| SuctnDoor_DD | 2022-10-13

SuctnDoor_DD

Software and calibration documentation (detailed) [COMP]

I [SuctnDoor_DD]

1 Function Definition

1.1 Purpose

Input the purpose of developing this function

1.2 Introduction

Suction door device driver

2 Function Description

2.1 Behavior in normal mode

Figure 1 SuctnDoor_DD [SuctnDoor_DD]

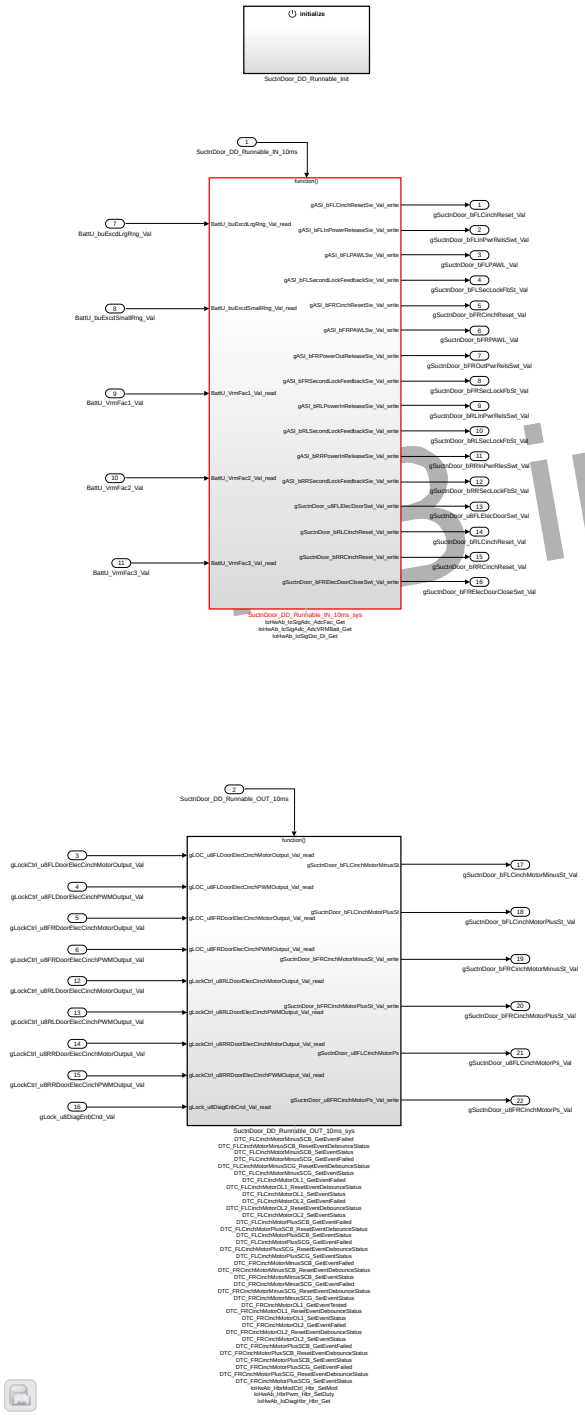


Figure 2 SuctnDoor_DD_SuctnDoor_DD_Runnable_IN_10ms_sys [SuctnDoor_DD_SuctnDoor_DD_Runnable_IN_10ms_sys]

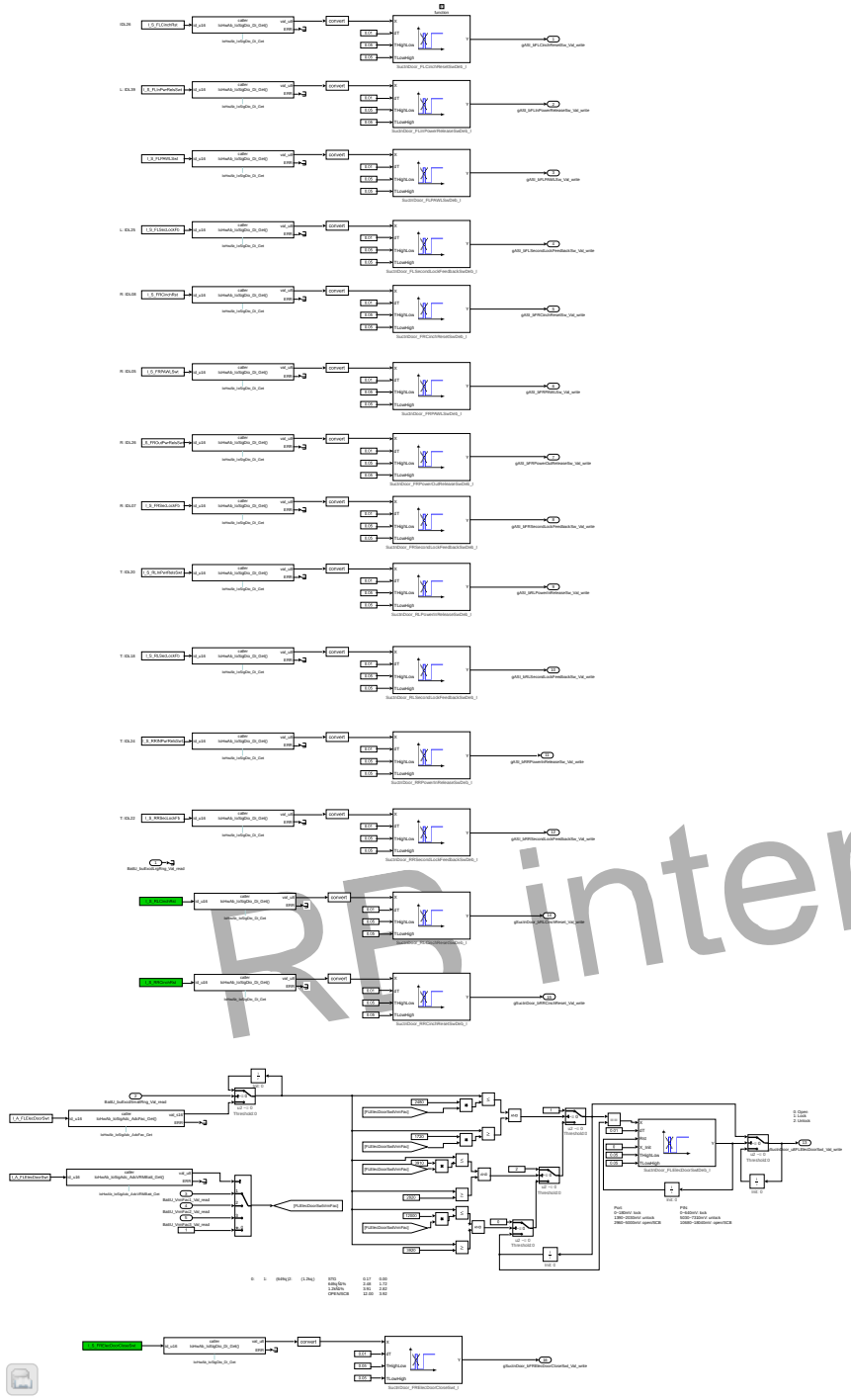


Figure 3 SuctnDoor_DD_SuctnDoor_DD_Runnable_Init [SuctnDoor_DD_SuctnDoor_DD_Runnable_Init]

Figure 4 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys]

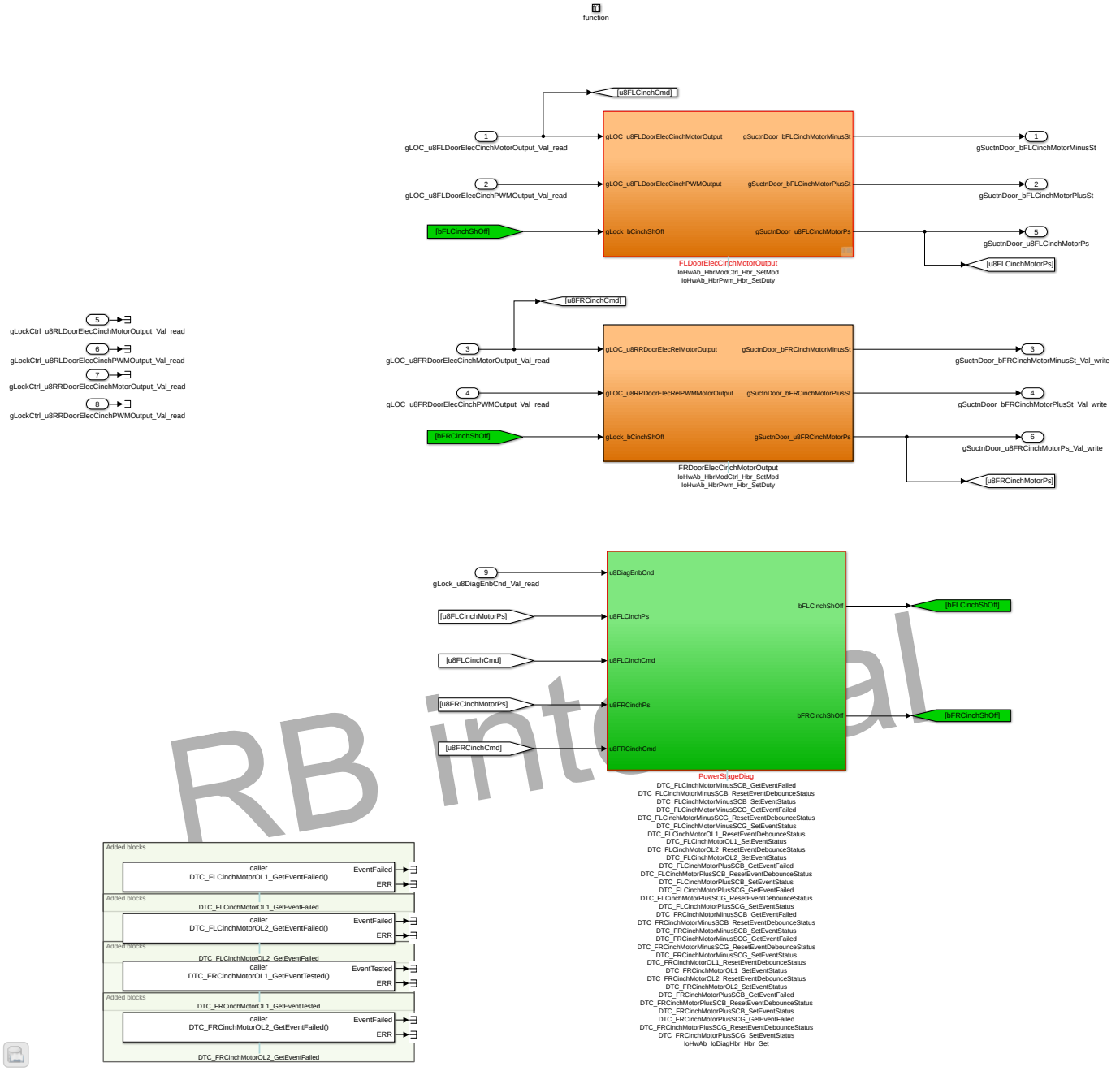
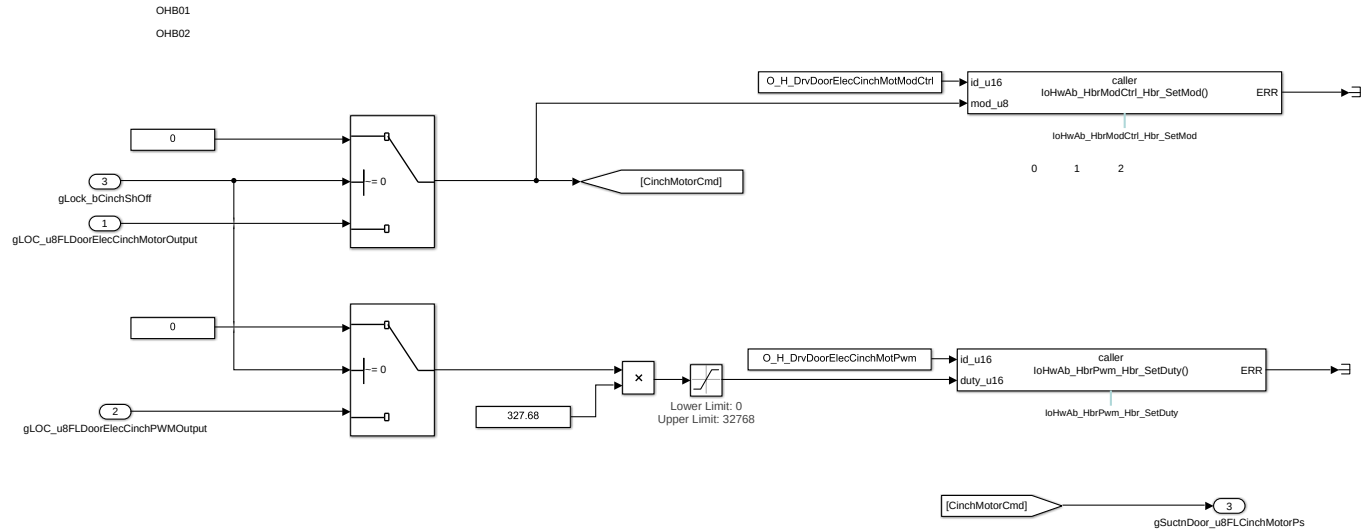


Figure 5 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput [SuctnDoor_DD_SuctnDoor_DD_Runnable_-OUT_10ms_sys_FLDoorElecCinchMotorOutput]



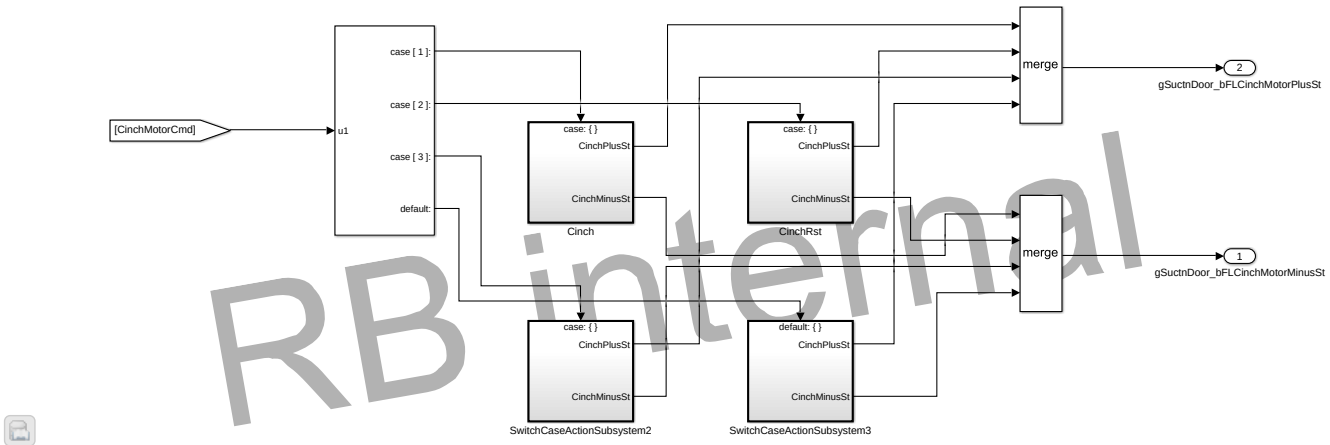


Figure 6 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_Cinch [SuctnDoor_DD_SuctnDoor_DD_-Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_Cinch]

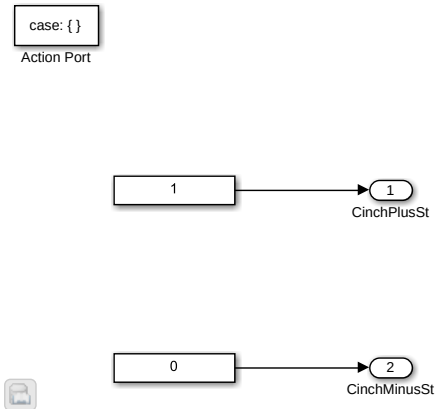


Figure 7 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_CinchRst [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_CinchRst]

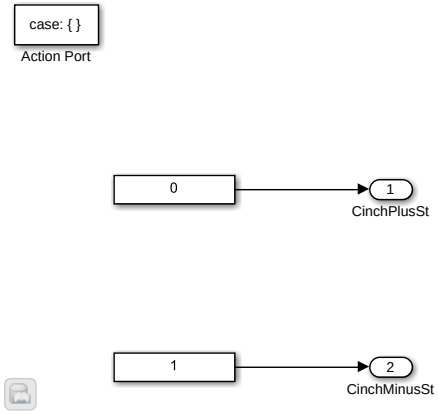


Figure 8 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_SwitchCaseActionSubsystem2 [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_SwitchCaseActionSubsystem2]

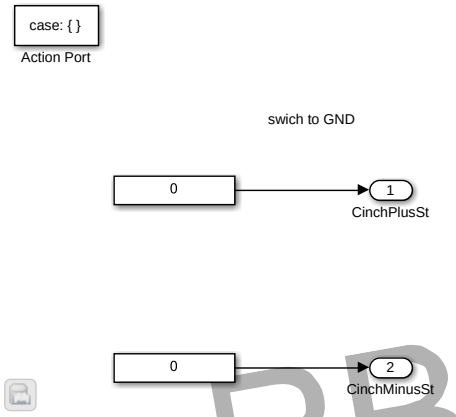


Figure 9 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_SwitchCaseActionSubsystem3 [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FLDoorElecCinchMotorOutput_SwitchCaseActionSubsystem3]

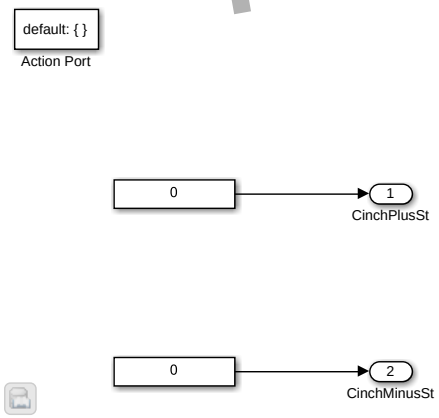


Figure 10 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput [SuctnDoor_DD_SuctnDoor_DD_Runnable_-OUT_10ms_sys_FRDoorElecCinchMotorOutput]

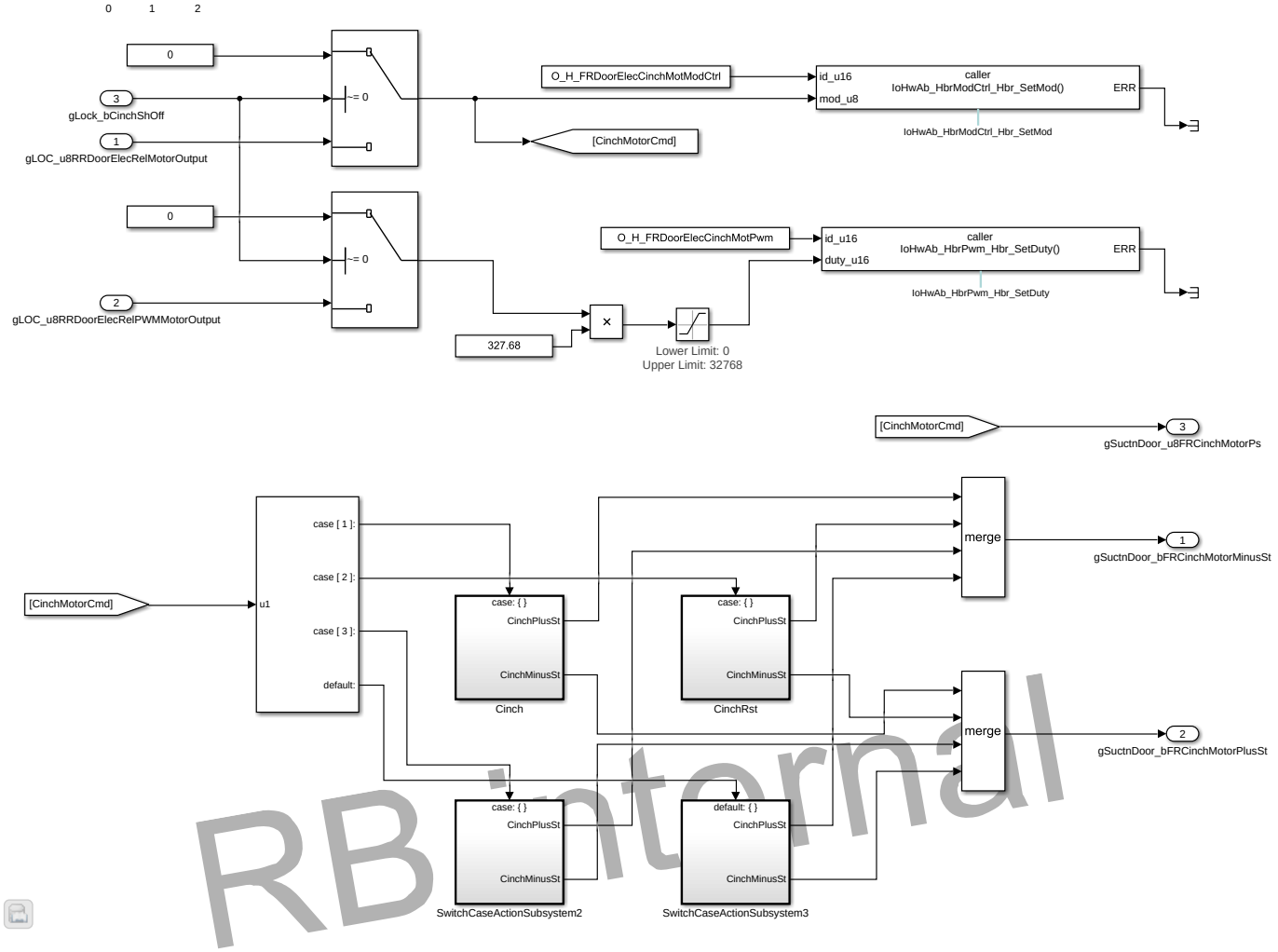


Figure 11 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_Cinch [SuctnDoor_DD_SuctnDoor_DD_-Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_Cinch]

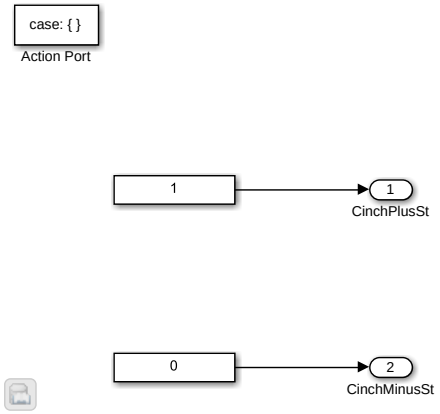


Figure 12 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_CinchRst [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_CinchRst]

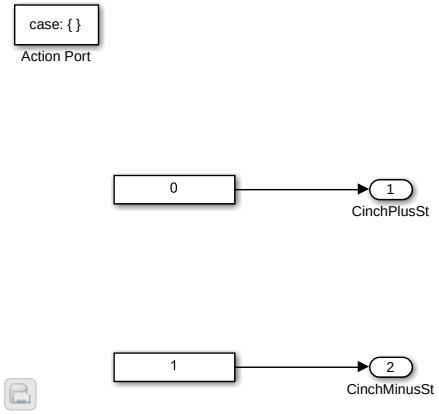


Figure 13 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_SwitchCaseActionSubsystem2 [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_SwitchCaseActionSubsystem2]

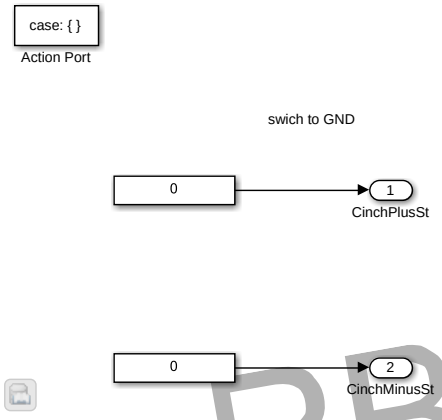


Figure 14 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_SwitchCaseActionSubsystem3 [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_FRDoorElecCinchMotorOutput_SwitchCaseActionSubsystem3]

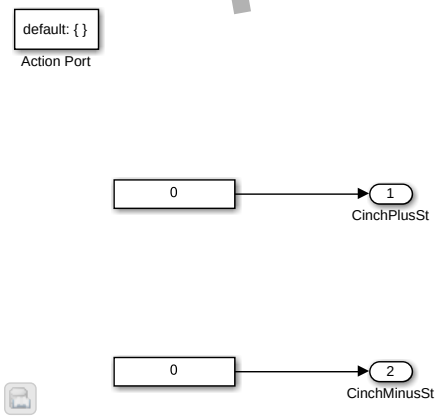


Figure 15 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_1-0ms_sys_PowerStageDiag]

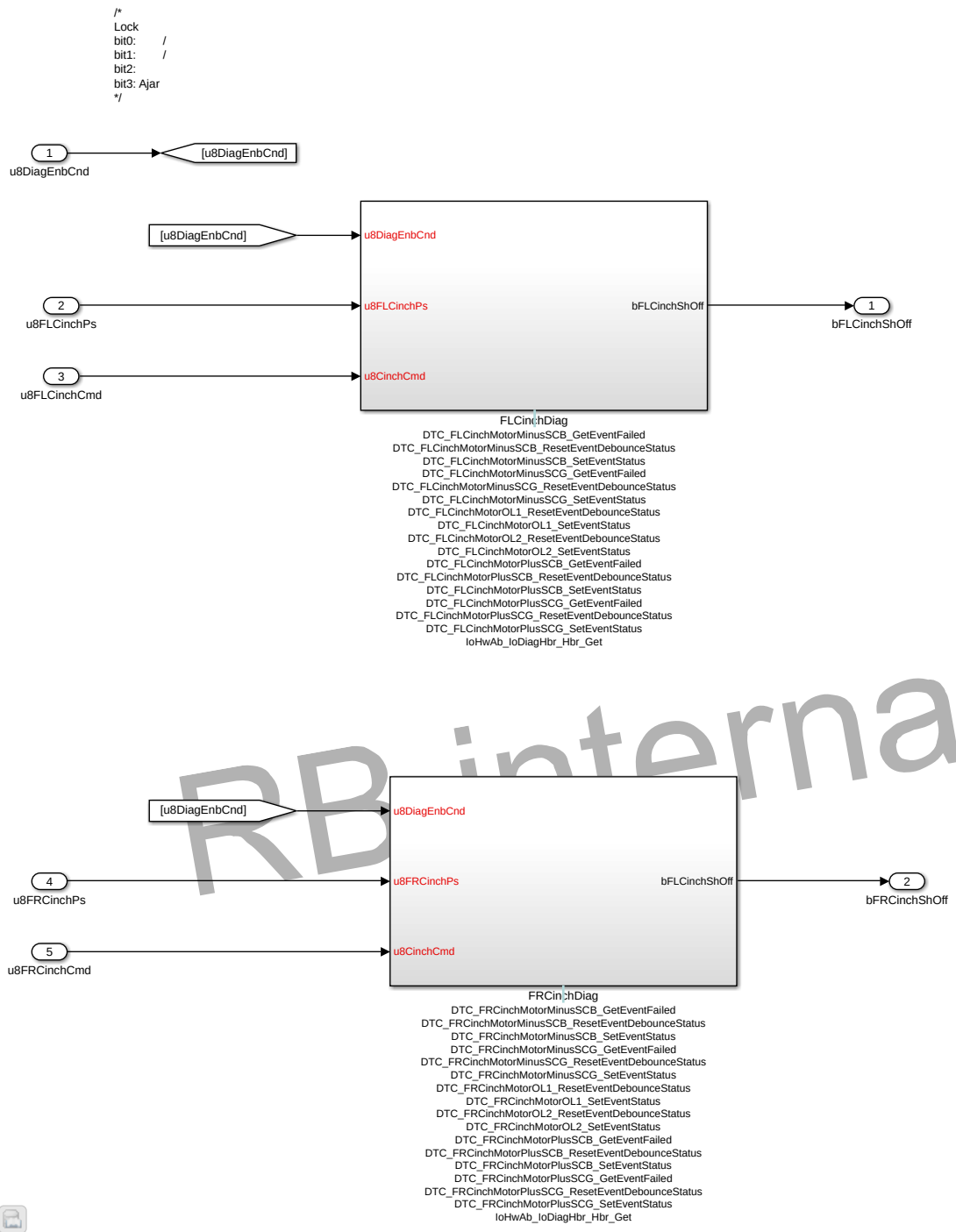


Figure 16 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag [SuctnDoor_DD_SuctnDoor_DD_Runnable_-OUT_10ms_sys_PowerStageDiag_FLCinchDiag]

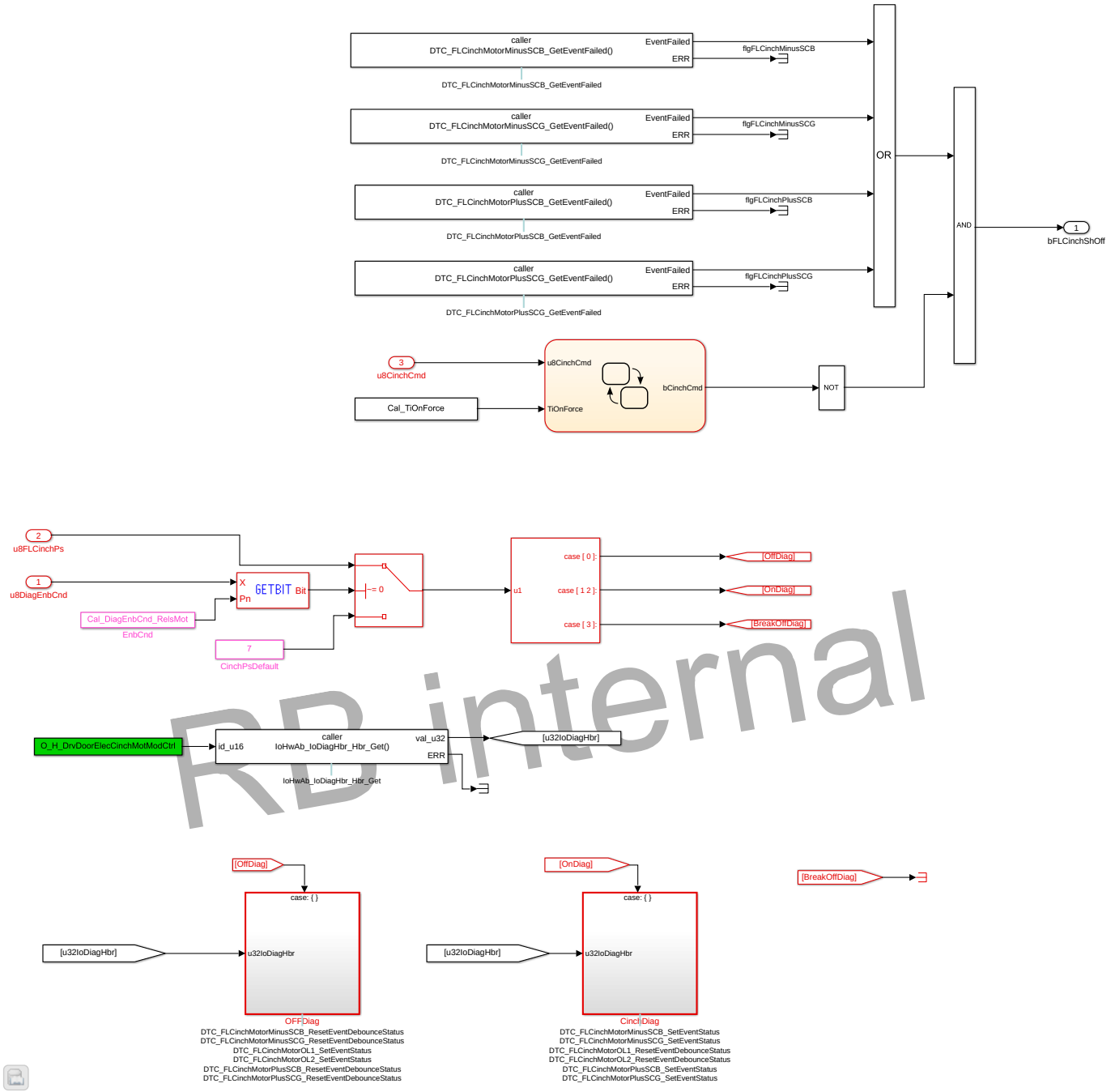


Figure 17 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_Chart [SuctnDoor_DD_SuctnDoor_DD_-Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_Chart]

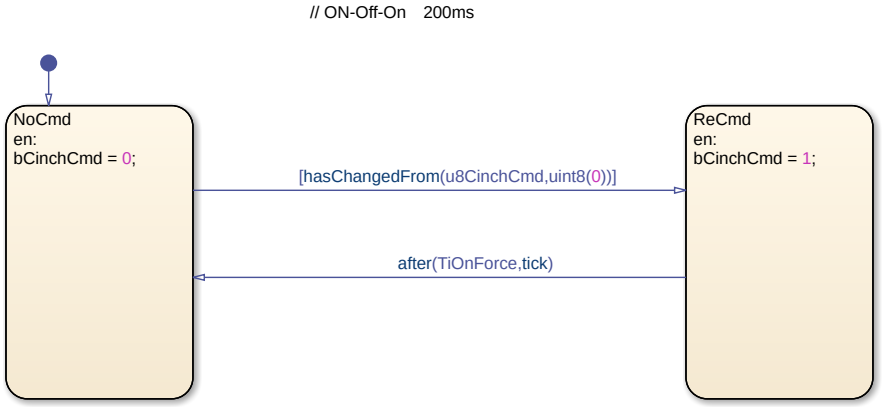


Figure 18 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_CinchDiag [SuctnDoor_DD_SuctnDoor_-DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_CinchDiag]

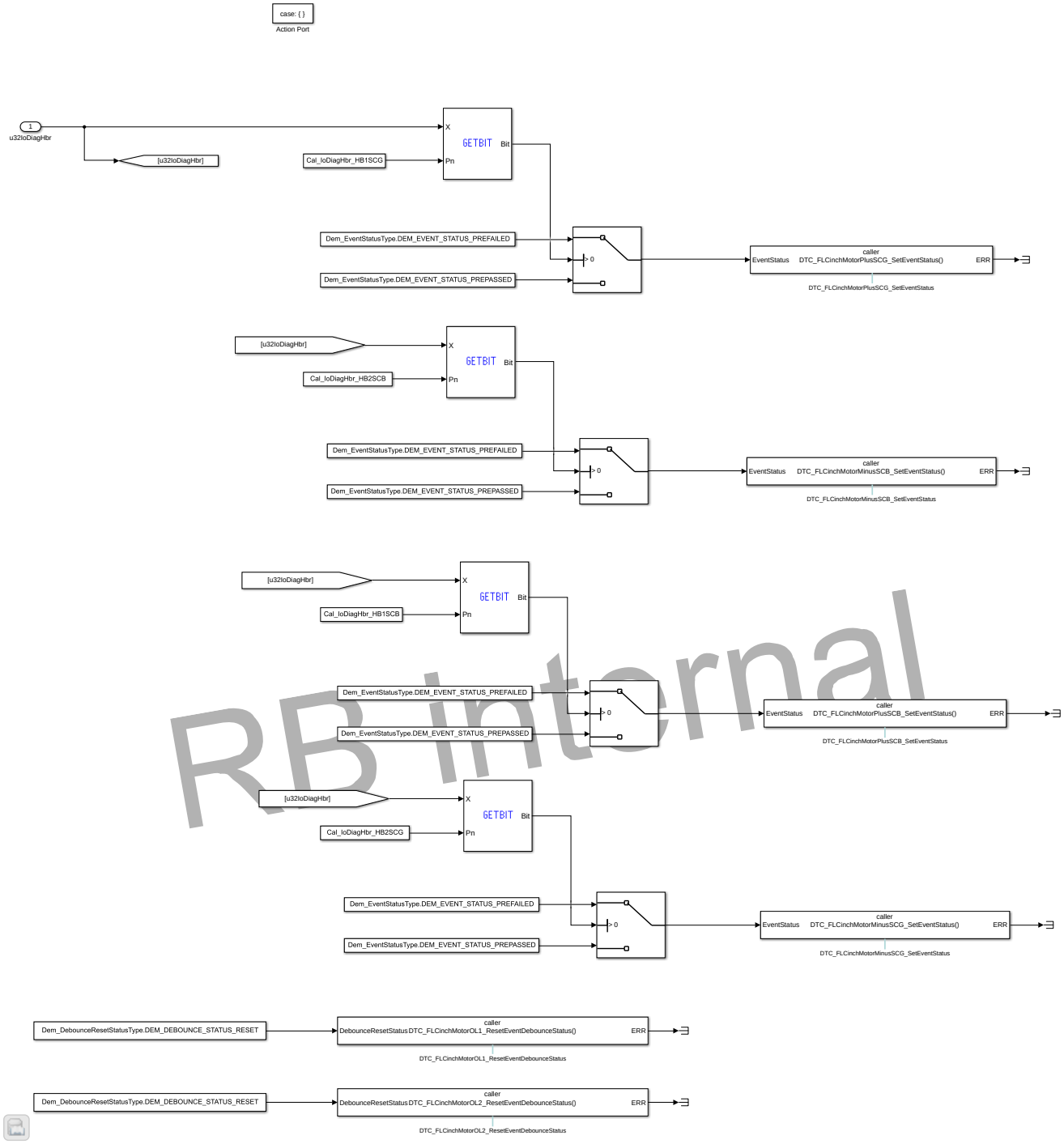


Figure 19 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_OFFDiag [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FLCinchDiag_OFFDiag]

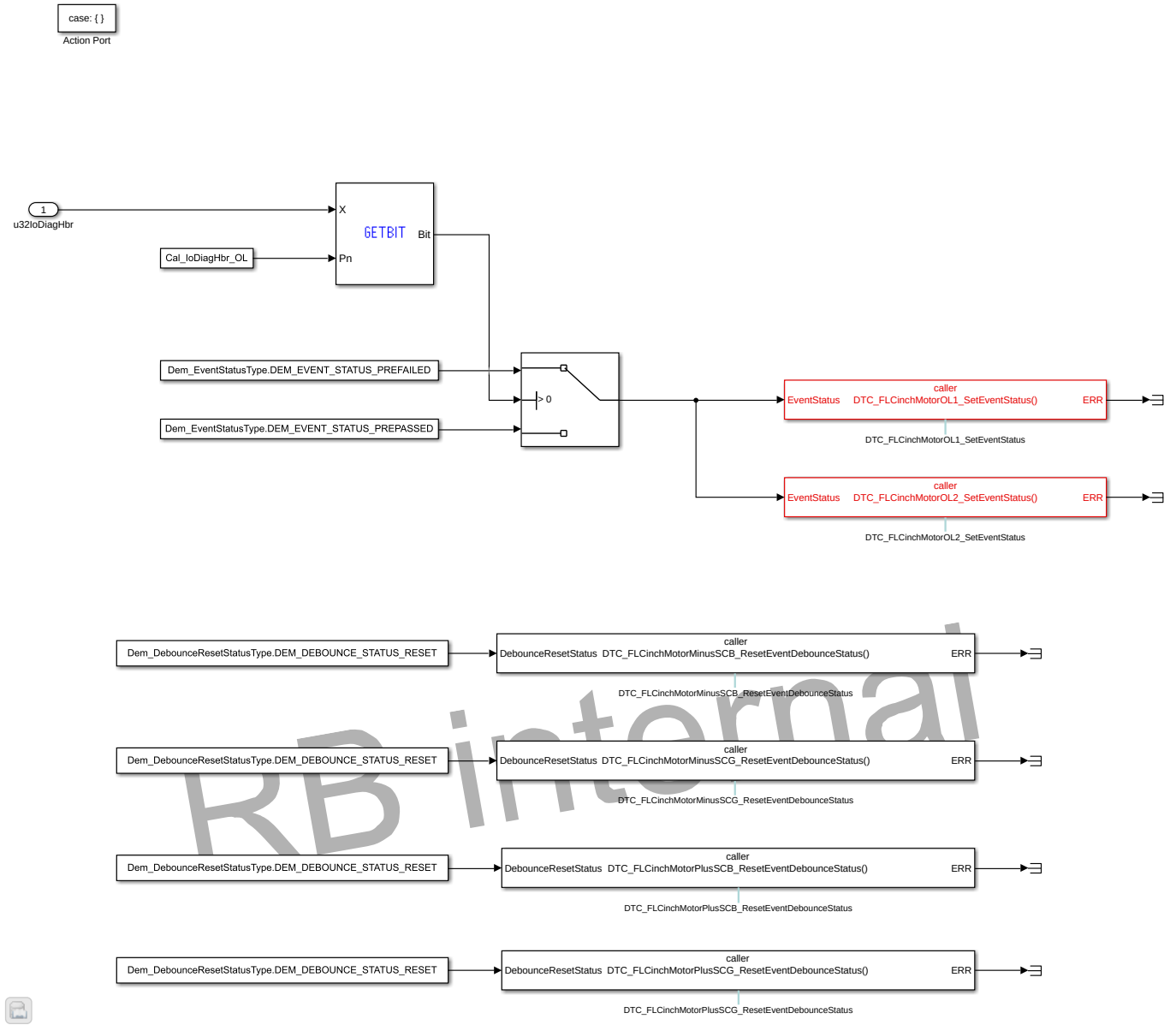


Figure 20 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag [SuctnDoor_DD_SuctnDoor_DD_Runnable_-OUT_10ms_sys_PowerStageDiag_FRCinchDiag]

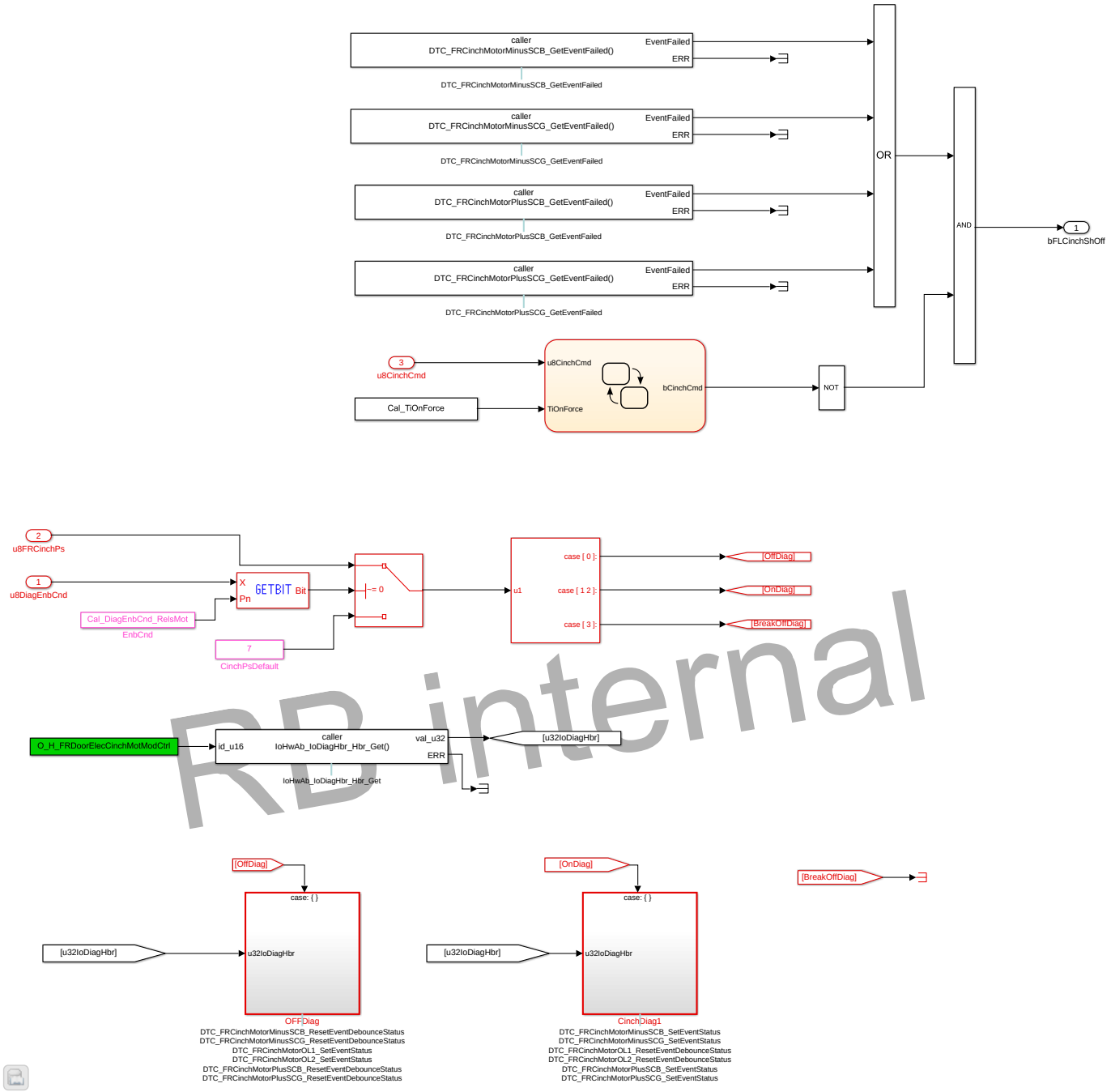


Figure 21 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_Chart [SuctnDoor_DD_SuctnDoor_DD_-Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_Chart]

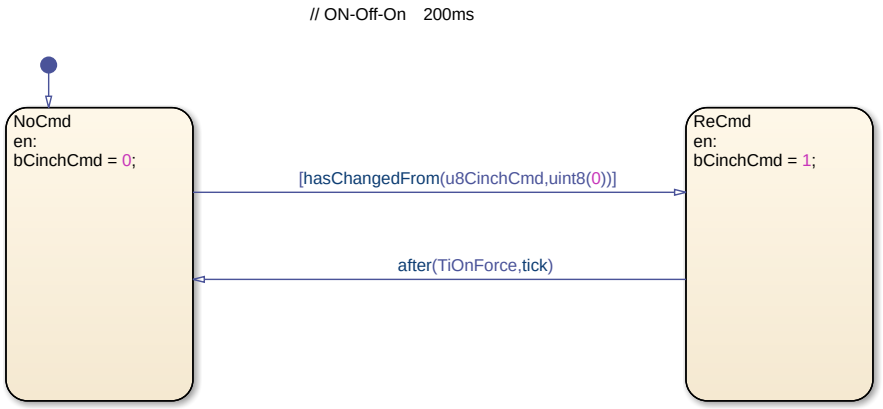


Figure 22 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_CinchDiag1 [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_CinchDiag1]

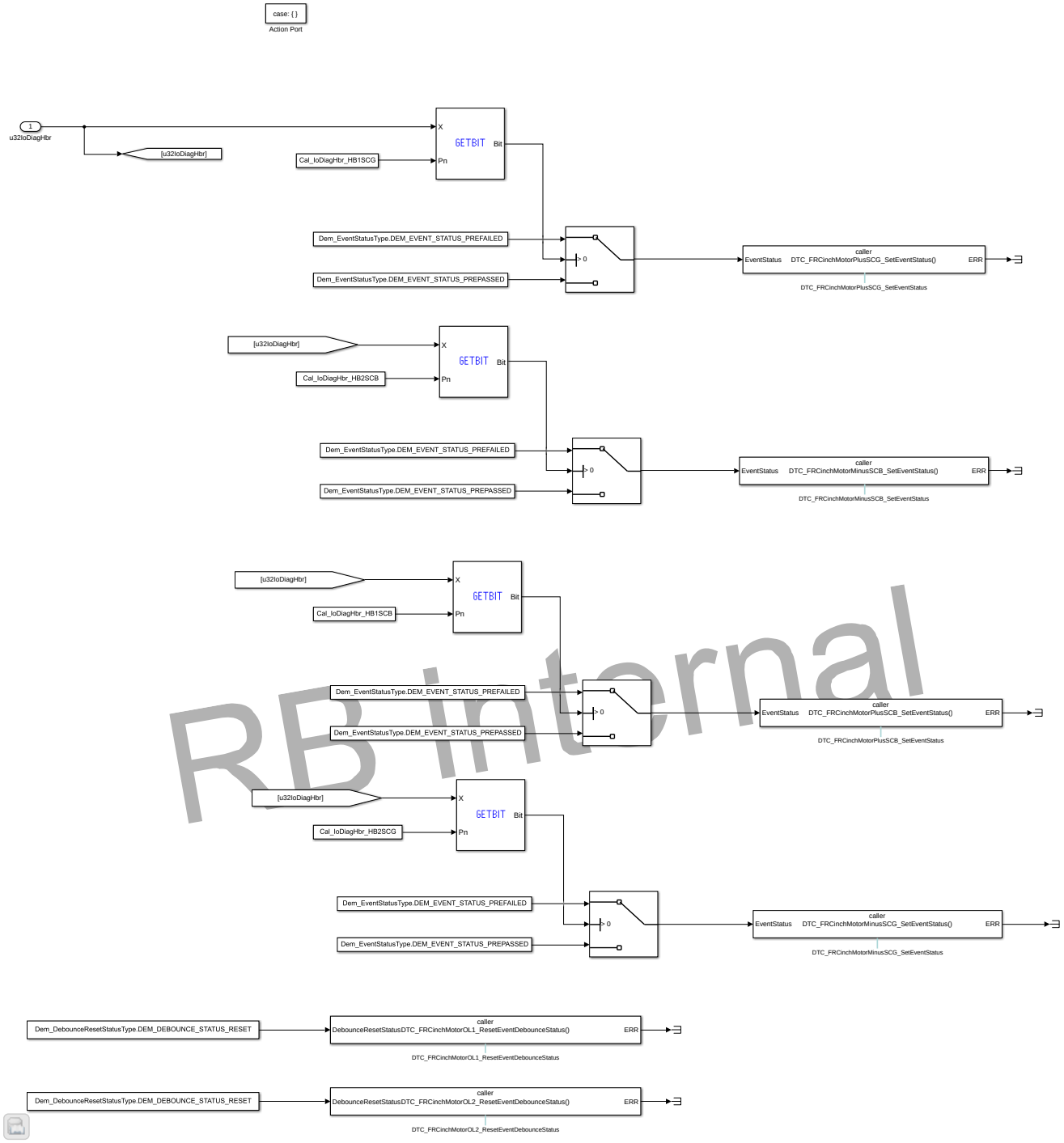


Figure 23 SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_OFFDiag [SuctnDoor_DD_SuctnDoor_DD_Runnable_OUT_10ms_sys_PowerStageDiag_FRCinchDiag_OFFDiag]

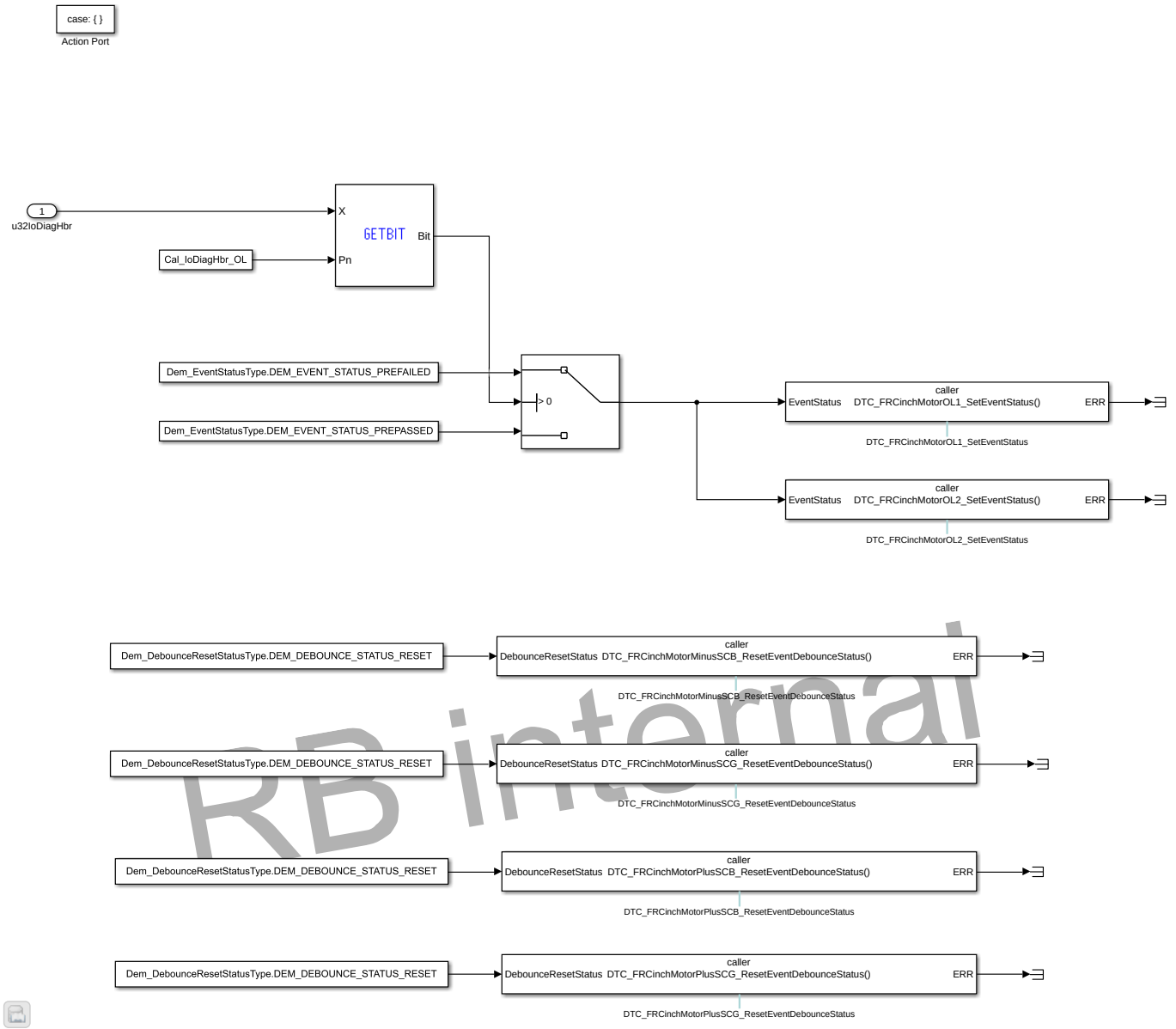


Table 1 Data Types for port interfaces [PortInterfaceDataTypes]

Port	AccessMode	Interface	DE	Datatype
gLockCtrl_u8FLDoorElec-CinchMotorOutput	ExplicitReceive	gLockCtrl_u8FLDoorElec-CinchMotorOutput	Val	uint8
gLockCtrl_u8FLDoorElec-CinchPWMOutput	ExplicitReceive	gLockCtrl_u8FLDoorElec-CinchPWMOutput	Val	uint8
gLockCtrl_u8FRDoorElec-CinchMotorOutput	ExplicitReceive	gLockCtrl_u8FRDoorElec-CinchMotorOutput	Val	uint8
gLockCtrl_u8FRDoorElec-CinchPWMOutput	ExplicitReceive	gLockCtrl_u8FRDoorElec-CinchPWMOutput	Val	uint8
BattU_buExcdLrgRng	ExplicitReceive	BattU_buExcdLrgRng	Val	boolean
BattU_buExcdSmallRng	ExplicitReceive	BattU_buExcdSmallRng	Val	boolean
BattU_VrmFac1	ExplicitReceive	BattU_VrmFac1	Val	Fac_q0p001_u16
BattU_VrmFac2	ExplicitReceive	BattU_VrmFac2	Val	Fac_q0p001_u16
BattU_VrmFac3	ExplicitReceive	BattU_VrmFac3	Val	Fac_q0p001_u16
gLockCtrl_u8RLDoorElec-CinchMotorOutput	ExplicitReceive	gLockCtrl_u8RLDoorElec-CinchMotorOutput	Val	uint8
gLockCtrl_u8RLDoorElec-CinchPWMOutput	ExplicitReceive	gLockCtrl_u8RLDoorElec-CinchPWMOutput	Val	uint8

Port	AccessMode	Interface	DE	Datatype
gLockCtrl_u8RRDoorElecCinchMotorOutput	ExplicitReceive	gLockCtrl_u8RRDoorElecCinchMotorOutput	Val	uint8
gLockCtrl_u8RRDoorElecCinchPWMOutput	ExplicitReceive	gLockCtrl_u8RRDoorElecCinchPWMOutput	Val	uint8
gLock_u8DiagEnbCnd	ExplicitReceive	gLock_u8DiagEnbCnd	Val	uint8
gSuctnDoor_bFLCinchReset	ExplicitSend	gSuctnDoor_bFLCinchReset	Val	boolean
gSuctnDoor_bFLInPwrRelsSwt	ExplicitSend	gSuctnDoor_bFLInPwrRelsSwt	Val	boolean
gSuctnDoor_bFLPAWL	ExplicitSend	gSuctnDoor_bFLPAWL	Val	boolean
gSuctnDoor_bFLSecLockFbSt	ExplicitSend	gSuctnDoor_bFLSecLockFbSt	Val	boolean
gSuctnDoor_bFRCinchReset	ExplicitSend	gSuctnDoor_bFRCinchReset	Val	boolean
gSuctnDoor_bFRPAWL	ExplicitSend	gSuctnDoor_bFRPAWL	Val	boolean
gSuctnDoor_bFROutPwrRelsSwt	ExplicitSend	gSuctnDoor_bFROutPwrRelsSwt	Val	boolean
gSuctnDoor_bFRSecLockFbSt	ExplicitSend	gSuctnDoor_bFRSecLockFbSt	Val	boolean
gSuctnDoor_bRLInPwrRelsSwt	ExplicitSend	gSuctnDoor_bRLInPwrRelsSwt	Val	boolean
gSuctnDoor_bRLSecLockFbSt	ExplicitSend	gSuctnDoor_bRLSecLockFbSt	Val	boolean
gSuctnDoor_bRRInPwrRlesSwt	ExplicitSend	gSuctnDoor_bRRInPwrRlesSwt	Val	boolean
gSuctnDoor_bRRSecLockFbSt	ExplicitSend	gSuctnDoor_bRRSecLockFbSt	Val	boolean
gSuctnDoor_u8FLElecDoorSwt	ExplicitSend	gSuctnDoor_u8FLElecDoorSwt	Val	uint8
gSuctnDoor_bRLCinchReset	ExplicitSend	gSuctnDoor_bRLCinchReset	Val	boolean
gSuctnDoor_bRRCinchReset	ExplicitSend	gSuctnDoor_bRRCinchReset	Val	boolean
gSuctnDoor_bFRElecDoorCloseSwt	ExplicitSend	gSuctnDoor_bFRElecDoorCloseSwt	Val	boolean
gSuctnDoor_bFLCinchMotorMinusSt	ExplicitSend	gSuctnDoor_bFLCinchMotorMinusSt	Val	boolean
gSuctnDoor_bFLCinchMotorPlusSt	ExplicitSend	gSuctnDoor_bFLCinchMotorPlusSt	Val	boolean
gSuctnDoor_bFRCinchMotorMinusSt	ExplicitSend	gSuctnDoor_bFRCinchMotorMinusSt	Val	boolean
gSuctnDoor_bFRCinchMotorPlusSt	ExplicitSend	gSuctnDoor_bFRCinchMotorPlusSt	Val	boolean
gSuctnDoor_u8FLCinchMotorPs	ExplicitSend	gSuctnDoor_u8FLCinchMotorPs	Val	uint8
gSuctnDoor_u8FRCinchMotorPs	ExplicitSend	gSuctnDoor_u8FRCinchMotorPs	Val	uint8

Table 2 Data Types for ADT [ApplicationDataTypes]

Name	Length	IsSigned	CompuMethod
Fac_q0p001_u16	16	false	CM_Fac_q0p001

