HvacDampr_DD

[COMP]

I [HvacDampr_DD]

1 Function Definition

1.1 Purpose

HVAC Damper Device Driver

1.2 Introduction

HVAC Damper Device Driver

2 Function Description

2.1 Behavior in normal mode

Figure 1 HvacDampr_DD [HvacDampr_DD]

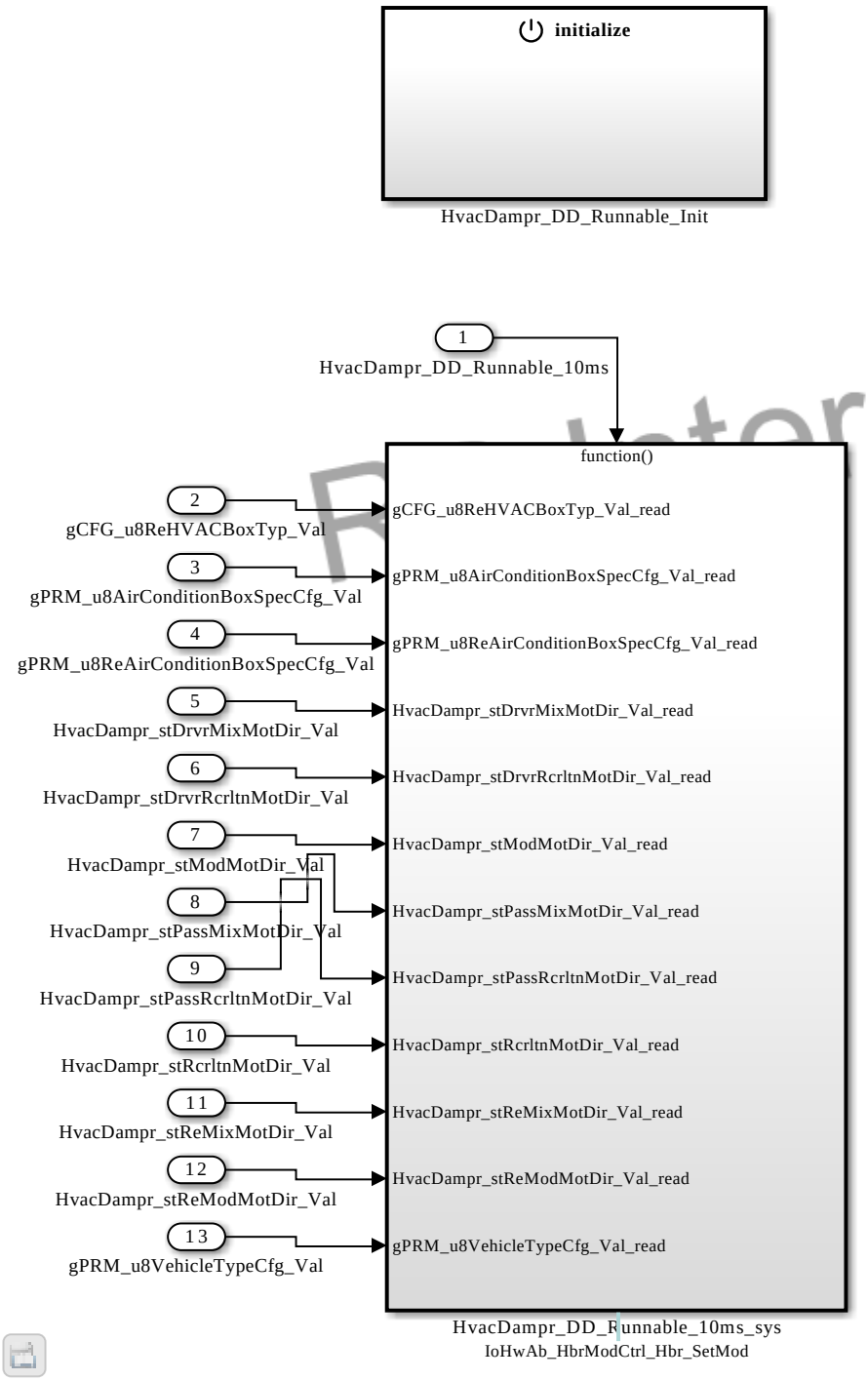

Figure 2 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys]

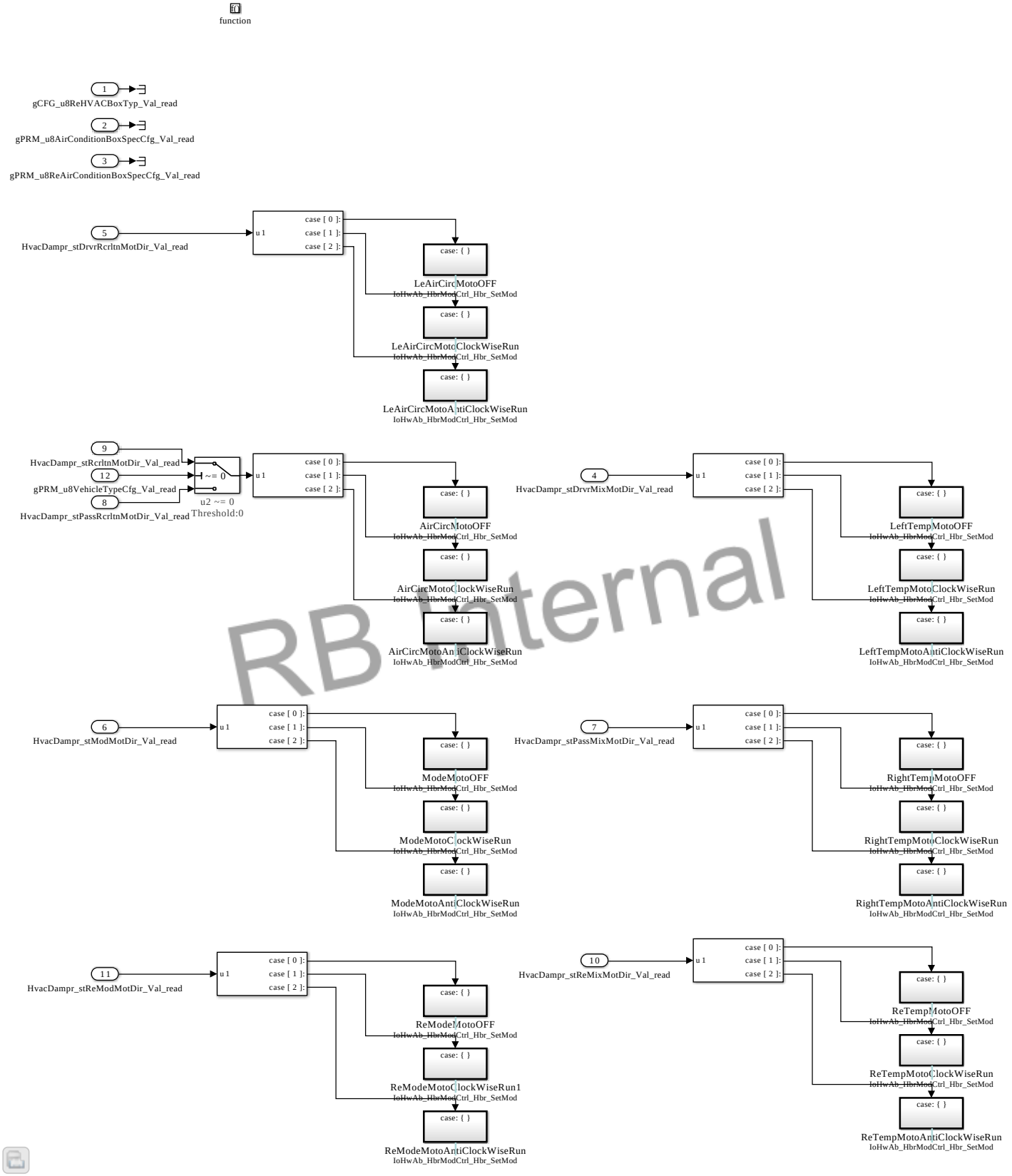

Figure 3 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoAntiClockWiseRun]

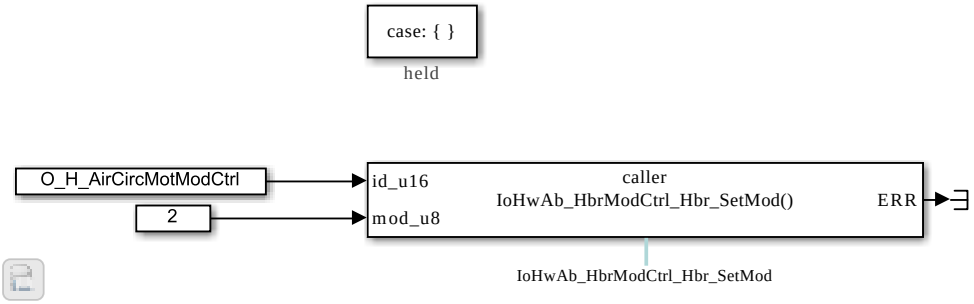

Figure 4 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoClockWiseRun]

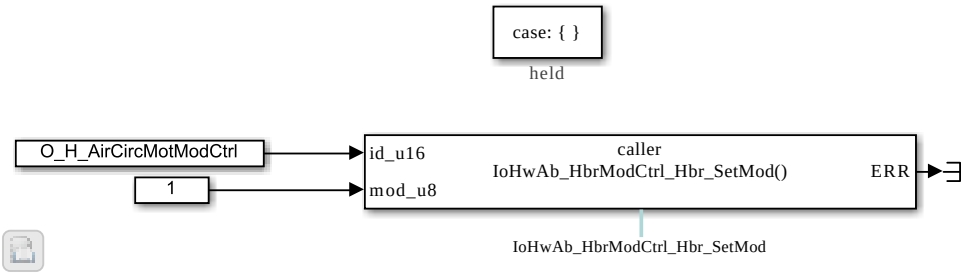

Figure 5 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_AirCircMotoOFF]

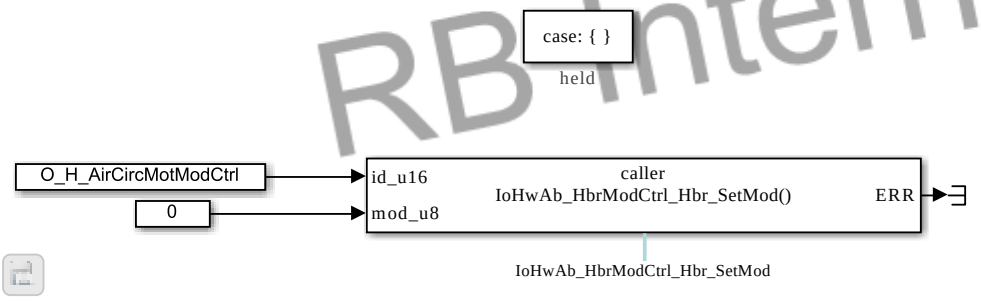

Figure 6 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoAntiClockWiseRun]

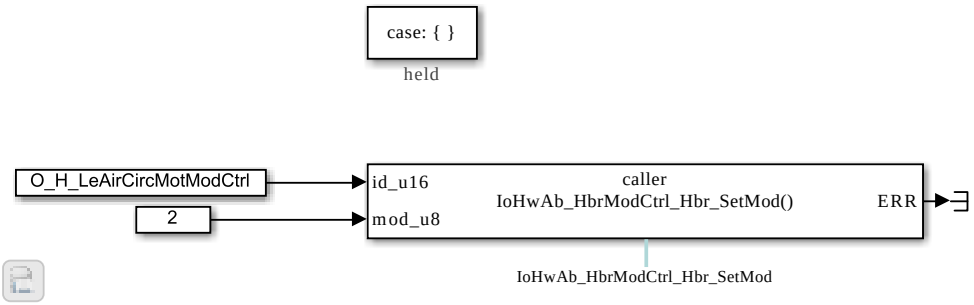

Figure 7 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoClockWiseRun]

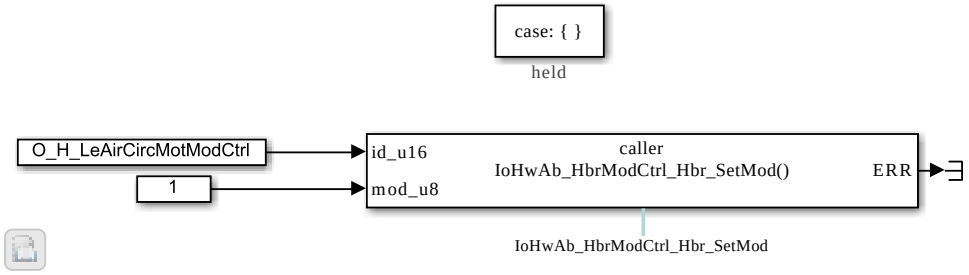

Figure 8 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeAirCircMotoOFF]

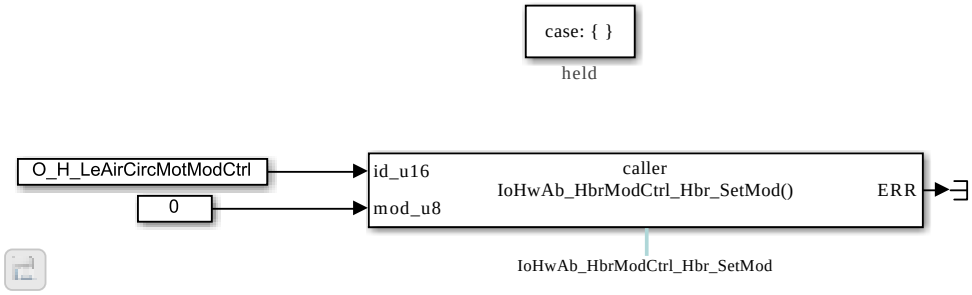

Figure 9 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoAntiClockWiseRun]

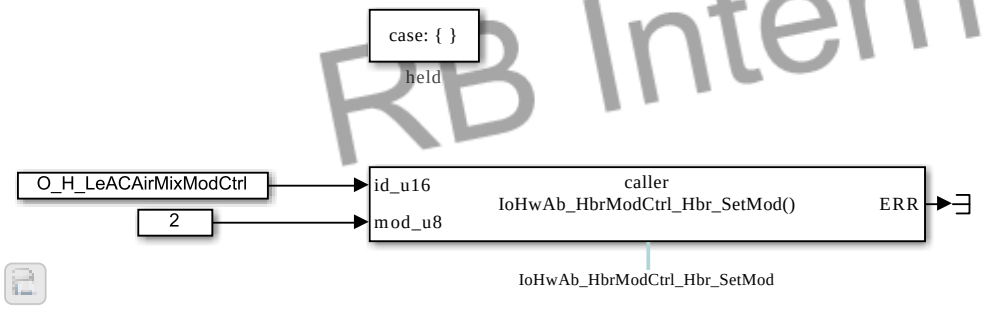

Figure 10 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoClockWiseRun]

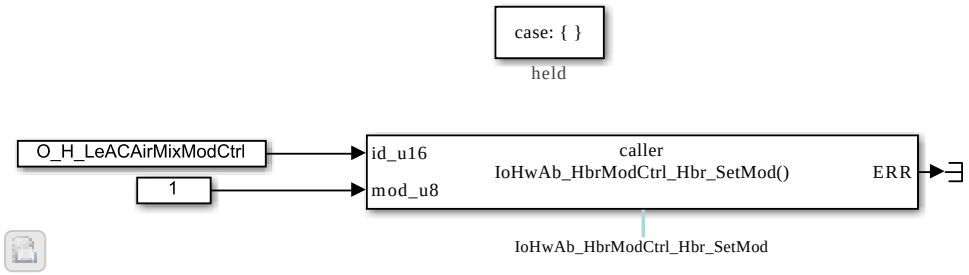

Figure 11 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_LeftTempMotoOFF]

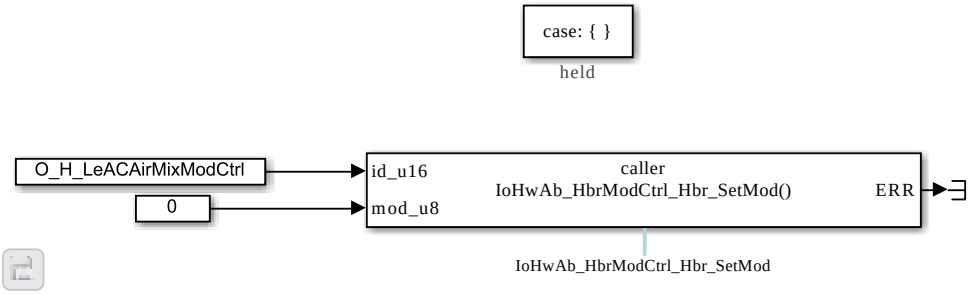

Figure 12 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoAntiClockWiseRun]

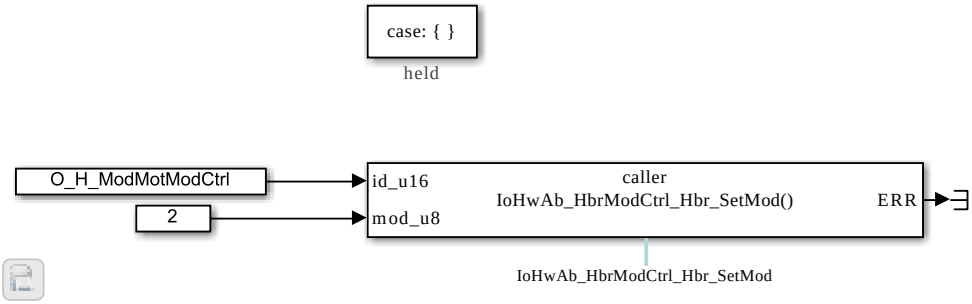

Figure 13 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoClockWiseRun]

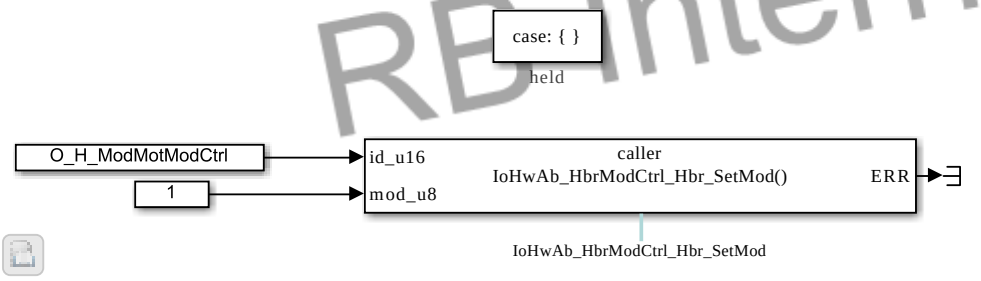

Figure 14 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ModeMotoOFF]

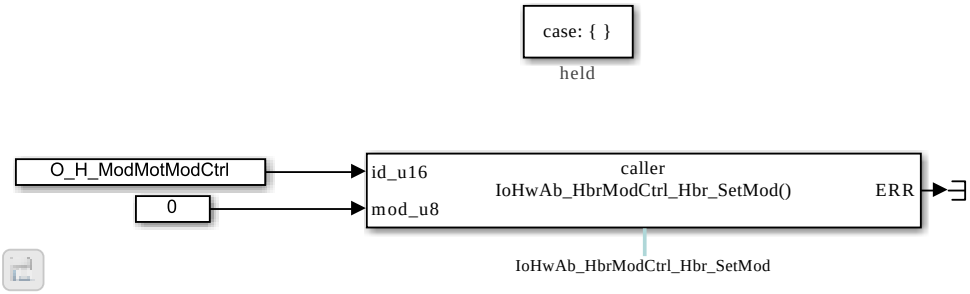

Figure 15 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoAntiClockWiseRun]

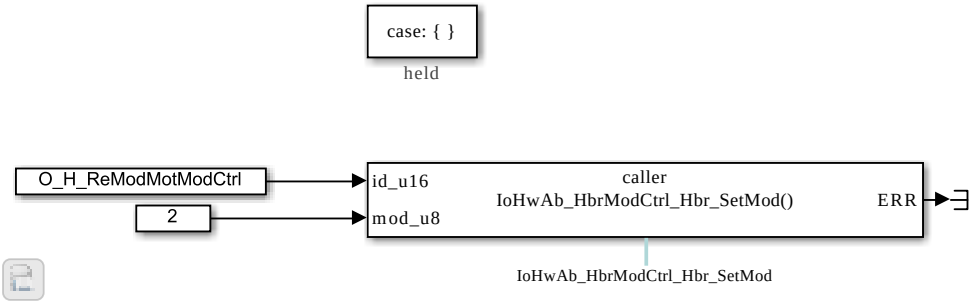

Figure 16 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoClockWiseRun1 [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoClockWiseRun1]

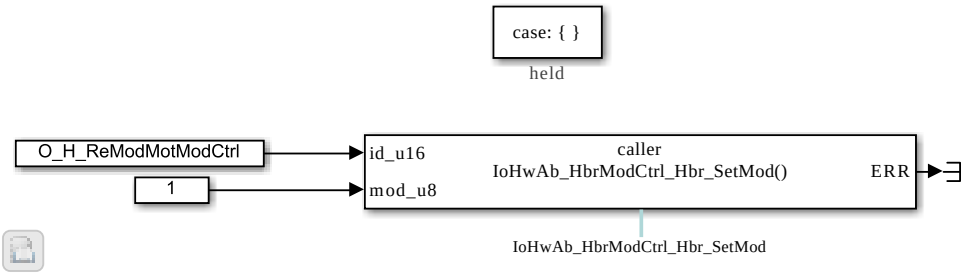

Figure 17 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReModeMotoOFF]

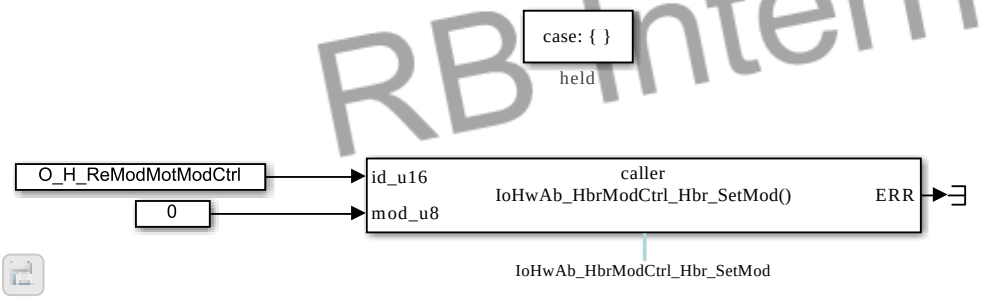

Figure 18 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoAntiClockWiseRun]

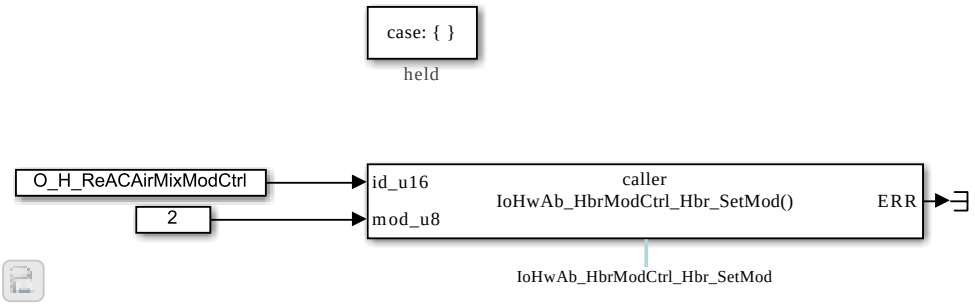

Figure 19 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoClockWiseRun]

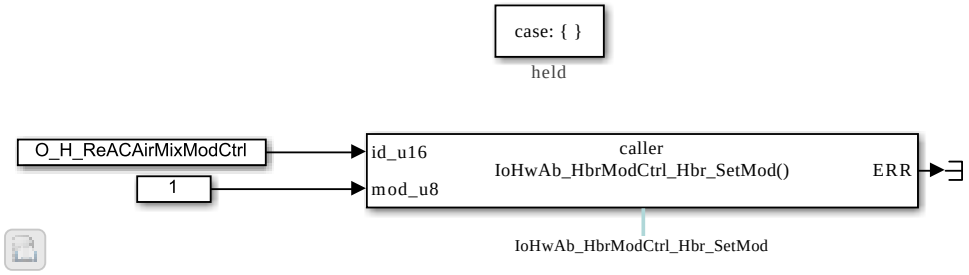

Figure 20 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_ReTempMotoOFF]

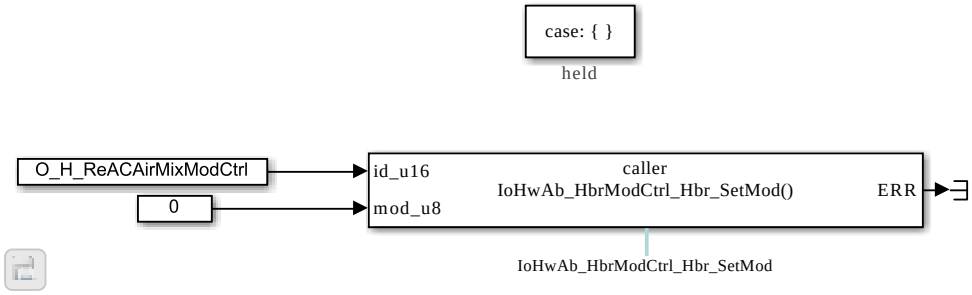

Figure 21 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoAntiClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoAntiClockWiseRun]

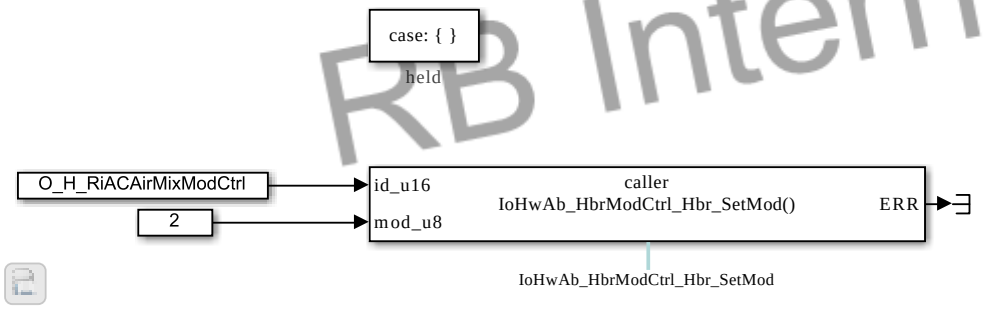

Figure 22 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoClockWiseRun [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoClockWiseRun]

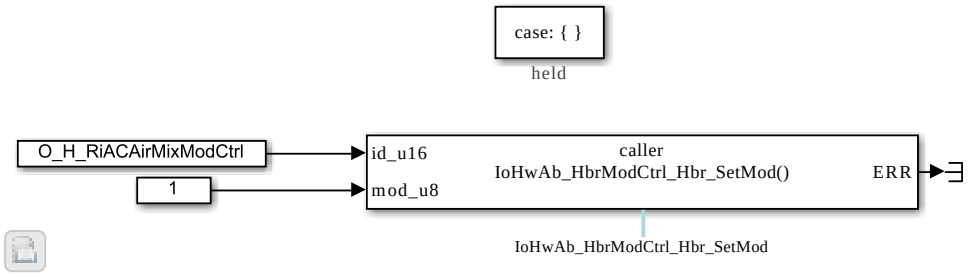

Figure 23 HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoOFF [HvacDampr_DD_HvacDampr_DD_Runnable_10ms_sys_RightTempMotoOFF]

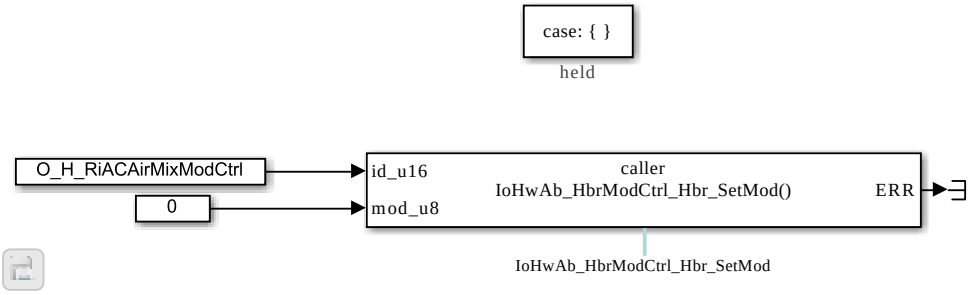

Figure 24 HvacDampr_DD_HvacDampr_DD_Runnable_Init [HvacDampr_DD_HvacDampr_DD_Runnable_Init]

Table 1 Data Types for port interfaces [PortInterfaceDataTypes]

Port	AccessMode	Interface	DE	Datatype
gCFG_u8ReHVACBoxTyp	ExplicitReceive	gCFG_u8ReHVACBoxTyp	Val	uint8
gPRM_u8AirConditionBoxSpecCfg	ExplicitReceive	gPRM_u8AirConditionBoxSpecCfg	Val	uint8
gPRM_u8ReAirConditionBoxSpecCfg	ExplicitReceive	gPRM_u8ReAirConditionBoxSpecCfg	Val	uint8
HvacDampr_stDrvrMixMotDir	ExplicitReceive	HvacDampr_stDrvrMixMotDir	Val	uint8
HvacDampr_stDrvrRcrltnMotDir	ExplicitReceive	HvacDampr_stDrvrRcrltnMotDir	Val	uint8
HvacDampr_stModMotDir	ExplicitReceive	HvacDampr_stModMotDir	Val	uint8
HvacDampr_stPassMixMotDir	ExplicitReceive	HvacDampr_stPassMixMotDir	Val	uint8
HvacDampr_stPassRcrltnMotDir	ExplicitReceive	HvacDampr_stPassRcrltnMotDir	Val	uint8
HvacDampr_stRcrltnMotDir	ExplicitReceive	HvacDampr_stRcrltnMotDir	Val	uint8
HvacDampr_stReMixMotDir	ExplicitReceive	HvacDampr_stReMixMotDir	Val	uint8
HvacDampr_stReModMotDir	ExplicitReceive	HvacDampr_stReModMotDir	Val	uint8
gPRM_u8VehicleTypeCfg	ExplicitReceive	gPRM_u8VehicleTypeCfg	Val	uint8

3 Conversion forms

Table 2 Conversion forms

Name	Category	Unit	Contents int
CM_Fac_q0p001	LINEAR		f(phys) := 1000phys
CM_Frq_q0p1_Hz	LINEAR	Hz	f(phys) := 10phys
CM_I_q0p25_mA	LINEAR	mA	f(phys) := 4phys
CM_N_q1_rpm	LINEAR		f(phys) := 1phys
CM_P_q2_hPa	LINEAR	hPa	f(phys) := 1phys / 2
CM_Perc_q0p0122_Perc	LINEAR	%	f(phys) := 81.92phys
CM_T_q0p1_o273p14_DegC	LINEAR	DegC	f(phys) := (10phys--2731.3999999999996)
CM_Ti_q0p001_s	LINEAR		f(phys) := 1000phys
CM_Ti_q1_us	LINEAR	us	f(phys) := 1phys
CM_U_q1_mV	LINEAR	mV	f(phys) := 1phys
CM_boolean	TEXTTABLE		(FALSE, 0), (TRUE, 1)
Dem_DTCFormatType	TEXTTABLE		(DEM_DTC_FORMAT_OBD, 0), (DEM_DTC_FORMAT_UDS, 1), (DEM_DTC_FORMAT_J1939, 2)

Name	Category	Unit	Contents int
Dem_DebounceResetStatusType	TEXTTABLE		(DEM_DEBOUNCE_STATUS_FREEZE, 0), (DEM_DEBOUNCE_STATUS_RESET, 1)
Dem_EventStatusType	TEXTTABLE		(DEM_EVENT_STATUS_PASSED, 0), (DEM_EVENT_STATUS_FAILED, 1), (DEM_EVENT_STATUS_PREPASSED, 2), (DEM_EVENT_STATUS_PREFAILED, 3), (DEM_EVENT_STATUS_FDC_THRESHOLD_REACHED, 4), (DEM_EVENT_STATUS_PASSED_CONDITIONS_NOT_FULFILLED, 5), (DEM_EVENT_STATUS_FAILED_CONDITIONS_NOT_FULFILLED, 6), (DEM_EVENT_STATUS_PREPASSED_CONDITIONS_NOT_FULFILLED, 7), (DEM_EVENT_STATUS_PREFAILED_CONDITIONS_NOT_FULFILLED, 8)
Dem_UdsStatusByteType	SCALE_LINEAR_AND_TEXTTABLE		
Identcl	IDENTICAL		
boolean_CompuMethod	TEXTTABLE		(FALSE, 0), (TRUE, 1)

II Production Note

Table 3 Configuration chosen for DocuNG

Parameter	Value
User	
Project Name	GAC_ZCUT_FRM_C0Sample
Generator Mode	Continue on non-fatal error
Ascet graphic generator engine	UnifiedGraphicGenerator
Matlab graphic generator engine	UnifiedGraphicGenerator
DocType	CDGBookAllDetailed
Condition Evaluation	true
Title Page Logo	
Print Algorithms To Review	true
Support Fallback Language	true
Print List Of Converted System Constants	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

Table 4 Version Information

Program Module	Version
Product	AEEE-Pro 2020.2.0