

| ElecDoorHndlHall\_DD | 2022-10-14

# ElecDoorHndlHall\_DD

Software and calibration documentation (detailed) [COMP]

RB internal

# I [ElecDoorHndlHall\_DD]

## 1 Function Definition

### 1.1 Purpose

Input the purpose of developing this function

### 1.2 Introduction

EDH\_HALL Driver

## 2 Function Description

### 2.1 Behavior in normal mode

Figure 1 ElecDoorHndlHall\_DD [ElecDoorHndlHall\_DD]

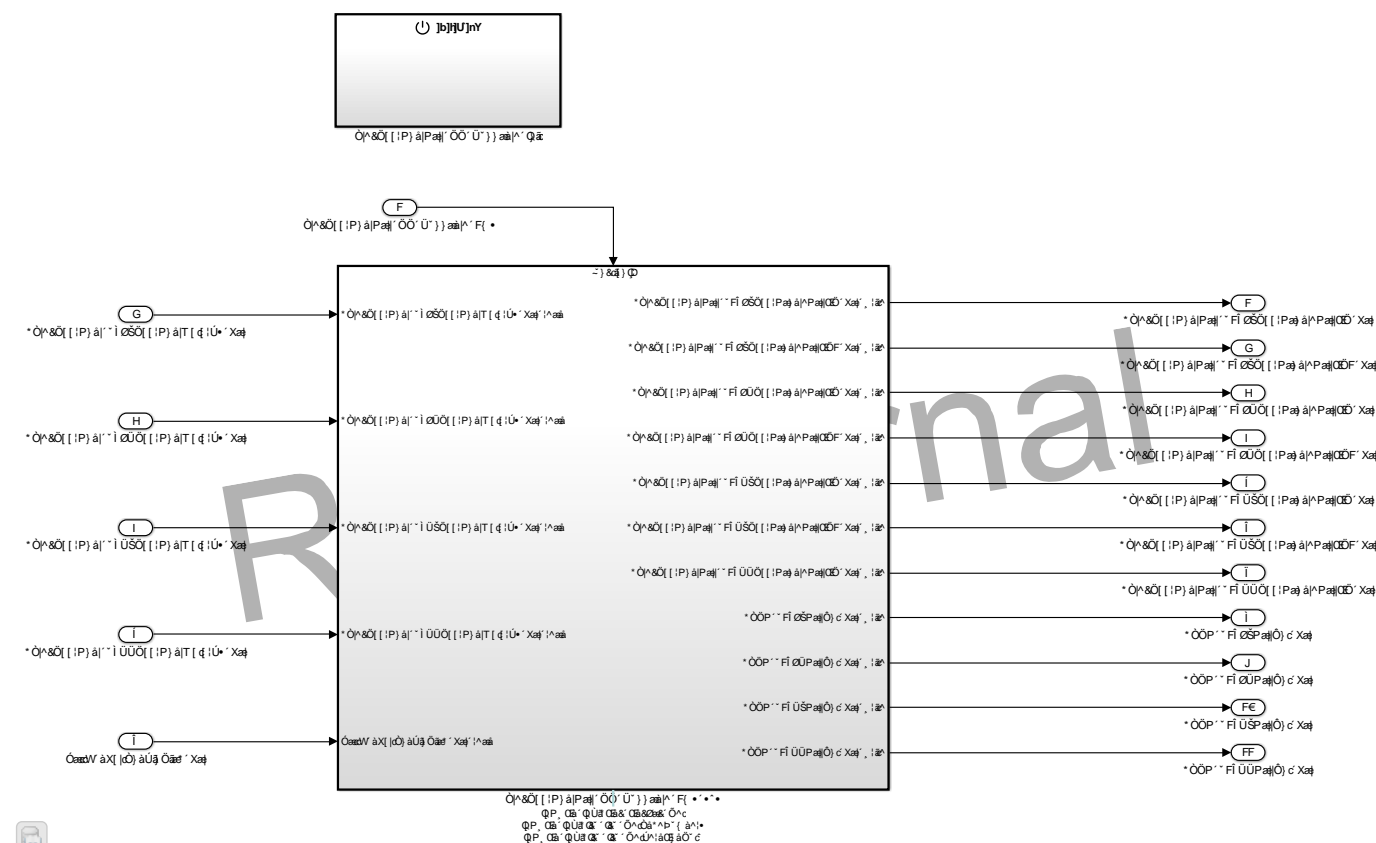


Figure 2 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys]

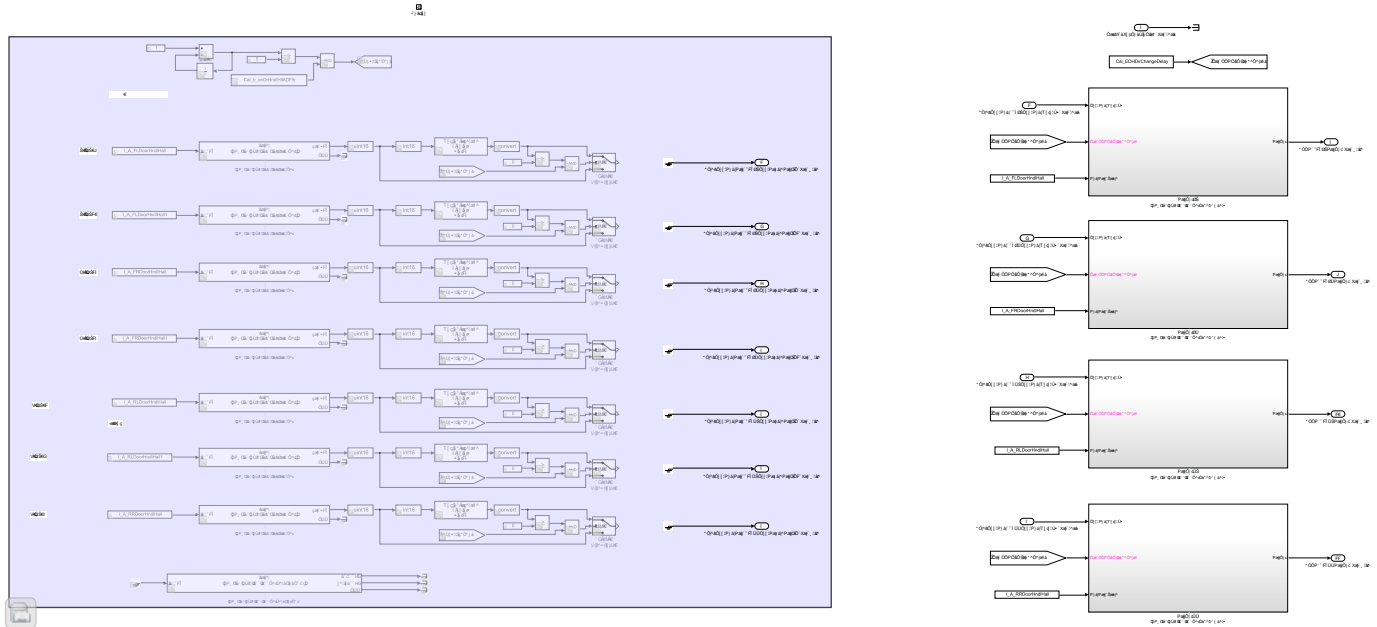


Figure 3 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntFL [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntFL]

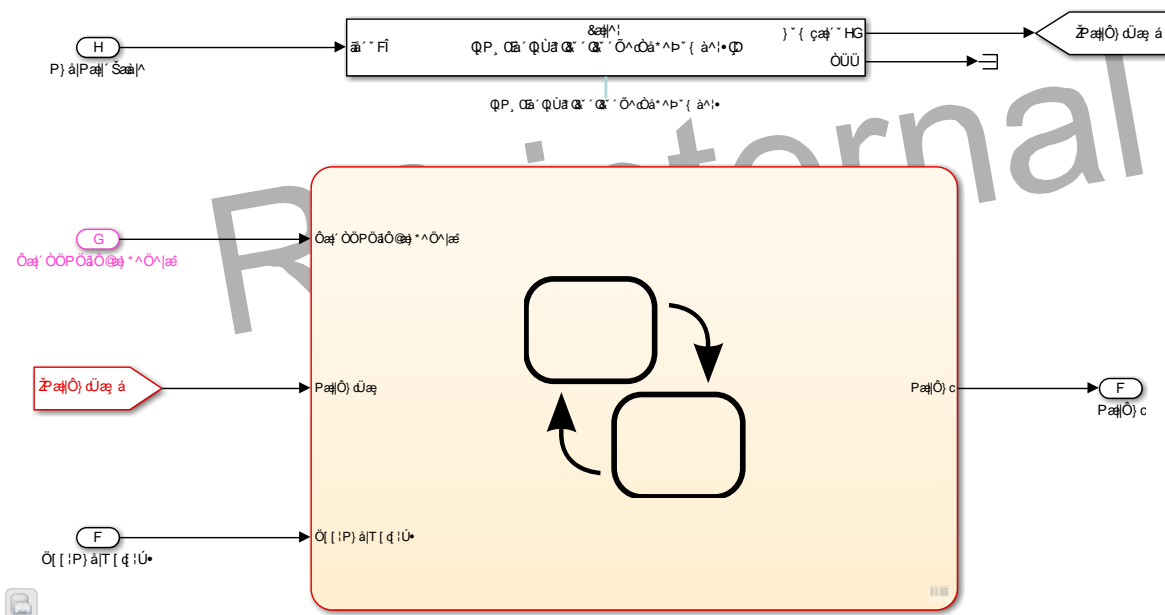


Figure 4 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntFL\_Chart [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntFL\_Chart]

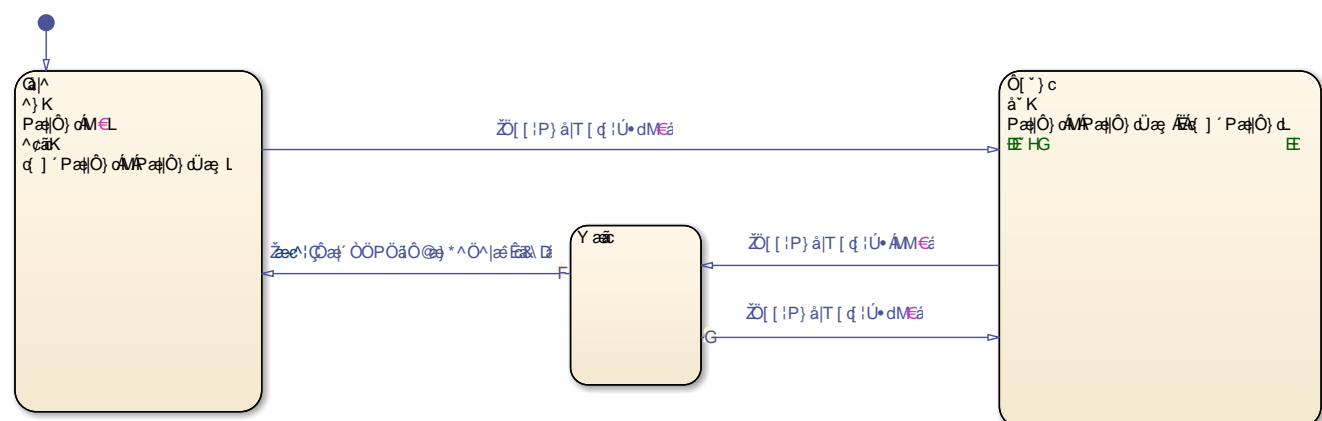


Figure 5 ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntFR [ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntFR]

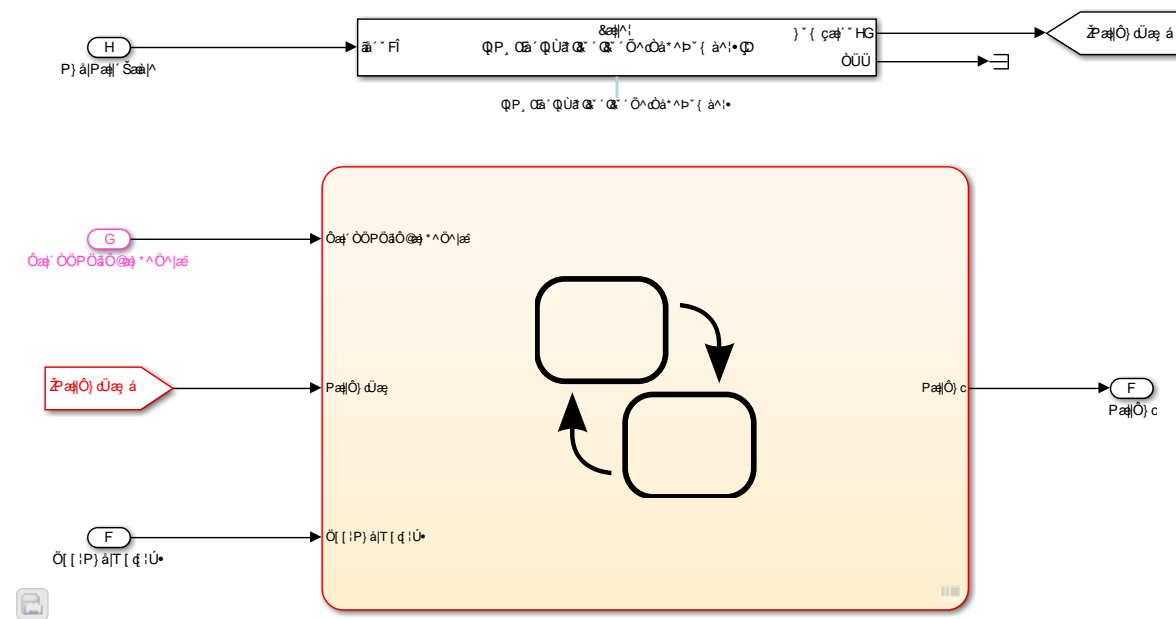


Figure 6 ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntFR\_Chart [ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntFR\_Chart]

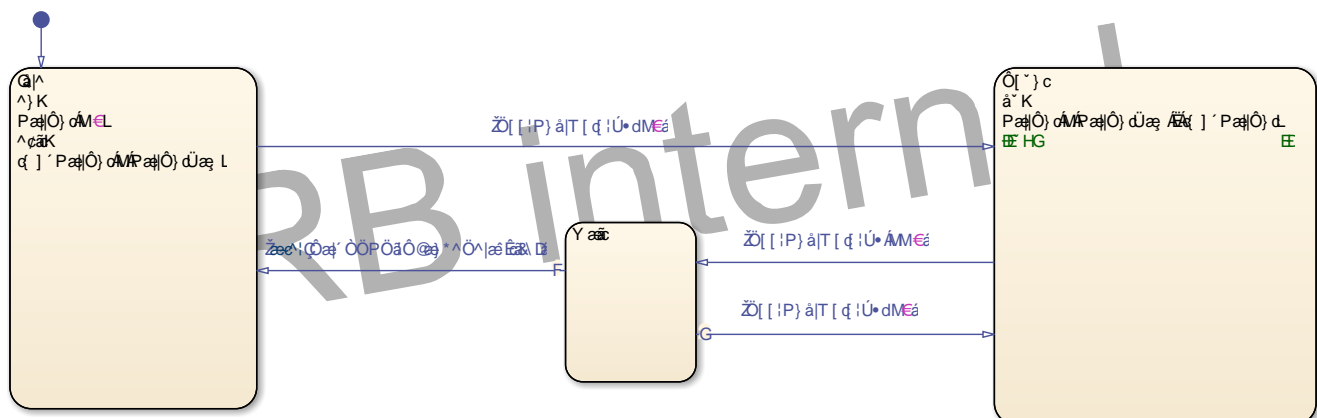


Figure 7 ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntRL [ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntRL]

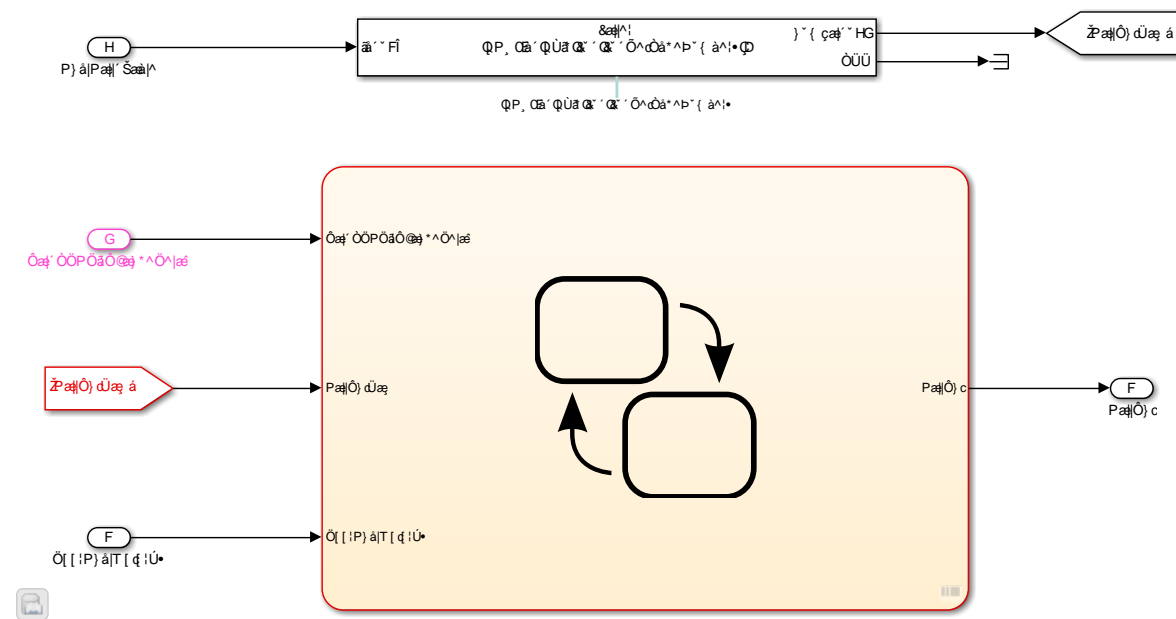


Figure 8 ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntRL\_Chart [ElecDoorHndlHall\_DD\_ElecDoorHndlHall\_DD\_Runnable\_1ms\_sys\_HallCntRL\_Chart]

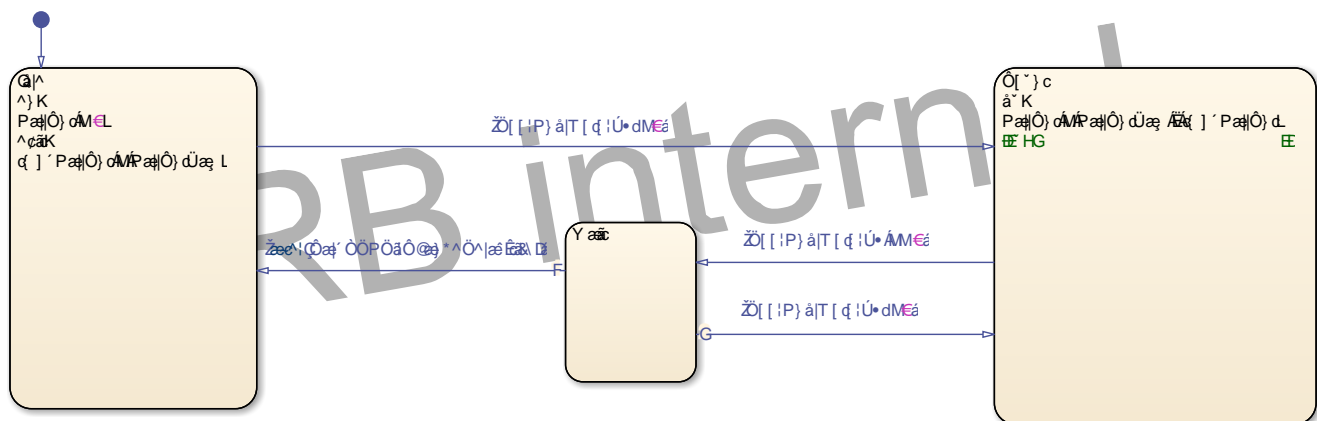


Figure 9 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntRR [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntRR]

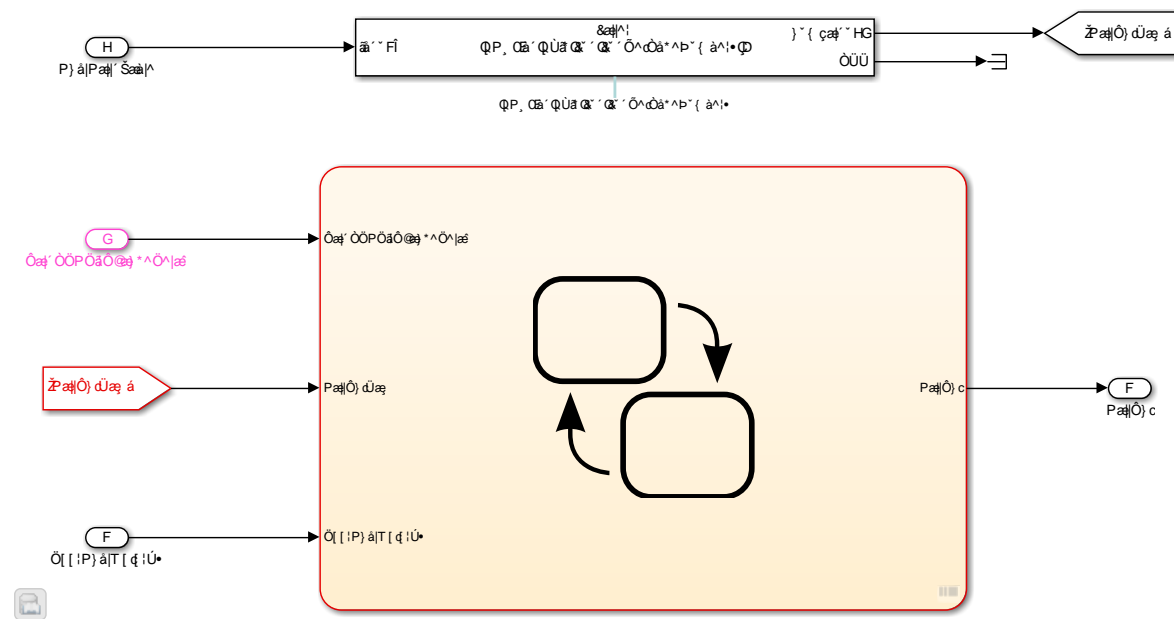


Figure 10 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntRR\_Chart [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_1ms\_sys\_HallCntRR\_Chart]

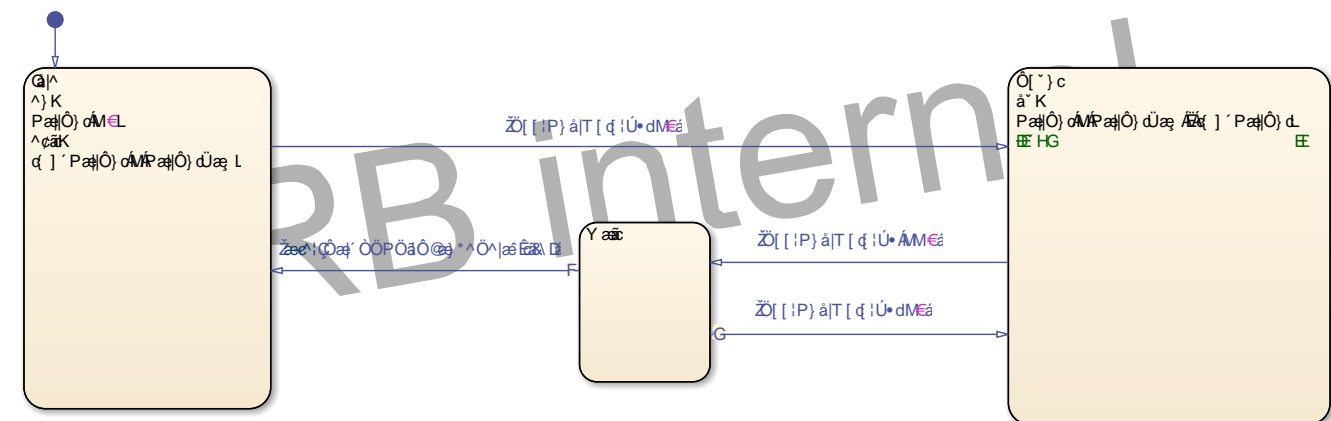


Figure 11 ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_Init [ElecDoorHndIHall\_DD\_ElecDoorHndIHall\_DD\_Runnable\_Init]



Table 1 Data Types for port interfaces [PortInterfaceDataTypes]

| Port                                     | AccessMode      | Interface                                | DE  | Datatype |
|--|-----------------|--|-----|----------|
| gElecDoorHndI_u8FLDoorHndIMotorPs        | ExplicitReceive | gElecDoorHndI_u8FLDoorHndIMotorPs        | Val | uint8    |
| gElecDoorHndI_u8FRDoorHndIMotorPs        | ExplicitReceive | gElecDoorHndI_u8FRDoorHndIMotorPs        | Val | uint8    |
| gElecDoorHndI_u8RLDoorHndIMotorPs        | ExplicitReceive | gElecDoorHndI_u8RLDoorHndIMotorPs        | Val | uint8    |
| gElecDoorHndI_u8RRDoorHndIMotorPs        | ExplicitReceive | gElecDoorHndI_u8RRDoorHndIMotorPs        | Val | uint8    |
| BattU_bVoltEnbPinDiag                    | ExplicitReceive | BattU_bVoltEnbPinDiag                    | Val | boolean  |
| gElecDoorHndIHall_u16FLDoorHandleHallAD  | ExplicitSend    | gElecDoorHndIHall_u16FLDoorHandleHallAD  | Val | uint16   |
| gElecDoorHndIHall_u16FLDoorHandleHallAD1 | ExplicitSend    | gElecDoorHndIHall_u16FLDoorHandleHallAD1 | Val | uint16   |
| gElecDoorHndIHall_u16RDoorHandleHallAD   | ExplicitSend    | gElecDoorHndIHall_u16RDoorHandleHallAD   | Val | uint16   |

| Port                                      | AccessMode   | Interface                                 | DE  | Datatype |
|---|--------------|---|-----|----------|
| gElecDoorHndlHall_u16F-RDoorHandleHallAD1 | ExplicitSend | gElecDoorHndlHall_u16F-RDoorHandleHallAD1 | Val | uint16   |
| gElecDoorHndlHall_u16R-LDoorHandleHallAD  | ExplicitSend | gElecDoorHndlHall_u16R-LDoorHandleHallAD  | Val | uint16   |
| gElecDoorHndlHall_u16R-LDoorHandleHallAD1 | ExplicitSend | gElecDoorHndlHall_u16R-LDoorHandleHallAD1 | Val | uint16   |
| gElecDoorHndlHall_u16R-RDoorHandleHallAD  | ExplicitSend | gElecDoorHndlHall_u16R-RDoorHandleHallAD  | Val | uint16   |
| gEDH_u16FLHallCnt                         | ExplicitSend | gEDH_u16FLHallCnt                         | Val | uint16   |
| gEDH_u16FRHallCnt                         | ExplicitSend | gEDH_u16FRHallCnt                         | Val | uint16   |
| gEDH_u16RLHallCnt                         | ExplicitSend | gEDH_u16RLHallCnt                         | Val | uint16   |
| gEDH_u16RRHallCnt                         | ExplicitSend | gEDH_u16RRHallCnt                         | Val | uint16   |

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