HvacBlowr_DD | 2022-10-17

HvacBlowr_DD

[COMP]

I [HvacBlowr_DD]

1 Function Definition

1.1 Purpose

HVAC Blower Device Driver

1.2 Introduction

HVAC Blower Device Driver

2 Function Description

2.1 Behavior in normal mode

Figure 1 HvacBlowr_DD [HvacBlowr_DD]

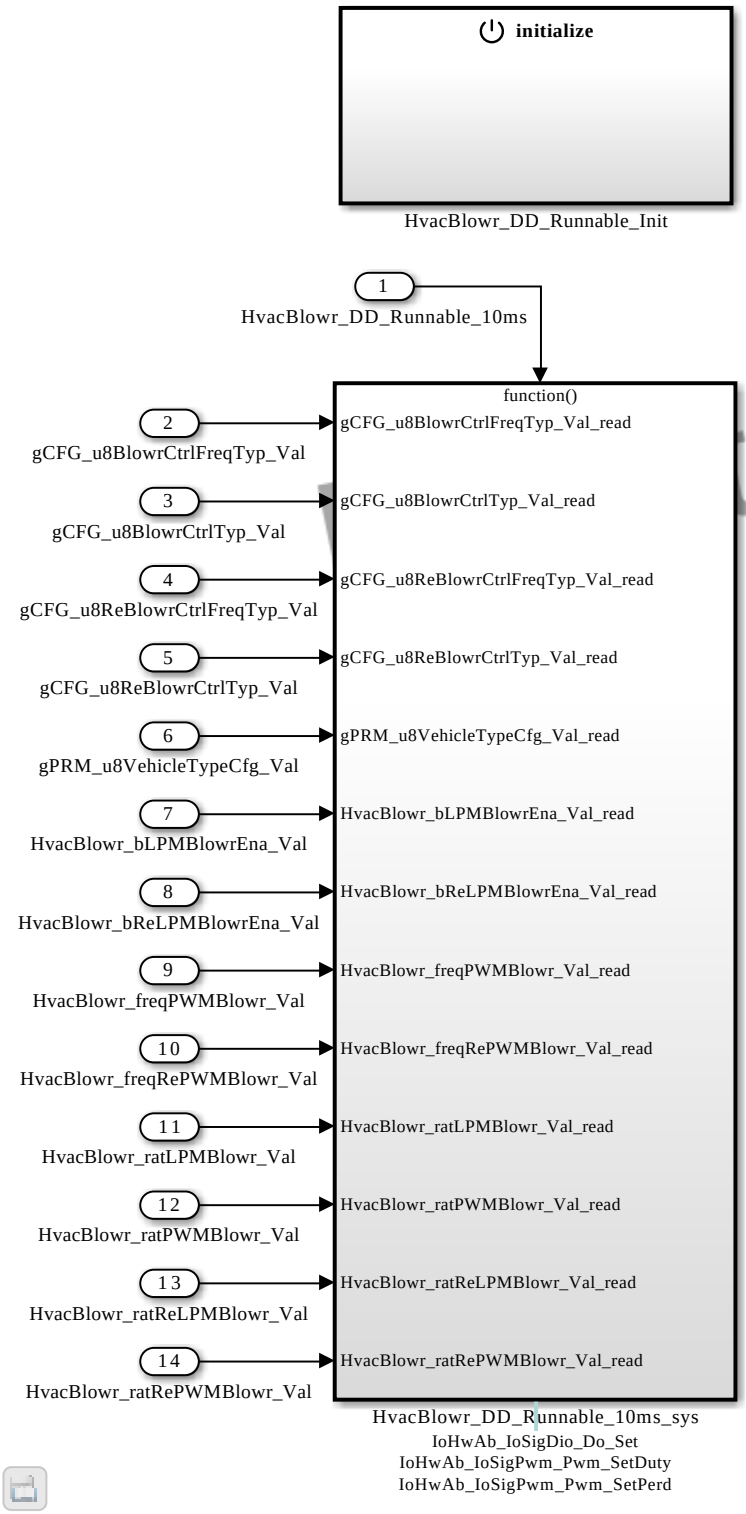

Figure 2 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys]

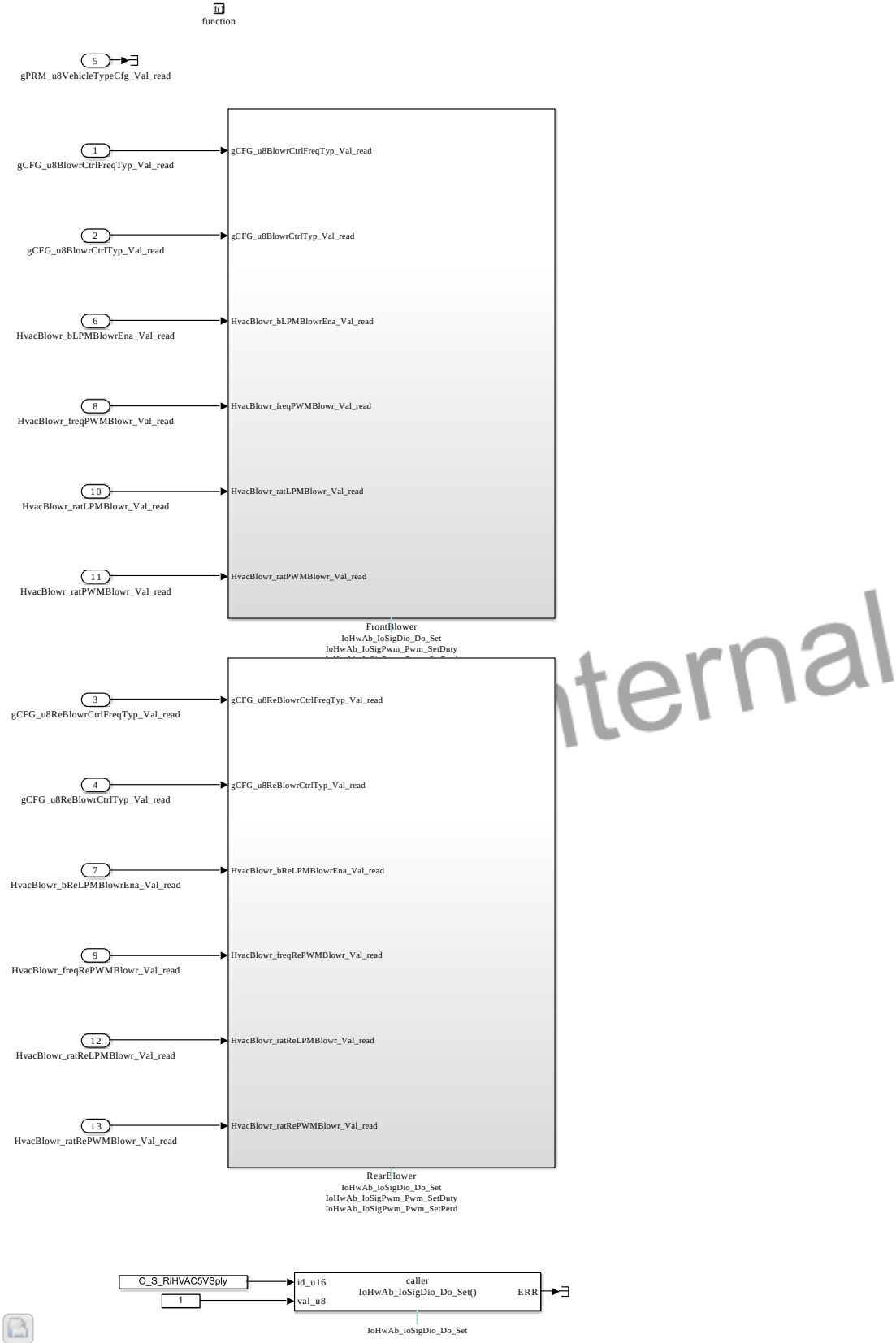

Figure 3 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower]

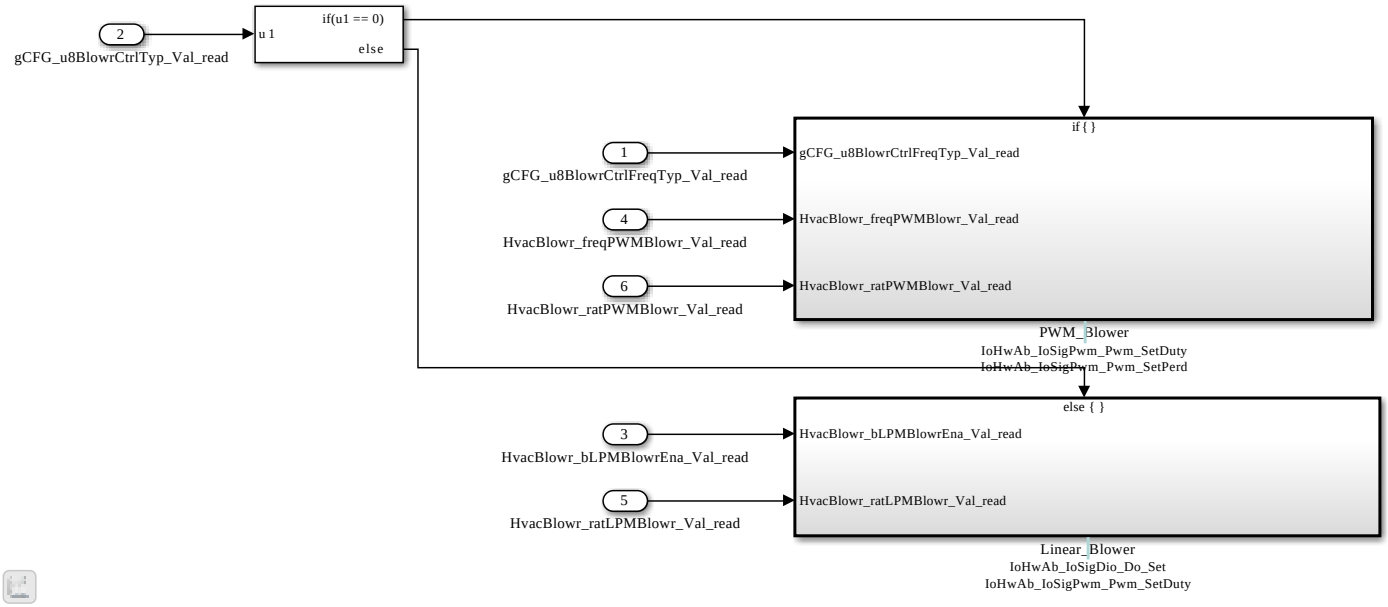

Figure 4 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower_Linear_Blower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower_Linear_Blower]

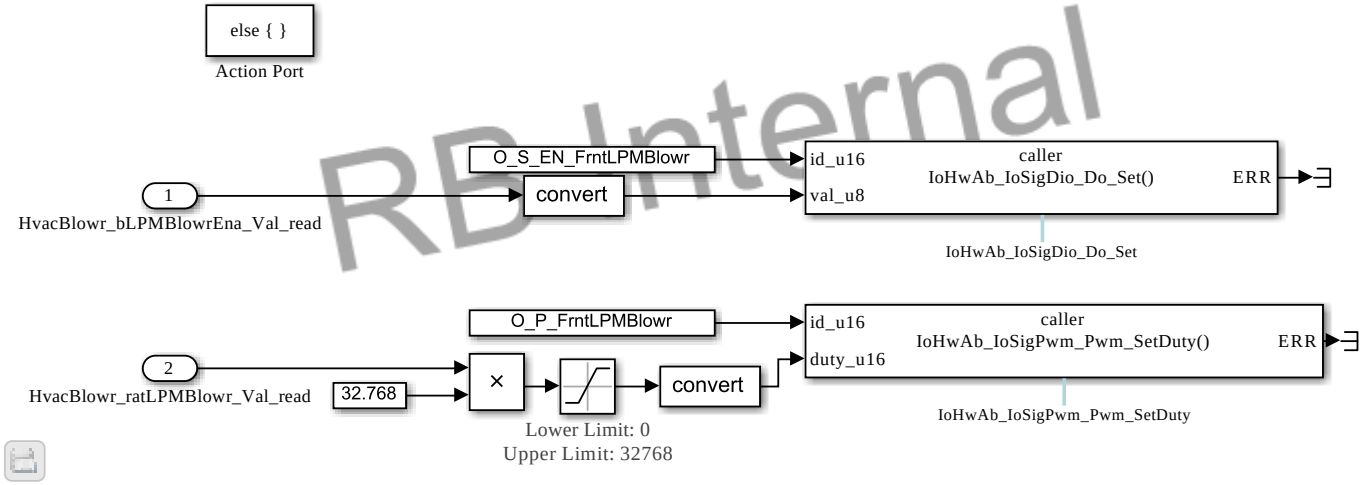

Figure 5 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower_PWM_Blower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_FrontBlower_PWM_Blower]

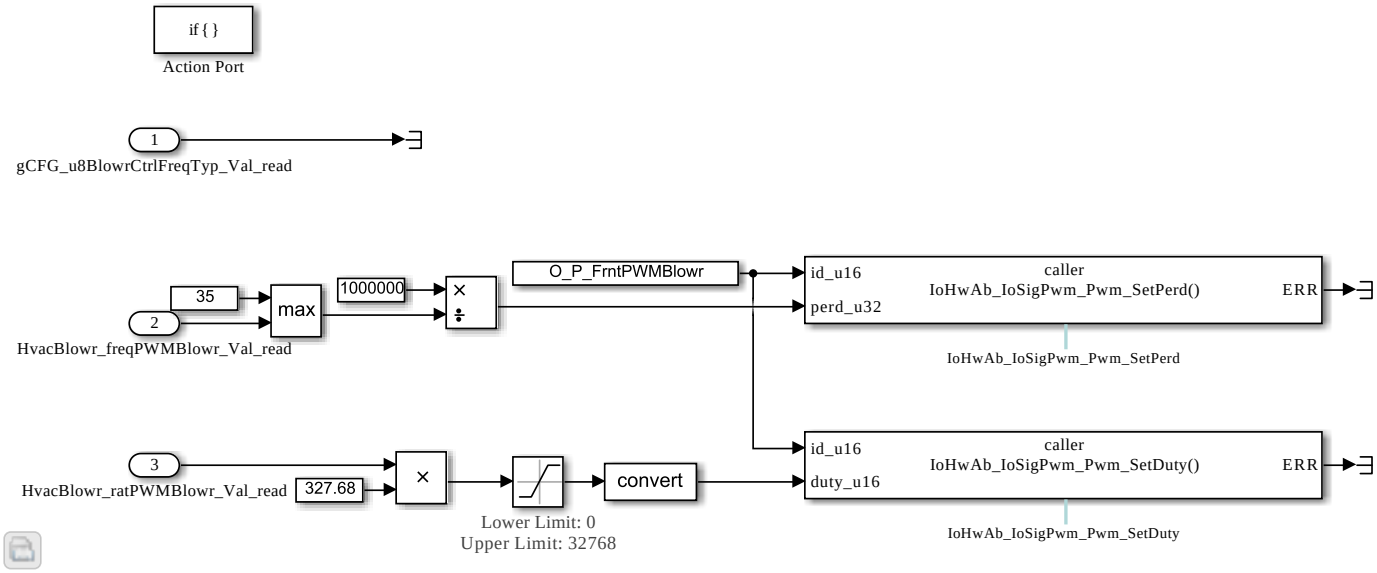

Figure 6 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower]

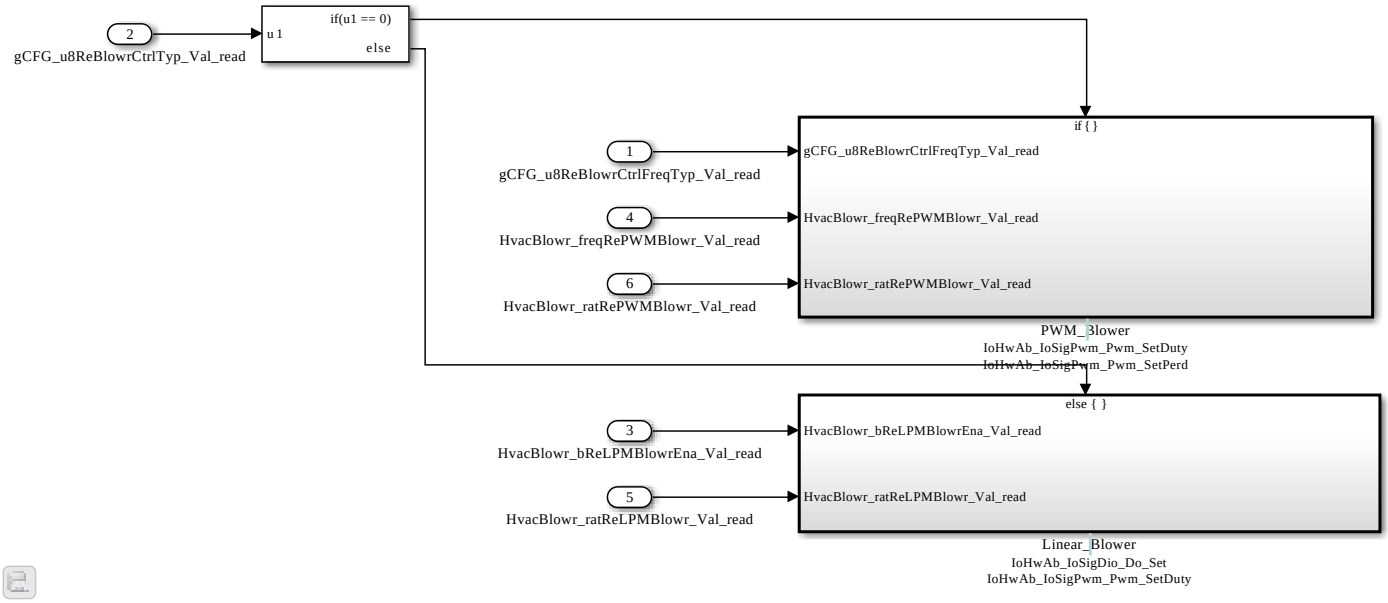

Figure 7 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower_Linear_Blower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower_Linear_Blower]

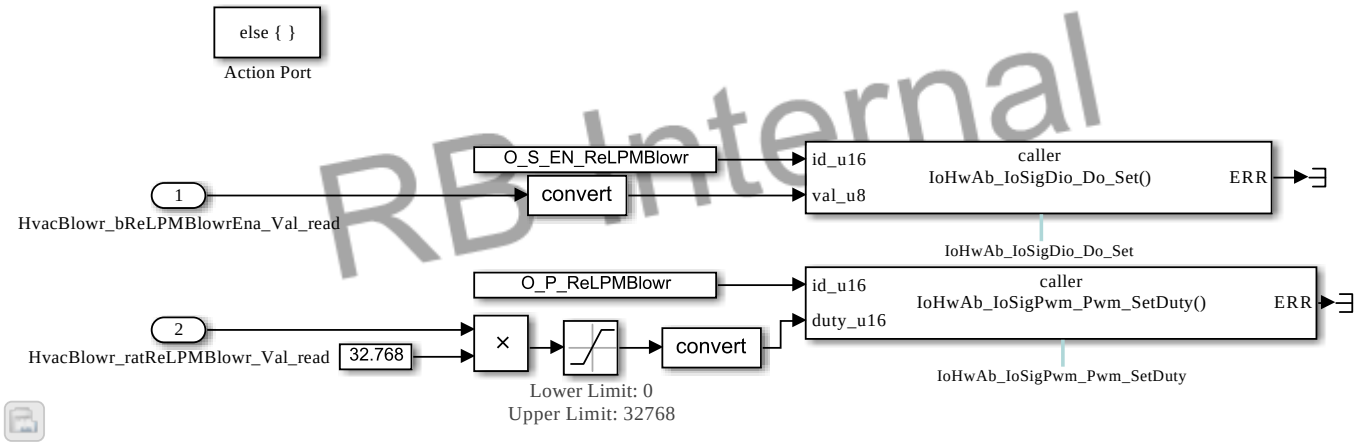

Figure 8 HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower_PWM_Blower [HvacBlowr_DD_HvacBlowr_DD_Runnable_10ms_sys_RearBlower_PWM_Blower]

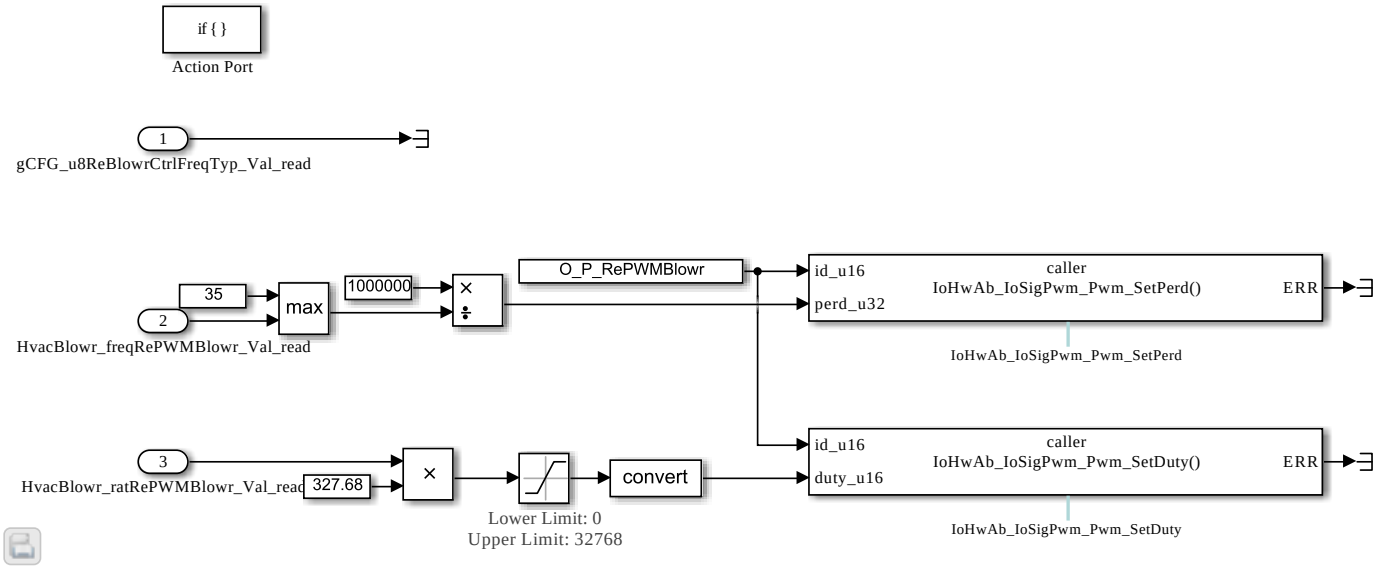

Figure 9 HvacBlowr_DD_HvacBlowr_DD_Runnable_Init [HvacBlowr_DD_HvacBlowr_DD_Runnable_Init]

Table 1 Data Types for port interfaces [PortInterfaceDataTypes]

Port	AccessMode	Interface	DE	Datatype
gCFG_u8BlowrCtrlFreqTyp	ImplicitReceive	gCFG_u8BlowrCtrlFreqTyp	Val	uint8
gCFG_u8BlowrCtrlTyp	ImplicitReceive	gCFG_u8BlowrCtrlTyp	Val	uint8
gCFG_u8ReBlowrCtrlFreq-Typ	ImplicitReceive	gCFG_u8ReBlowrCtrlFreq-Typ	Val	uint8
gCFG_u8ReBlowrCtrlTyp	ImplicitReceive	gCFG_u8ReBlowrCtrlTyp	Val	uint8
gPRM_u8VehicleTypeCfg	ImplicitReceive	gPRM_u8VehicleTypeCfg	Val	uint8
HvacBlowr_bLPMBlowrEna	ImplicitReceive	HvacBlowr_bLPMBlowrEna	Val	boolean
HvacBlowr_bReLPMBlowrE-na	ImplicitReceive	HvacBlowr_bReLPMBlowrE-na	Val	boolean
HvacBlowr_freqPWMBlowr	ImplicitReceive	HvacBlowr_freqPWMBlowr	Val	uint16
HvacBlowr_freqRePWM-Blowr	ImplicitReceive	HvacBlowr_freqRePWM-Blowr	Val	uint16
HvacBlowr_ratLPMBlowr	ImplicitReceive	HvacBlowr_ratLPMBlowr	Val	uint16
HvacBlowr_ratPWMBlowr	ImplicitReceive	HvacBlowr_ratPWMBlowr	Val	uint16
HvacBlowr_ratReLPMBlowr	ImplicitReceive	HvacBlowr_ratReLPMBlowr	Val	uint16
HvacBlowr_ratRePWMBlowr	ImplicitReceive	HvacBlowr_ratRePWMBlowr	Val	uint16

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_FOR-MAT_J1939, 2)
Dem_DebounceResetStatusTy-pe	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_STA-TUS_PASSED_CONDITIONS_NOT_FULFILLED, 5), (DEM_EVENT_STATUS_FAI-LED_CONDITIONS_NOT_FULFILLED, 6), (DEM_EVENT_STATUS_PREPASSED_CON-DITIONS_NOT_FULFILLED, 7), (DEM_EVENT_STATUS_PREFAILED_CONDITIO-NS_NOT_FULFILLED, 8)
Dem_UdsStatusByteType	SCALE_LINE-AR_AND_TEXT-TABLE		
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