PwrSply_u8VehFLCM	Val	uint8
PwrSply_u8VehicleTypeCfg	ImplicitReceive	PwrSply_u8VehicleTypeCfg	Val	uint8
PwrSply_u8VMM_OTAModeSt	ImplicitReceive	PwrSply_u8VMM_OTAModeSt	Val	uint8
PwrSply_bPositionLightCtrlCmd03	ImplicitReceive	PwrSply_bPositionLightCtrlCmd03	Val	boolean
PwrSply_bPositionLightCtrlCmd04	ImplicitReceive	PwrSply_bPositionLightCtrlCmd04	Val	boolean
PwrSply_au8CoornReq	ImplicitSend	PwrSply_au8CoornReq	Val	uint8

3 Conversion forms
Table 2 Conversion forms

Name	Category	Unit	Contents int
CM_Curr_Ampr	LINEAR	Curr_A	
CM_boolean	TEXTTABLE	NoUnit	(FALSE,0),(TRUE,1)
CM_q1Em6	LINEAR	NoUnit	

4 Ports and Interfaces

4.1 Sender Receiver Interface and Ports

4.1.1 Incoming
Table 3 Incoming

Port	Variable	Description	Type
PwrSply_au8PwrSup	Val		ARRAY
PwrSply_au8PwrSupTime	Val		ARRAY
PwrSply_au8PwrSupTime_RcvCnt	Val		ARRAY
PwrSply_bCCULostComm	Val		VALUE
PwrSply_bNetSleepFlag	Val		VALUE
PwrSply_bPositionLightCtrlCmd01	Val		VALUE
PwrSply_bPositionLightCtrlCmd02	Val		VALUE
PwrSply_bPositionLightCtrlCmd03	Val		VALUE

Port	Variable	Description	Type
PwrSply_bPositionLightCtrlCmd04	Val		VALUE
PwrSply_bPositionLightTimingOF-FEnableCfg	Val		VALUE
PwrSply_bVehSpdTkOvr	Val		VALUE
PwrSply_u8UMM_UsageModeSt	Val		VALUE
PwrSply_u8VehFLCM	Val		VALUE
PwrSply_u8VehicleTypeCfg	Val		VALUE
PwrSply_u8VMM_OTAModeSt	Val		VALUE

4.1.2 Outgoing
Table 4 Outgoing

Port	Variable	Description	Type
PwrSply_au8CoornReq	Val		ARRAY

II Production Note

Table 5 Configuration chosen for DocuNG

Parameter	Value
User	
Project Name	KL15PwrSply_Ctrl
Generator Mode	Continue on non-fatal error
Ascet graphic generator engine	UnifiedGraphicGenerator
Matlab graphic generator engine	UnifiedGraphicGenerator
DocType	Det-SwCalDoc
Condition Evaluation	true
Sorting Algorithm	Config Order
Title Page Logo	
Print Algorithms To Review	true
Support Fallback Language	true
Print List Of Converted System Constants	true
Include Function Information Chapter	true
Create Label Alias Mapping	true
HTML	false
PDF	true
PDF: Language	EN - English
PDF: Links in Graphics	true
PDF: Line Numbers	false
PDF: Confidential Level 2	true
PDF: Docu Security Option	false
EHB	false

Table 6 Version Information

Program Module	Version
Product	AEEE-Pro 2020.1.0