APA/RPA Function

<<Logical Function>>

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Important Note

You need to use the RE specification macros provided by the "RE_SpecificationMacroTemplate.dotm" (refer to "Utilities" on page "Specification Templates" in the RE Wiki) to allow seamless VSEM import of the specification content. ***Use only these RE specification macros to create requirements*** *in this specification. Refer to "How to use the Specification Templates" on how to enable and use the macros and the requirements templates in this specification.*

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1 FUNCTION SPECIFICATION

1.1 Function Overview

1.1.1 Function Description

APA/RPA Function

The Automated Parking Assist (APA) and Remote Parking Assist (RPA) client is the interface between the driver and the features. The APA and RPA in-vehicle HMI allows the driver to search for and select suitable parking spaces, also provides the driver with necessary instruction to perform the APA and RPA.

1.1.2 Function Variants

No Variants identified for APA/RPA Function

1.1.3 Input Requirements/Documents

Reference (Reference as listed in ch. "**Error! Reference source not found.**")	**Section/Requirement**	**Description**	**Derived Requirement** (optional – reference to requirement in ch. "**Error! Reference source not found.**")
Feature Requirements			
Ford Engineering Standards			
	<Example: some SDS (requirement)>		
Legal Regulations			
Industry Standards			
Other Sources			

Table 1: Input Requirements/Documents

1.1.4 Assumptions

No Assumptions specified.

1.2 Function Scope

The – **"APA/RPA Function"** function is called by the following functions:

- – "I/O Block"

1.2.1 I/O Block

Figure 1: Activity Diagram of “I/O Block” calling “APA/RPA Function”

1.3 Function Interfaces

1.3.1 Logical Inputs

Signal Name	Description
<<ETHERNET>>Obstacle Type: <<ETHERNET>>Obstacle	This signal indicates the type, id, offset angle, etc, of obstacles which will displayed on APIM screen.
BoundingBox Type: <<ETHERNET>>BoundingBox	This signal indicates the location of obstacles which will displayed on APIM screen.
<<ETHERNET>>ParkingSpaceInfo Type: ParkingSpaceInfo	This signal indicates the id, type, location, status, etc, of parking slots which will displayed on APIM screen.
<<ETHERNET>>Planing Type: <<ETHERNET>>Planing	This signal indicates the APA parking trajectory line equation.
APA_ParkSlotPopupButtonFeedback Type: APA_ParkSlotPopupButtonFeedback	This signal indicates that ACU receive APA popup setting request.
APA_SearchParkRemindPopup Type: APA_SearchParkRemindPopup	This signal indicates that popup shall be sent when park slot is searched eventhough APA is not to be activated.
APA_Sts (Reserved) Type: APA_Sts	The APA status signal represents the current state of the APA statemachine contained in IPMB.
APA_PageDispReq Type: APA_PageDispReq	This signal indicates the different APA pages request for APIM.
APA_ParkTypeReq (Reserved) Type: APA_ParkTypeReq	This signal indicates the recommend APA parking mode by IPMB.
APA_ParkSts (Reserved) Type: APA_ParkSts	This signal indicates the current parking state.
APA_ParkMode (Reserved) Type: APA_ParkMode	This signal indicates the current parking mode.

APA_ParkInIconSts Type: APA_ParkInIconSts	This signal indicates the APA parking in activation button display status on APIM screen.
RPA_ParkInIconSts Type: RPA_ParkInIconSts	This signal indicates the RPA activation button display status on APIM screen.
APA_ParkOutIconSts Type: APA_ParkOutIconSts	This signal indicates the APA parking out activation button display status on APIM screen.
APA_ParkSlotNOReq Type: APA_ParkSlotNOReq	This signal indicates the flag of parking slots NO. whether displayed on APIM screen.
APA_RecommendParkSlot Type: APA_RecommendParkSlot	This signal indicates the recommend APA parking slot by IPMB, which is nearest slot to the vehicle.
APA_DriverParkSlotReqFeedback Type: APA_DriverParkSlotReqFeedback	This signal indicates the APA send feedback to confirm selected parking slot by user on APIM screen.
APA_ParkOutDirectionFront Type: APA_ParkOutDirectionFront	This signal indicates whether the front of vehicle could support parking out.
APA_ParkOutDirectionRear Type: APA_ParkOutDirectionRear	This signal indicates whether the rear of vehicle could support parking out.
APA_ParkOutDirectionFrontLeftCross Type: APA_ParkOutDirectionFrontLeftCross	This signal indicates whether the left front of vehicle could support vertical parking out.
APA_ParkOutDirectionFrontRightCross Type: APA_ParkOutDirectionFrontRightCross	This signal indicates whether the right front of vehicle could support vertical parking out.
APA_ParkOutDirectionFrontRightParallel Type: APA_ParkOutDirectionFrontRightParallel	This signal indicates whether the right front of vehicle could support horizontal parking out.
APA_ParkOutDirectionFrontLeftParallel Type: APA_ParkOutDirectionFrontLeftParallel	This signal indicates whether the left front of vehicle could support horizontal parking out.

APA_DriverSelectDirectionConfirm Type: APA_DriverSelectDirectionConfirm	This signal indicates the ACU confirm receive APA parking out direction which is selected by user on APIM screen.
APA_ManeuveringRemainDistance Type: APA_ManeuveringRemainDistance	This signal indicates the remain distance of APA maneuvering.
APA_GuidePopup Type: APA_GuidePopup	This signal indicates the popup prompt after APA ON, which is dispalyed on APIM screen.
APA_ProcessingPopup Type: APA_ProcessingPopup	This signal indicates the popup prompt after APA ON, which is dispalyed on virtual screen.
APA_SuspendPopup Type: APA_SuspendPopup	This signal indicates the popup prompt after APA suspend, which is dispalyed on APIM screen.
APA_TerminatePopup Type: APA_TerminatePopup	This signal indicates the popup prompt after APA terminate, which is dispalyed on APIM screen.
Prk_Resume_Req Type: Prk_Resume_Req	This signal indicates parking function suspend recovery, which is send by IPMB.
APA_ActiveType_Indicate (Reserved)	This signal indicates the different activation ways of the APA.
Prk_IVIFunc_Req	This signal indicates parking feature request for IVI to have function ON, include APA/AVM/Backtrack/HAVP.
ApaMde_D_Stat2_IVI	This signal represents the current state of the APA (Automatic Parking Assist) Modes

1.3.1.1 IR-REQ-XXXXXX/X-INTERNAL:

- Internal_InfoBook_Setup_MC
-

1.3.1.2 MUX signals on the ETHERNET from IPMB

1 <<ETHERNET>>Obstacle

Method Type	?
QoS Level	?

Retained	?

R/O	Name	Type	Units	Value	Description	Min	Max
?	Id	int32	-			-	-
?	timestamp	uint64	us			-	-

?	type	enum	-		OBSTACLE_TYPE_CAR = 0; // 汽车
					OBSTACLE_TYPE_PEDESTRIAN = 1; // 行人
					OBSTACLE_TYPE_PEDESTRIAN = 2; // 行人
					OBSTACLE_TYPE_CONE = 3; // 锥筒
						0	2

?	speed_heading	double	Rad			-π	-π
?	bounding_box	?	-			-	-

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 1

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

2 <<ETHERNET>>BoundingBox

Method Type	?
QoS Level	?
Retained	?

R/O	Name	Type	Units	Value	Description	Min	Max
?	left_front	Point	m		coordinate figure	-	-
?	right_front	Point	m		coordinate figure	-	-
?	left_back	Point	m		coordinate figure	-	-
?	right_back	Point	m		coordinate figure	-	-

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 1

Rationale			
Acceptance Criteria			
Notes			
Source		**Owner**	

Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

3 <<ETHERNET>>ParkingSpaceInfo

Method Type	?
QoS Level	?
Retained	?

R/O	Name	Type	Units	Value	Description	Min	Max
?	bounding_point	Point	-			-	-

?	parkspace_type	enum	-		NO_TYPE = 0;
					CROSS = 1; //垂直车位
					PARALLEL = 2; //平行车位
					DIAGNOAL = 3; //斜车位
						-	-

?	parking_lot_status	enum	-		NO_COMMENT = 0x0; PARKING_LOT_AVAIL = 0x1; 空车位 PARKING_LOT_UNAVAIL = 0x2 被占用车位	-	-
?	id	int32	-			-	-

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 2

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

4 <<ETHERNET>>Planing

Method Type	?
QoS Level	?
Retained	?

R/O	Name	Type	Units	Value	Description	Min	Max
?	trajectory	Point	-		trajectory point	-	-
?	trajectoryDir	double	-		trajectory direction	-	-

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 3					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

1.3.1.3 MUX signals on the CAN Bus from IPMB

1 SIG-REQ-XXXXXX/X-Prk_InfobookButtonStat

This signal indicates the status of Infobook button , if parking feature actived, IPMB will request APIM to display the button in grey.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
Prk_InfobookButtonStat	2		-	1	0		0	3
		Normal				0×0		
		Gray				0×1		
		Not display				0×2		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 31					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

2 SIG-REQ-XXXXXX/X-APA_ParkSlotPopupButtonFeedback Signal

This signal indicates that ACU receive APA popup setting request.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkSlotPopupButtonFeedback	1			1	0		0	1
		ON				0×0		

		OFF				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 9					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

3 SIG-REQ-XXXXXX/X-APA_SearchParkRemindPopup Signal

This signal indicates that popup shall be sent when park slot is searched eventhough APA is not be activated.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_SearchParkRemindPopup	1		-	1	0		0	1
		ON				0×0		
		OFF				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 12					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

4 SIG-REQ-XXXXXX/X-APA_Sts Signal (not uesd)

The APA status signal represents the current state of the APA statemachine contained in IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_Sts	4		-	1	0		0	15
		OFF				0×0		
		Disable				0×1		

		Failure				0×2		
		Standby				0×3		
		Searching_Active				0×4		
		Searching_Suspend				0×5		
		Parking_Active				0×6		
		Parking_suspend				0×7		
		Terminated				0×8		
		Completed				0×9		
		Initialization				0×A		
		Reserved				0×B~0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 21

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

5 SIG-REQ-XXXXXX/X-APA_PageDispReq Signal

This signal indicates the different APA pages request for APIM.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_PageDispReq	4			1	0		0	15
		No Req				0×0		
		ParkIn_ParkOut_Selection				0×1		
		Searching_Moving				0×2		
		Searching_Stop				0×3		
		Manuaring_ParkIn				0×4		
		ParkIn_Completed				0×5		

		ParkOut_SelectDirection				0×6		
		Manuaring_ParkOut				0×7		
		ParkOut_Completed				0×8		
		RemotePark_Remind				0×9		
		RemotePark_PhoneControl				0×A		
		Reserved				0×9~0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 20

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

6 SIG-REQ-XXXXXX/X-APA_ParkTypeReq (Reserved)

This signal indicates the recommend APA parking mode by IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ParkTypeReq	3		-	1	0		0	7
		No_Req				0×0		
		Park_In				0×1		
		Park_Out				0×2		
		Park_In_Out				0×3		
		Reserved				0×4		
		Reserved				0×5		
		Reserved				0×6		
		Reserved				0×7		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 18

Rationale	

Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement
Req. Template Version 6.0					End of Requirement

7 SIG-REQ-XXXXXX/X-APA_ParkSts (Reserved) Signal

This signal indicates the current parking state.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkSts	2			1	0		0	3
		No_Req				0×0		
		Park_In				0×1		
		Park_Out				0×2		
		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 6

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

8 SIG-REQ-XXXXXX/X-APA_ParkMode (Reserved) Signal

This signal indicates the current parking mode.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkMode	2			1	0		0	3
		No_Req				0×0		
		APA				0×1		
		RPA				0×2		
		Reserved				0×3		

Satisfied by:

- Functions:

- APA/RPA Function

Requirement ID: 13					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

9 SIG-REQ-XXXXXX/X-APA_ParkInIconSts Signal

This signal indicates the APA parking in activation button display status on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ParkInIconSts	2		-	1	0		0	3
		No Display				0×0		
		Display_Hight				0×1		
		Display_Gray				0×2		
		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 16					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

10 SIG-REQ-XXXXXX/X-RPA_ParkInIconSts Signal

This signal indicates the RPA activation button display status on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
RPA_ParkInIconSts	2		-	1	0		0	3
		No Display				0×0		
		Display_Hight				0×1		
		Display_Gray				0×2		

		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 27					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

11 SIG-REQ-XXXXXX/X-APA_ParkOutIconSts Signal

This signal indicates the APA parking out activation button display status on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ParkOutIconSts	2		-	1	0		0	3
		No Display				0×0		
		Display_Hight				0×1		
		Display_Gray				0×2		
		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 10					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

12 SIG-REQ-XXXXXX/X-APA_ParkSlotNOReq Signal

This signal indicates the flag of parking slots NO. whether displayed on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_DriverParkTypeReq	1		-	1	0		0	1
		No Display				0×0		

		Display				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 23					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

13 SIG-REQ-XXXXXX/X-APA_RecommendParkSlot

This signal indicates the recommend APA parking slot by IPMB, which is nearest slot to the vehicle.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_RecommendParkSlot	4		-	1	0		0	15
		No_Req				0×0		
		Slot_L1				0×1		
		Slot_L2				0×2		
		Slot_L3				0×3		
		Slot_L4				0×4		
		Slot_L5				0×5		
		Slot_R1				0×6		
		Slot_R2				0×7		
		Slot_R3				0×8		
		Slot_R4				0×9		
		Slot_R5				0×A		
		Reserved				0×B~0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 17	
Rationale	
Acceptance Criteria	

Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

14 SIG-REQ-XXXXXX/X-APA_DriverParkSlotReqFeedback Signal

This signal indicates the APA send feedback to confirm selected parking slot by user on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_DriverParkSlotReqFeedback	4		-	1	0		0	15
		No_Req				0×0		
		Slot_L1				0×1		
		Slot_L2				0×2		
		Slot_L3				0×3		
		Slot_L4				0×4		
		Slot_L5				0×5		
		Slot_R1				0×6		
		Slot_R2				0×7		
		Slot_R3				0×8		
		Slot_R4				0×9		
		Slot_R5				0×A		
		Reserved				0×B~0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 15

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

15 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionFront Signal

TThis signal indicates whether the front of vehicle could support parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutDirection Front	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 26

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

16 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionRear Signal

This signal indicates whether the rear of vehicle could support parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutDirection Rear	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 7

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

17 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionFrontLeftCross Signal

This signal indicates whether the left front of vehicle could support vertical parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max

APA_ParkOutDirection FrontLeftCross	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 22					
Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**	**Status**	In-Progress	
Req. Template Version 6.0				End of Requirement	

18 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionFrontRightCross Signal

This signal indicates whether the right front of vehicle could support vertical parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutDirection FrontRightCross	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 5					
Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**	**Status**	In-Progress	
Req. Template Version 6.0				End of Requirement	
Req. Template Version 6.0				End of Requirement	
Req. Template Version 6.0				End of Requirement	

19 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionFrontRightParallel Signal

This signal indicates whether the right front of vehicle could support horizontal parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutDirection FrontRightParallel	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 11

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

20 SIG-REQ-XXXXXX/X-APA_ParkOutDirectionFrontLeftParallel Signal

This signal indicates whether the left front of vehicle could support horizontal parking out.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutDirection FrontLeftParallel	1			1	0		0	1
		Available				0×0		
		Unavailable				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 25

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

21 SIG-REQ-XXXXXX/X-APA_DriverSelectDirectionConfirm Signal

This signal indicates the ACU confirm receive APA parking out direction which is selected by user on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_DriverSelectDirectionConfirm	3			1	0		0	7
		No_Park_Out_Direction				0×0		
		Park_Out_Front_Left_Parallel				0×1		
		Park_Out_Front_Left_Cross				0×2		
		Park_Out_Front_Right_Parallel				0×3		
		Park_Out_Front_Right_Cross				0×4		
		Park_Out_Front				0×5		
		Park_Out_Backward				0×6		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 28

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

22 SIG-REQ-XXXXXX/X-APA_ManeuveringRemainDistance Signal

This signal indicates the remain distance of APA maneuvering.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ManeuveringRemainDistance	8		m	0.1	0		0	25.5

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 8

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

Req. Template Version 6.0 End of Requirement

23 SIG-REQ-XXXXXX/X-APA_GuidePopup Signal

This signal indicates the popup prompt after APA ON, which is dispalyed on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_GuidePopup	4		-	1	0		0	15
		No Popup				0×0		
		Functional Conflict				0×1		
		Speed Too High				0×2		
		Not Normal Mode				0×3		
		No Dynamics				0×4		
		eCALL				0×5		
		Mobile Control				0×6		
		Under Developing				0×7		
		Log In				0×8		
		Authorization				0×9		
		Require Exam				0×A		
		Wake Up				0×B		
		APA Failure				0×C		
		ACU Updating				0×D		
		HAVP is creating learning map				0×E		
		Reserved				0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 14

Rationale	
Acceptance Criteria	

Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

24 SIG-REQ-XXXXXX/X-APA_ProcessingPopup Signal

This signal indicates the popup prompt after APA ON, which is dispalyed on virtual screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ProcessingPopup	6		-	1	0		0	63
		No req				0×0		
		Select park in or park out				0×1		
		Searching park slot				0×2		
		Slow down to search park slot				0×3		
		Searching paused				0×4		
		Searching continue				0×5		
		Stop to park in				0×6		
		Close doors				0×7		
		Close hood door				0×8		
		Close back door				0×9		
		Fasten seat belt				0×A		
		Presse brake pedal				0×B		
		Shift N or P				0×C		
		Stop to select park slot				0×D		
		Release EPB				0×E		
		Select button				0×F		
		Select RPA button				0×10		
		Parking In				0×11		

		Select Recover button				0×12		
		Park in completed				0×13		
		Phone controing				0×14		
		Select park direction				0×15		
		Park direction unavailable				0×16		
		Select "Park Out" button				0×17		
		Don't press accelerator				0×18		
		All parking out direction unavailable				0×19		
		Parking out completed				0×1A		
		Parking out				0×1B		
		Please pull out charging gun				0×1C		
		Please close charging port cover				0×1D		
		Please go to flat road to activate auto park				0×1E		
		Please select available park slot				0×1F		
		Reserved				0×20~0×3F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 24

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

25 SIG-REQ-XXXXXX/X-APA_SuspendPopup Signal

This signal indicates the popup prompt after APA suspend, which is dispalyed on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_SuspendPopup	5		-	1	0		0	31
		No req				0×0		
		Req_Paused_Waiting obstacles remove				0×1		
		Req_Paused_Close Door				0×2		
		Req_Paused_Close HoodDoor				0×3		
		Req_Paused_Close BackDoor				0×4		
		Req_Paused_FastenSeatBelt				0×5		
		Req_Paused_ReleaseBrakePedal				0×6		
		Req_Paused_Charging or filler flap				0×7		
		Reserved				0×8~ 0×1F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 30

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

26 SIG-REQ-XXXXXX/X-APA_TerminatePopup Signal

This signal indicates the popup prompt after APA terminate, which is dispalyed on APIM screen..

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max

APA_TerminatePopup	7		-	1	0		0	127
		No Request				0×0		
		Req_Quit_Car mode invalid				0×1		
		Req_Quit_OTA active				0×2		
		Req_Quit_ADAS				0×3		
		Req_Quit_ABS actvie				0×4		
		Req_Quit_TCS active				0×5		
		Req_Quit_ESC active				0×6		
		Req_Quit_eCALL				0×7		
		Req_Quit_Camera Blockage				0×8		
		Req_Quit_USS Blockage				0×9		
		Req_Quit_Slope_Too large				0×A		
		Req_Quit_Speed high				0×B		
		Req_Quit_Tire Pressure Too Low				0×C		
		Req_Quit_Remote start forbid				0×D		
		Req_Quit_PT READY FAILED				0×E		
		Req_Quit_Vehicle Low Battery				0×F		
		Req_Quit_Trailer connected				0×10		
		Req_Quit_Traction Control System off				0×11		

		Req_Quit_Powerpack torque status changes to not available				0×12		
		Req_Quit_Power management failure				0×13		
		Req_Quit_LSC error				0×14		
		Req_Quit_EPAS error				0×15		
		Req_Quit_ABS error				0×16		
		Req_Quit_BCM error				0×17		
		Req_Quit_BLEM_failure				0×18		
		Req_Quit_Remote Device error				0×19		
		Req_Quit_Unexpected deactivation of LSC				0×1A		
		Req_Quit_Unexpected deactivation of ABS				0×1B		
		Req_Quit_Unexpected deactivation of EPAS				0×1C		
		Req_Quit_External ECU failure				0×1D		
		Req_Quit_Sys_Failure				0×1E		
		Req_Quit_CAN_Communication_failure				0×1F		
		Req_Quit_Function on check overtime				0×20		

		Req_Quit Terminate Button Pressed HMI Cancel				0×21		
		Req_Quit_App exit				0×22		
		Req_Quit_Gear Intervention				0×23		
		Req_Quit_EPB_Apply				0×24		
		Req_Quit_Steering Wheel Intervention				0×25		
		Req_Quit_Mirror fold				0×26		
		Req_Quit_Unsafe_Behavior				0×27		
		Req_Quit_Vehcle_Charging				0×28		
		Req_PowerOFF				0×29		
		Req_Quit_Insurmountable obstacle detected				0×2A		
		Req_Quit_Timing overtime				0×2B		
		Req_Quit_Matime overtime				0×2C		
		Req_Quit_Recovery Timeout				0×2D		
		Req_Quit_Interrupt Times Overflow				0×2E		
		Req_Quit_Remote move distance out of range				0×2F		
		Req_Quit_Handshake failed				0×30		

		Req_Quit_Steering Angle_Out_of_Limit				0×31		
		Req_Quit_Shift_Operate_Failed				0×32		
		Req_Quit_Trajectory				0×33		
		Req_Quit_Path planning error				0×34		
		Req_Quit_Space limit				0×35		
		Parking succeed				0×36		
		Req_Quit_Searching_Timeout				0×37		
		Req_Quit_Searching_Overspeed				0×38		
		Req_Quit_ChargeGun				0×39		
		Req_Quit_Actuator feedback abnormal				0×3A		
		Searching speed too high				0×3B		
		Vehicle is not in safe state				0×3C		
		Reserved				0x3D ~0×7F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 29					
Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement
Req. Template Version 6.0					End of Requirement

27 SIG-REQ-XXXXXX/X-Prk_Resume_Req Signal

This signal indicates parking function suspend recovery, which is send by IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
Prk_Resume_Req	1		-	1	0		0	1
		No request				0×0		
		Request				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 19

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

28 SIG-REQ-XXXXXX/X- APA_ActiveType_Indicate (Reserved) Signal

This signal indicates the different activation ways of the APA.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_ActiveType_Indicate	3		-	1	0		0	7
		OFF				0×0		
		APA actived by soft button				0×1		
		APA actived by voice button				0×2		
		APA actived by hard button				0×3		
		APA actived by launcher button				0×4		
		APA actived by quick panel button				0×5		
		Reserved				0×6		
		Reserved				0×7		

29 SIG-REQ-XXXXXX/X- Prk_IVIFunc_Req Signal

This signal indicates parking feature request for IVI to have function ON, include APA/AVM/Backtrack/HAVP.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
Prk_IVIFunc_Req	3		-	1	0		0	7
		No req				0×0		
		AVM ON req				0×1		
		APA ON req				0×2		
		Backtrack ON req				0×3		
		HAVP ON req				0×4		
		RPA ON req				0×5		
		Reserved				0×6		
		Reserved				0×7		

30 SIG-REQ-XXXXXX/X- ApaMde_D_Stat2_IVI Signal

This signal represents the current state of the APA (Automatic Parking Assist) Modes

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
ApaMde_D_Stat2_IVI	4		-	1	0		0	15
		OFF				0×0		
		Disable				0×1		
		Failure				0×2		
		Standby				0×3		
		Searching_Active				0×4		
		Searching_Suspend				0×5		
		Parking_Active				0×6		
		Parking_suspend				0×7		
		Terminated				0x8		
		Completed				0x9		
		NotUsed_1				0xA		

		NotUsed_2				0xB		
		NotUsed_3				0xC		
		NotUsed_4				0xD		
		NotUsed_5				0xE		
		NotUsed_6				0xF		

1.3.2 Logical Outputs

Signal Name	Description
Internal_APAExitButton_Status_Flag	This signal is used to control the state of the APA Exit Button.
Internal_APASettingButton_Status_Flag	This signal is used to control the state of the APA Setting Button.
Internal_ParkSoltIndication_Dis_Status_Flag	This signal is used to control the state of the Park Slot Indication Popup.
Internal_ParkSoltIndication_Setup_MC	This signal is used to control the setting menu display output for Park Slot Indication selection.
Internal_ParkSoltIndication_Setup_DetailPopup_Flag	This signal is used to control the state of the Park Slot Setup infobook Popup
Internal_ParkSoltIndication_Setup_DetailReturn_MC	This signal indicates the Park Slot Setup InfoBook confirm Button status, which means user could click this button to exit Park Slot Setup infobook Popup.
Internal_APA_InfobookButton	This signal indicateds the InfoBook Button status, which means user could click this button to enter the infobook.

Interal_APA_InfobookReturn	This signal indicates the InfoBook Button status, which means user could click this button to exit infobook and went to APA page or launcher.
Internal_APA_GuidePopup_X_Status_Flag	This signal is used to control the state of the Guide Popup.
Internal_APA_ProcessingPopup _X_Status_Flag	This signal is used to control the state of the Processing Popup.
Internal_APA_SuspendPopup X_Status_Flag	This signal is used to control the state of the Suspend Popup.
Internal_APA_TerminatePopup X_Status_Flag	This signal is used to control the state of the Terminate Popup.
APA_SoftButton (Reserved) Type: APA_SoftButton	This signal indicates the soft button of APA on APIM screen, if user click this button, APIM will sent pressed status to IPMB.
APA_Launcher_SoftButton Type: APA_Launcher_SoftButton	This signal indicates the soft button of APA on launcher page, if user click this button, APIM will sent pressed status to IPMB.
APA_QuickPanelButton (Reserved) Type: APA_QuickPanelButton	This signal indicates the soft button of APA on APIM quick panel page, if user click this button, APIM will sent pressed status to IPMB.
APA_AVM_SoftButton Type: APA_AVM_SoftButton	This signal indicates the soft button of APA on AVM main page, if user click this button, APIM will sent pressed status to IPMB.
APA_VoiceActivationButton Type: APA_VoiceActivationButton	This signal indicates the voice activation of APA, if user request APA ON by voice, APIM will sent this signal to IPMB.
APIM_APA_PassExamination Type: APIM_APA_PassExamination	This signal indicates whether APA is enabled, log in with authentication, test passed, configured, etc.
APA_ParkSlotPopupButton Type: APA_ParkSlotPopupButton	This signal indicates that user can turn off popup reminder when park slot is searched eventhough APA is not be activated.

APA_DriverParkTypeReq Type: APA_DriverParkTypeReq	This signal indicates the request APA parking mode by user selected on APIM screen.
APA_ParkInControlReq Type: APA_ParkInControlReq	This signal indicates the selected status of APA parking in activation button.
APA_ParkOutControlReq Type: APA_ParkOutControlReq	This signal indicates the selected status of APA parking out activation button.
RPA_ParkControlReq Type: RPA_ParkControlReq	This signal indicates the selected status of RPA activation button.
APA_DriverParkSlotReq Type: APA_DriverParkSlotReq	This signal indicates the selected APA parking slot by user on APIM screen.
APA_DriverSelectDirection Type: APA_DriverSelectDirection	This signal indicates the APA parking out direction which is selected by user on APIM screen.
Prk_DriverResume_Req Type: Prk_DriverResume_Req	This signal indicates whether user click the parking function resume button on APIM screen after suspend recovery.
RPA_PageReturn_Button Type: RPA_PageReturn_Button	This signal indicates the exit button status of RPA page, which means user could click this button to exit RPA and went to APA page when waiting for bluetooth connecting.
Prk_ExitButton	This signal indicates parking feature request for APIM to have function OFF, include APA/AVM/Backtrack/HAVP.
IVI_Prk_DispStat	This signal indicates which parking feature is displayed on APIM, include APA/AVM/Backtrack/HAVP.

1.3.2.1 IR-REQ-XXXXXX/X-INTERNAL:

- Internal_APAExitButton_Status_Flag, which is used to control the state of the APA Exit Button.
- Internal_APASettingButton_Status_Flag, which is used to control the state of the APA Setting Button.
- Internal_ParkSoltIndication_Status_Flag, which is used to control the state of the Park Slot Indication Popup.
- Internal_ParkSoltIndication_Setup_DetailPopup_Flag, This signal is used to control the state of the Park Slot Setup infobook Popup.

- Internal_ParkSoltIndication_Setup_DetailReturn_MC, This signal indicates the Park Slot Setup InfoBook confirm Button status, which means user could click this button to exit Park Slot Setup infobook Popup.
- Internal_APA_InfobookButton, this signal indicateds the InfoBook Button status, which means user could click this button to enter the infobook.
- Interal_APA_InfobookReturn, this signal indicates the InfoBook Button status, which means user could click this button to exit infobook and went to APA page or launcher.
- Internal_APA_GuidePopup_X_Status_Flag, which is used to control the state of the Guide Popup.
- Internal_APA_ProcessingPopup _X_Status_Flag, which is used to control the state of the Processing Popup.
- Internal_APA_ SuspendPopup _X_Status_Flag, which is used to control the state of the Suspend Popup.
- Internal_APA_ TerminatePopup _X_Status_Flag, which is used to control the state of the Terminate Popup.

1.3.2.2 MUX signals on the CAN from IPMB

1 SIG-REQ-XXXXXX/X-APA_SoftButton (Reserved) Signal

This signal indicates the soft button of APA on APIM screen, if user click this button, APIM will sent pressed status to IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_SoftButton	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 33

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

2 SIG-REQ-XXXXXX/X-APA_Launcher_SoftButton Signal

This signal indicates the soft button of APA on launcher page, if user click this button, APIM will sent pressed status to IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_Launcher_SoftButton	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:

- APA/RPA Function

Requirement ID: 42					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

3 SIG-REQ-XXXXXX/X-APA_QuickPanelButton (Reserved) Signal

This signal indicates the soft button of APA on APIM quick panel page, if user click this button, APIM will sent pressed status to IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_QuickPanelButton	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 38					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

4 SIG-REQ-XXXXXX/X-APA_AVM_SoftButton Signal

This signal indicates the soft button of APA on AVM main page, if user click this button, APIM will sent pressed status to IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_AVM_SoftButton	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 32

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

5 SIG-REQ-XXXXXX/X-APA_VoiceActivationButton Signal

This signal indicates the voice activation of APA, if user request APA ON by voice, APIM will sent this signal to IPMB.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_VoiceActivationButton	2		-	1	0		0	3
		No request				0×0		
		ON				0×1		
		OFF				0×2		
		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 37

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

6 SIG-REQ-XXXXXX/X-APIM_APA_PassExamination Signal

This signal indicates whether APA/RPA is enabled, log in with authentication, test passed, configured, etc…

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APIM_APA_PassExamination	1			1	0		0	1
		Unactivated				0×0		
		Activated				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 41					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

7 SIG-REQ-XXXXXX/X-APA_ParkSlotPopupButton Signal

This signal indicates that user can turn off popup reminder when park slot is searched eventhough APA is not be activated.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkSlotPopupButton	1			1	0		0	1
		ON				0×0		
		OFF				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 34					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

8 SIG-REQ-XXXXXX/X-APA_DriverParkTypeReq

This signal indicates the request APA parking mode by user selected on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_DriverParkTypeReq	2		-	1	0		0	3
		No_Req				0×0		
		Park_In				0×1		
		Park_Out				0×2		

		Reserved				0×3		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 35					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

9 SIG-REQ-XXXXXX/X-APA_ParkInControlReq Signal

This signal indicates the selected status of APA parking in activation button.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkInControlReq	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 46					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

10 SIG-REQ-XXXXXX/X-APA_ParkOutControlReq Signal

This signal indicates the selected status of APA parking out activation button.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_ParkOutControlReq	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 45					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

11 SIG-REQ-XXXXXX/X-RPA_ParkControlReq Signal

This signal indicates the selected status of RPA activation button.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
RPA_ParkControlReq	1			1	0		0	1
		OFF				0×0		
		ON				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 40					
Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress
Req. Template Version 6.0					End of Requirement

12 SIG-REQ-XXXXXX/X-APA_DriverParkSlotReq Signal

This signal indicates the selected APA parking slot by user on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
APA_DriverParkSlotReq	4		-	1	0		0	15
		No_Req				0×0		
		Slot_L1				0×1		
		Slot_L2				0×2		
		Slot_L3				0×3		

		Slot_L4				0×4		
		Slot_L5				0×5		
		Slot_R1				0×6		
		Slot_R2				0×7		
		Slot_R3				0×8		
		Slot_R4				0×9		
		Slot_R5				0×A		
		Reserved				0×B~0×F		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 44

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

13 SIG-REQ-XXXXXX/X-APA_DriverSelectDirection Signal

This signal indicates the APA parking out direction which is selected by user on APIM screen.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
APA_DriverSelectDirection	3			1	0		0	7
		No_Park_Out_Direction				0×0		
		Park_Out_Front_Left_Parallel				0×1		
		Park_Out_Front_Left_Cross				0×2		
		Park_Out_Front_Right_Parallel				0×3		
		Park_Out_Front_Right_Cross				0×4		
		Park_Out_Front				0×5		

		Park_Out_Backward				0×6		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 43

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

14 SIG-REQ-XXXXXX/X-Prk_DriverResume_Req Signal

This signal indicates whether user click the parking function resume button on APIM screen after suspend recovery.

Signal Name	Size (bits)	Detail	Units	Res.	Offset	State Encoded	Min	Max
Prk_DriverResume_Req	1		-	1	0		0	1
		No Pressed				0×0		
		Pressed				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 36

Rationale					
Acceptance Criteria					
Notes					
Source				**Owner**	
Source Req.				**V&V Method**	
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

15 SIG-REQ-XXXXXX/X-RPA_PageReturn_Button Signal

This signal indicates the exit button status of RPA page, which means user could click this button to exit RPA and went to APA page when waiting for bluetooth connecting.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
RPA_PageReturn_Button	1			1	0		0	1
		No Pressed				0×0		

		Pressed				0×1		

Satisfied by:

- Functions:
  - APA/RPA Function

Requirement ID: 39

Rationale					
Acceptance Criteria					
Notes					
Source			**Owner**		
Source Req.			**V&V Method**		
Type		**Priority**		**Status**	In-Progress

Req. Template Version 6.0 End of Requirement

16 SIG-REQ-XXXXXX/X-Prk_ExitButton Signal

This signal indicates parking feature request for APIM to have function OFF, include APA/AVM/Backtrack/HAVP.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
Prk_ExitButton	1			1	0		0	1
		No Pressed				0×0		
		Pressed				0×1		

17 SIG-REQ-XXXXXX/X-IVI_Prk_DispStat Signal

This signal indicates which parking feature is displayed on APIM, include APA/AVM/Backtrack/HAVP.

Signal Name	Size (bits)	Detail	Units	Res.	Offset.	State Encoded	Min	Max
IVI_Prk_DispStat	3			1	0		0	7
		No req				0×0		
		AVM ON req				0×1		
		APA ON req				0×2		
		Backtrack ON req				0×3		
		HAVP ON req				0×4		
		RPA ON req				0×5		
		Reserved				0×6		
		Reserved				0×7		

1.3.3 Logical Parameters

(No parameters have been defined)

1.4 Function Modeling

1.4.1 State Charts

No state chart associated to specified function.

1.4.2 Activity Diagrams

1.4.2.1 Automated Parking Assist and Remote Parking Assist Diagnostic Comfiguration Flowchart

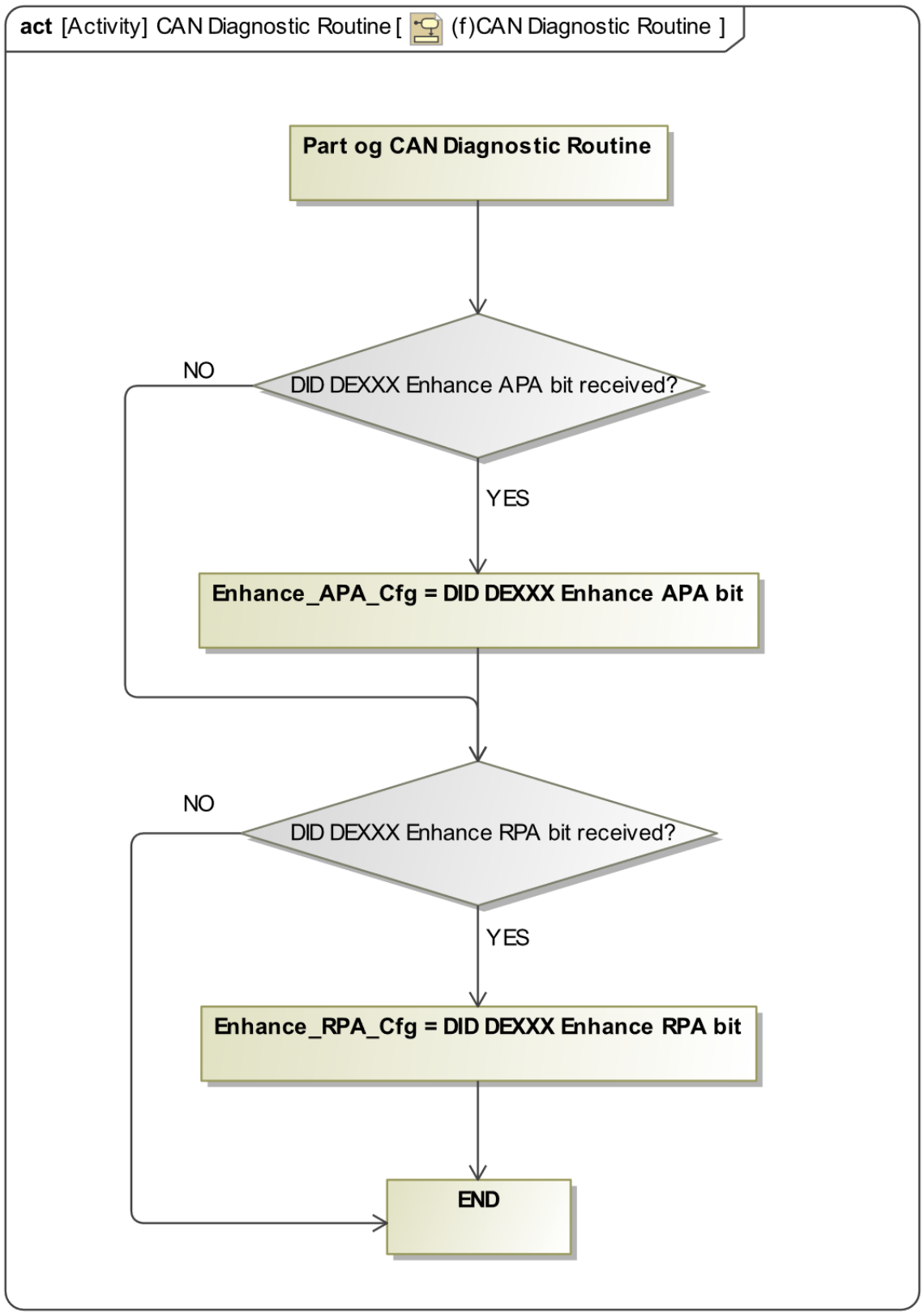


Figure 2: Automated Parking Assist and Remote Parking Assist Diagnostic Configuration Flowchart

1.4.2.2 Automated Parking Assist and Remote Parking Assist Activation Process Flowchart

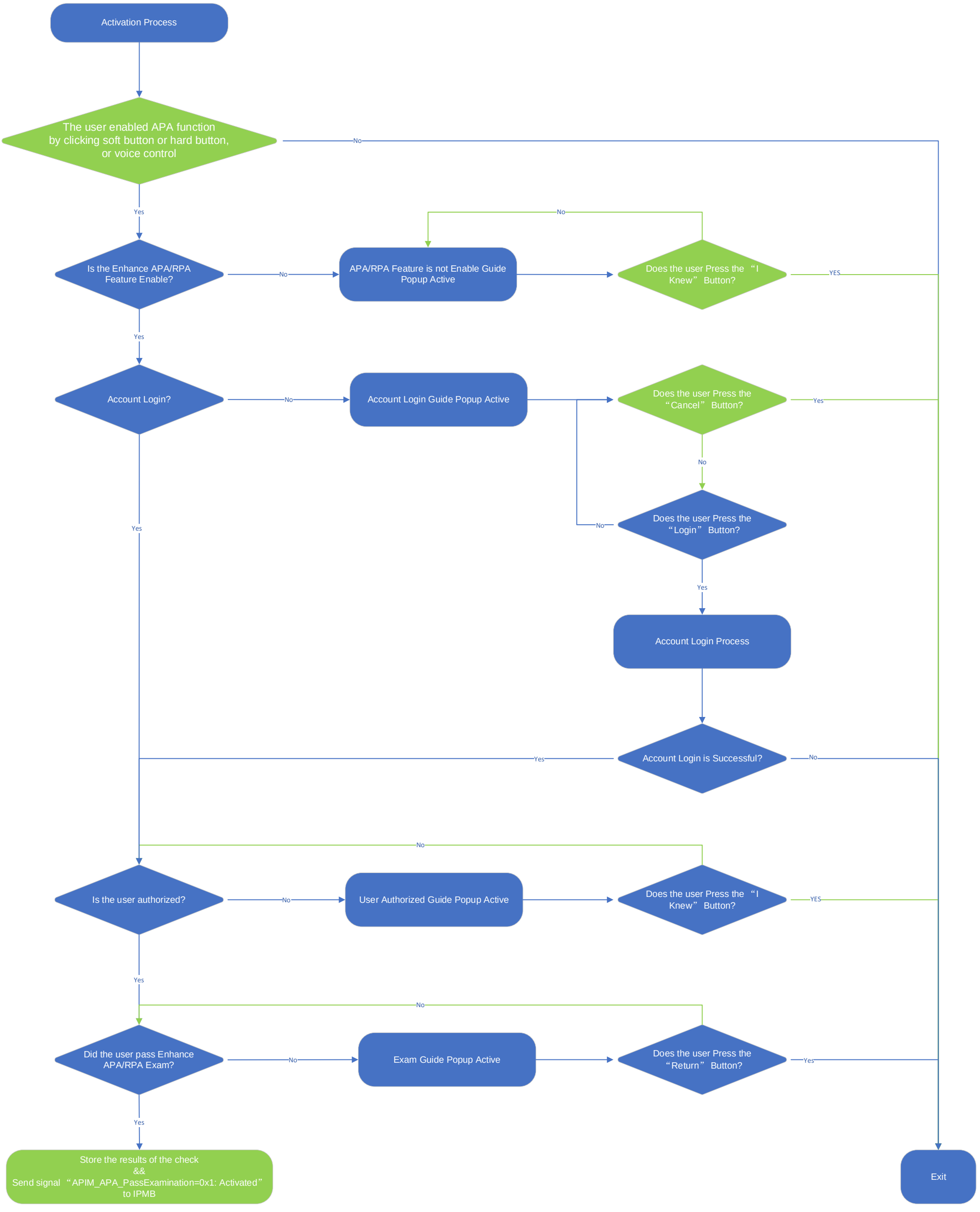


Figure 3: Activity Diagram of Automated Parking Assist and Remote Parking Assist Activation Process Flow Chart

1.4.2.3 Automated Parking Assist and Remote Parking Assist Parking Assist Precondition Checking Process Flowchart

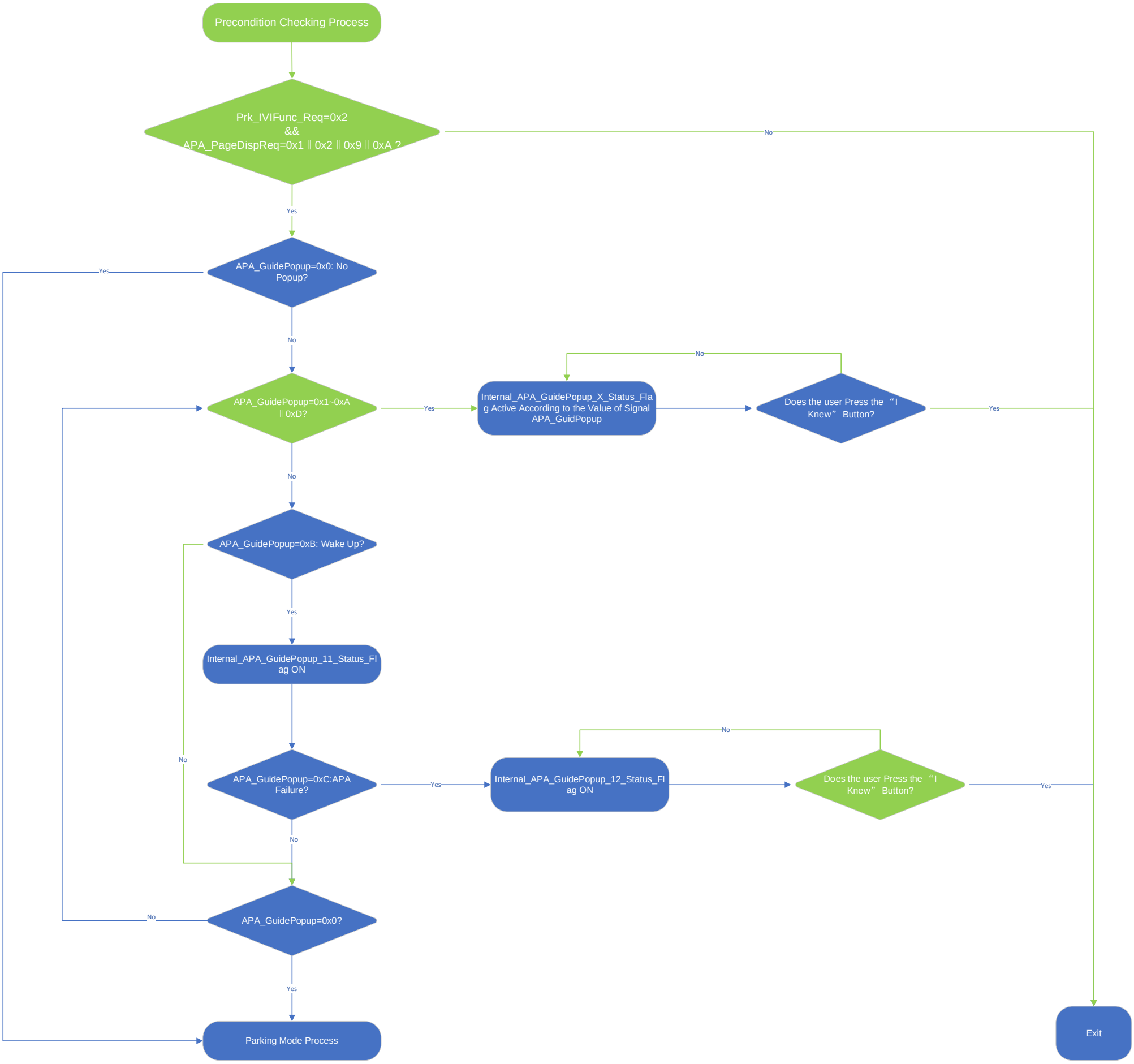


Figure 4: Activity Diagram of Automated Parking Assist and Remote Parking Assist Precondition Checking Flow Chart

1.4.2.4 Automated Parking Assist and Remote Parking Assist Parking Mode Process Flowchart

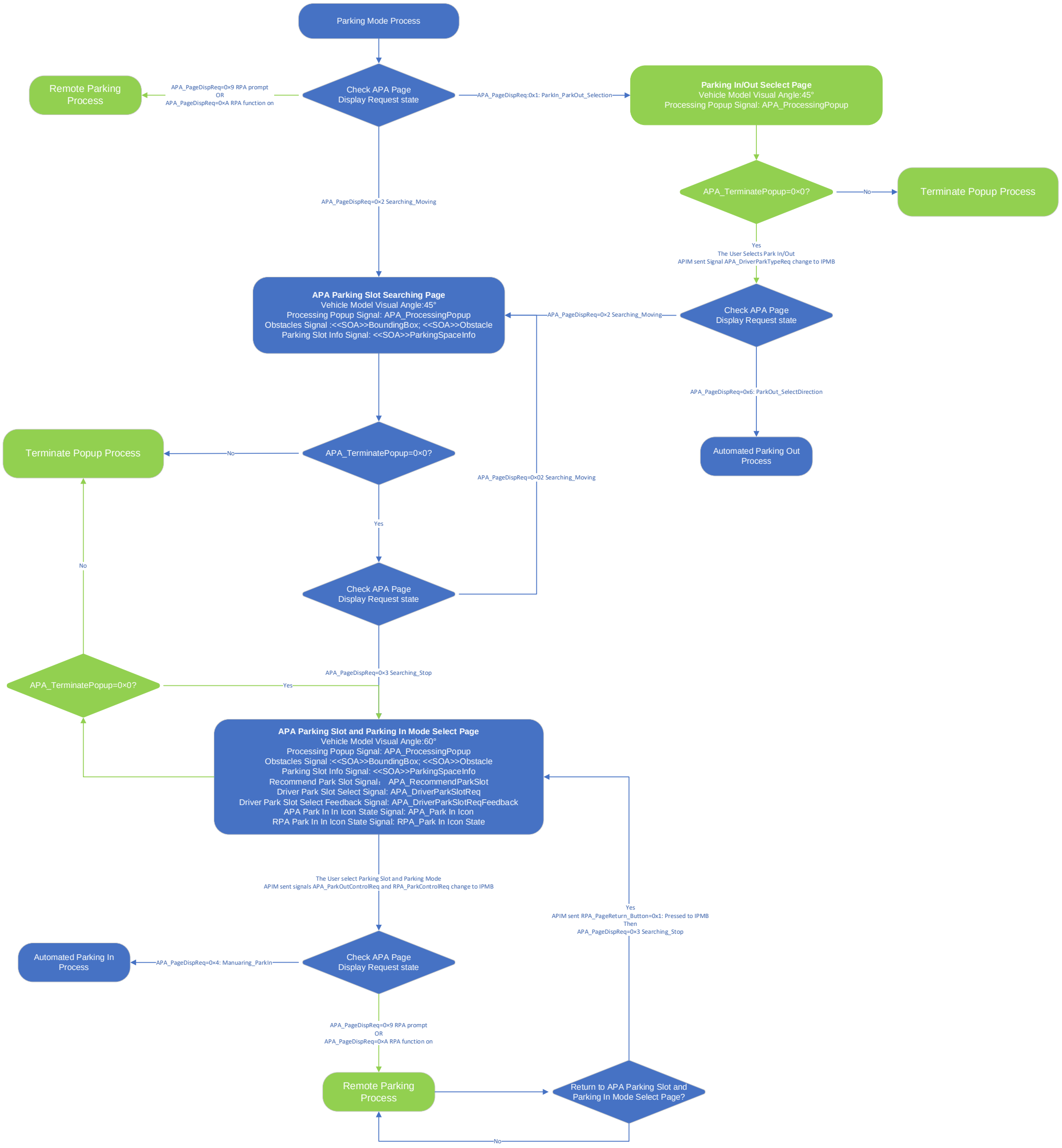


Figure 5: Automated Parking Assist and Remote Parking Assist Parking Mode Process Flowchart

1.4.2.5 Automated Parking Assist Parking In Process Flowchart

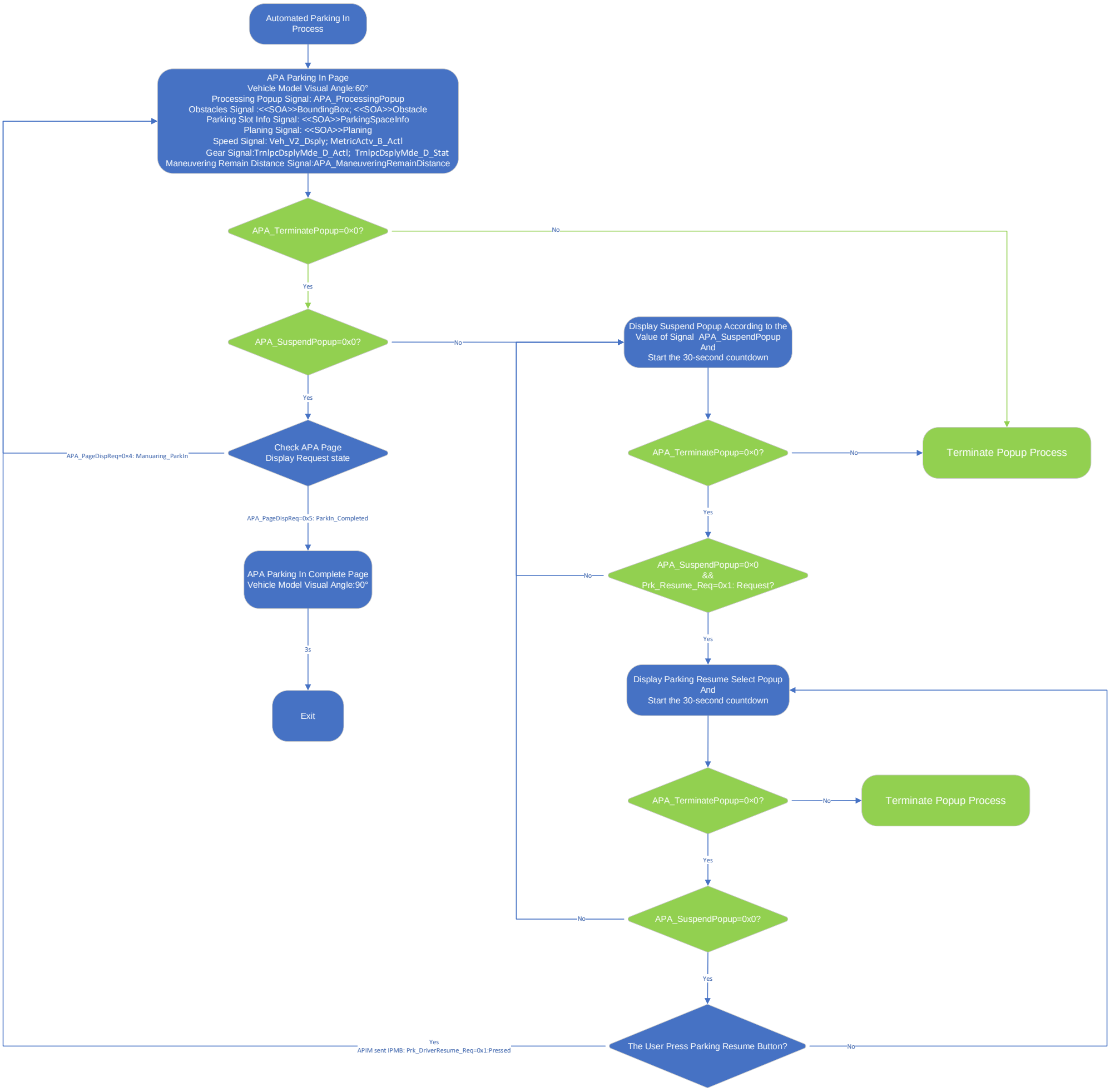


Figure6: Automated Parking Assist Parking In Process Flowchart

1.4.2.6 Automated Parking Assist Parking Out Process Flowchart

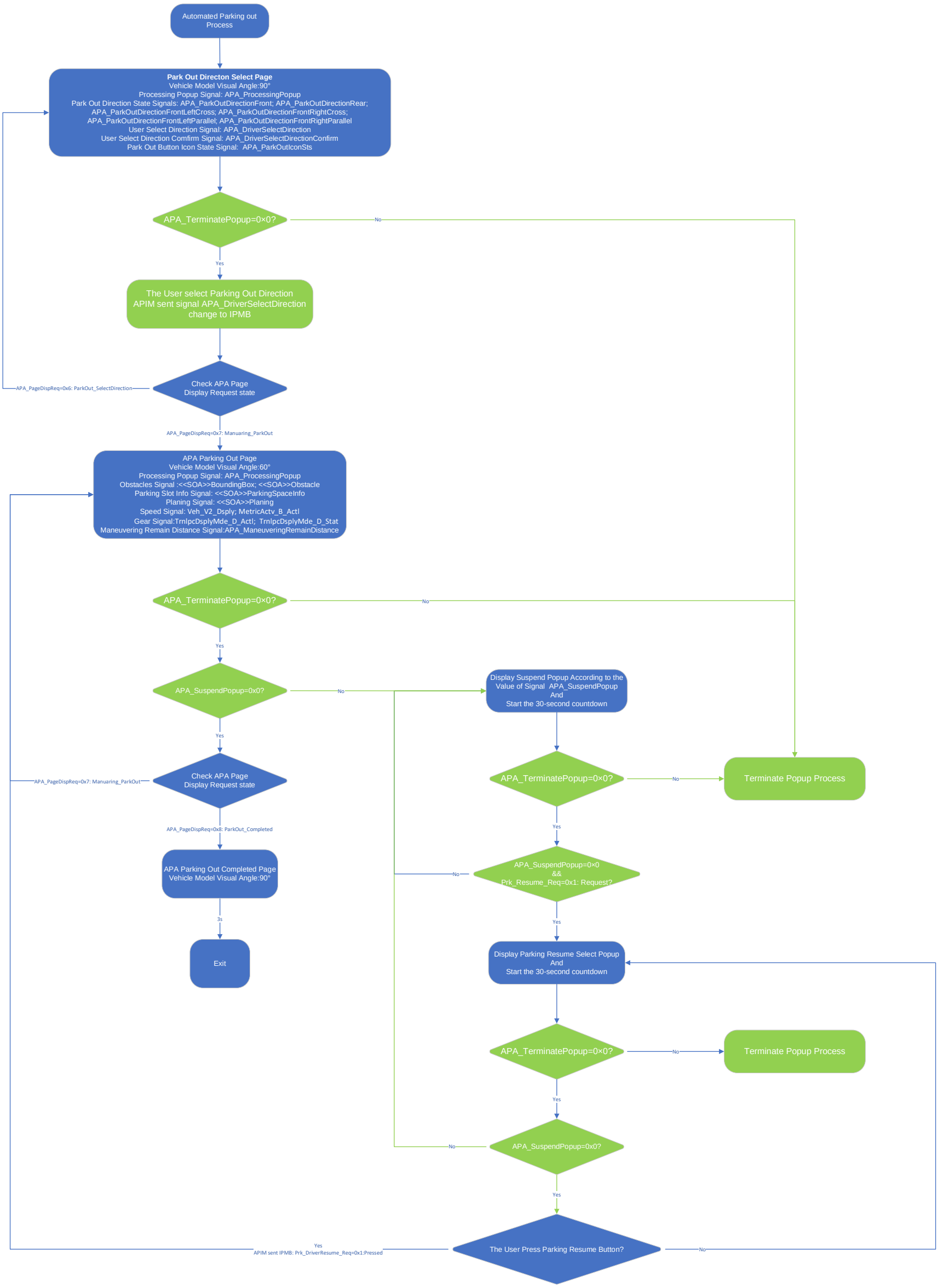


Figure 7: Automated Parking Assist Parking Out Process Flowchart

1.4.2.7 Romote Parking Assist Parking Process Flowchart

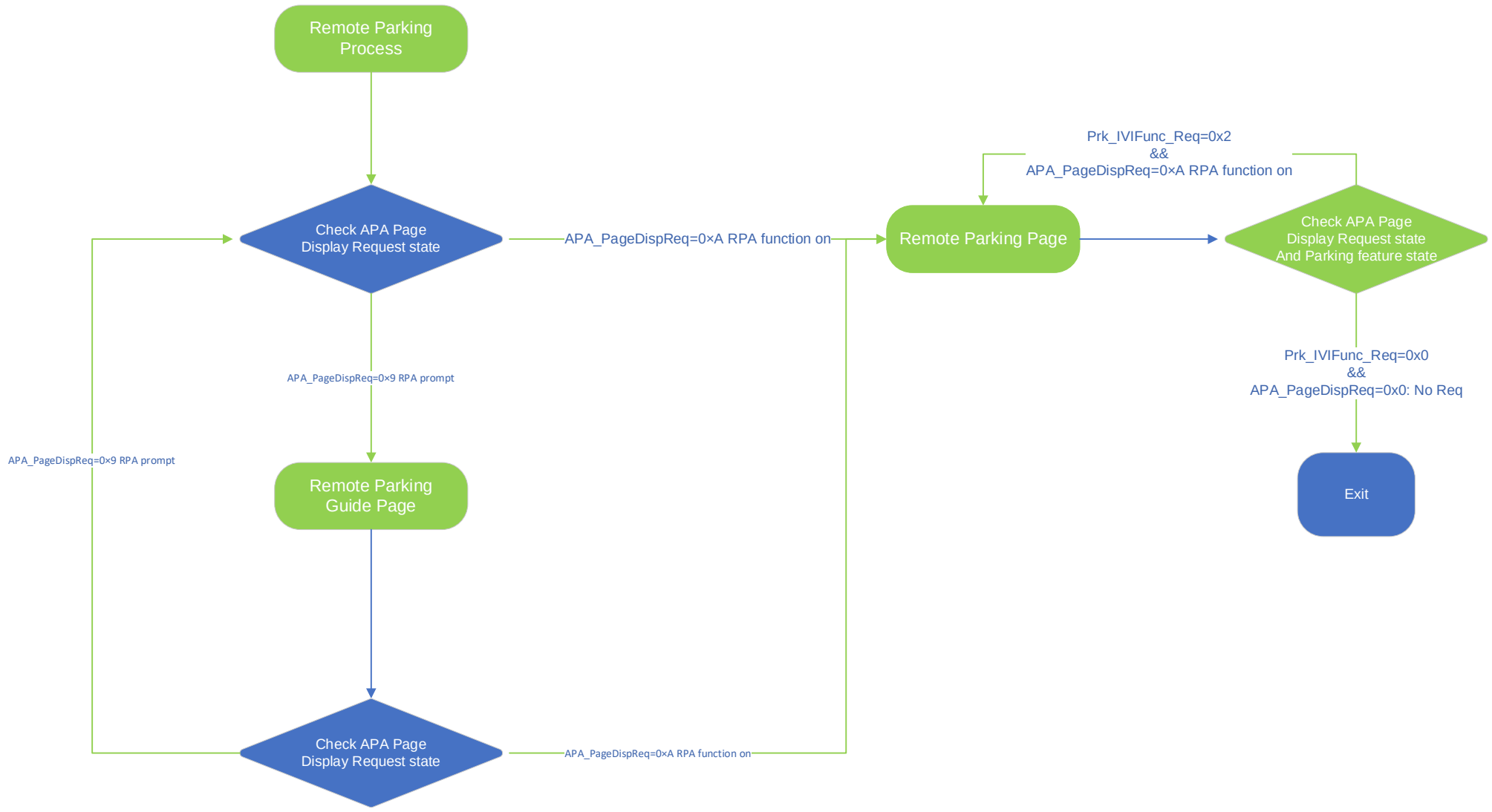


Figure 8: Romote Parking Assist Parking Process Flowchart

1.4.2.8 Terminate Popup Process Flowchart

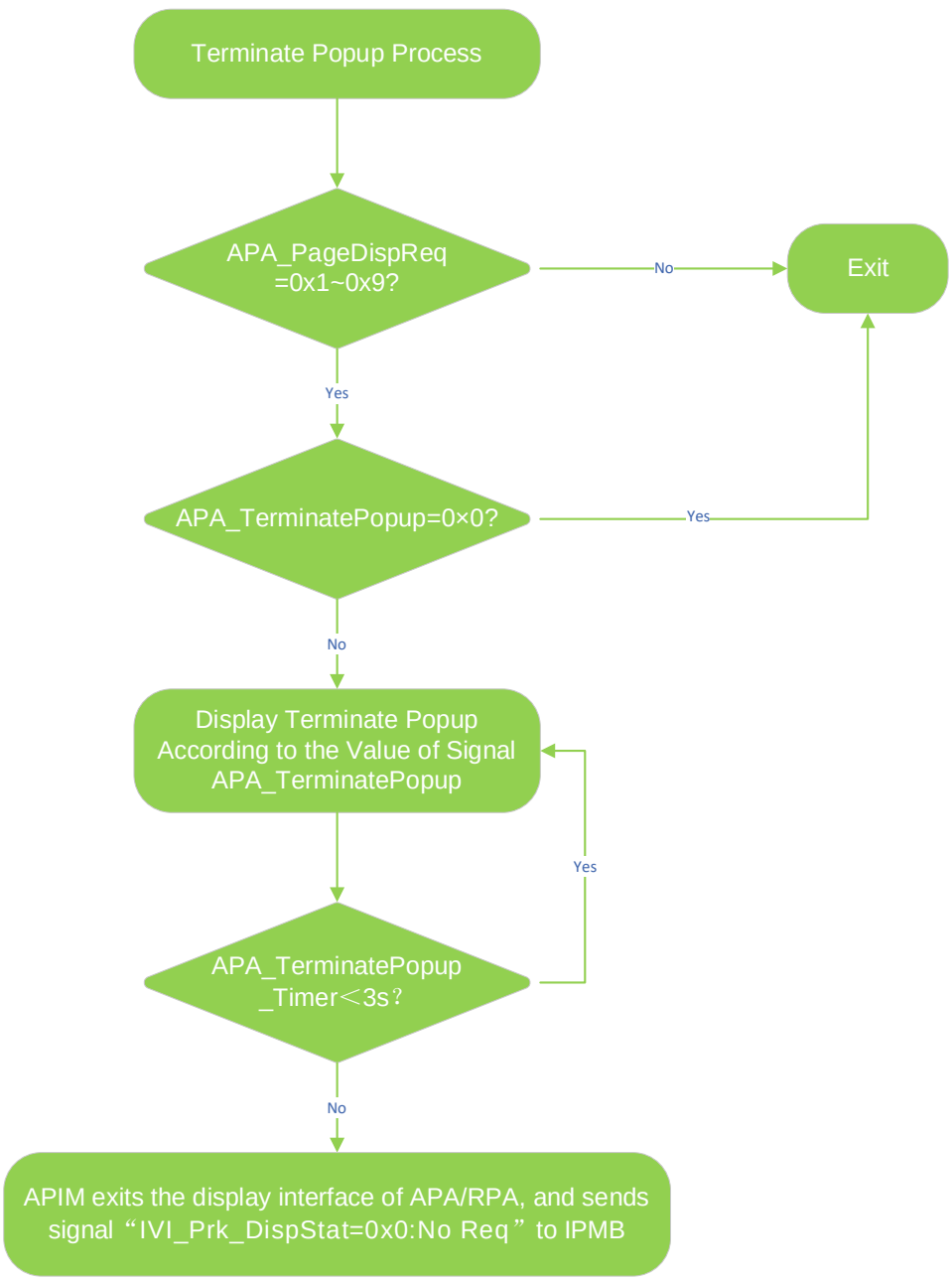


Figure 9: Terminate Popup Process Flowchart

1.4.2.9 APIM Display status signal Flowchart

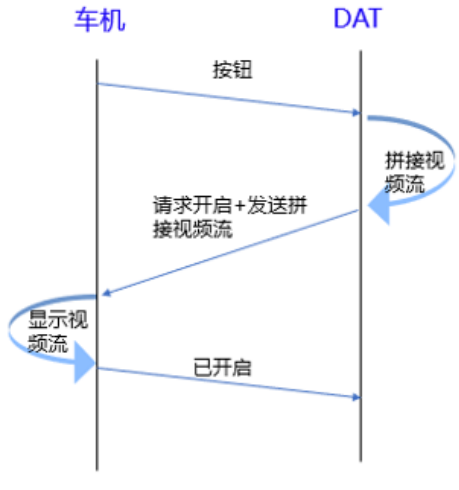


Fig.1 进入时序

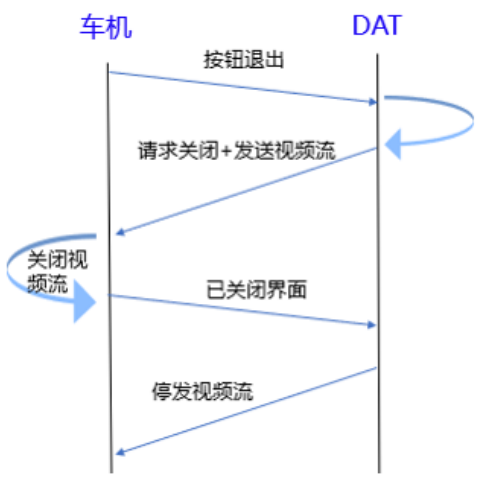


Fig.2 退出时序

When APIM displays APA/RPA information, APIM send the signal “IVI_Prk_DispStat=0×2: APA ON req” to APA/RPA sever.

1.4.3 Sequence Diagrams

No sequence diagram associated to specified function.

1.4.4 Decision Tables

No Decision Tables found in the Magicdraw model.

1.5 Function requirements

1.5.1 F-REQ-XXXXXX/x-Operational Modes

Mode	Differentiating Vehicle Conditions
Sleep Mode	The Automated Parking Assist and Remote Parking Assist Display Inactive
Limited Mode	The Automated Parking Assist and Remote Parking Assist Display Inactive
Normal Mode	The Automated Parking Assist and Remote Parking Assist Display Active
Crank Mode	The Automated Parking Assist and Remote Parking Assist Display Inactive

1.5.2 Human-Machine Interface

1.5.2.1 Indicator Graphics / Display Format

1.5.2.1.1 F-REQ-XXXXXX/X State Matrix for APA Interface Display Information

APIM will display different content in different stages of the Automated Parking Assist and Remote Parking Assist function.

Operational_Mode	Feature Config	APA_PageDispReq Signal	Park Slot Popup	APA Exit Button	HAVP Soft Botton	APA Setting Button	Info Book Button	Guide Popup	Processing Popup	Suspend Popup	Terminate Popup	Parking In/Out button	APA_Parking In Activation Button	RPA Parking In Activation Button	APA_Parking Out Activation Button	RPA_Return_Button	Vehicle Model	Obstacles	Parking Slot Info	APA_ParkOutDirection	Planing & speed & Gear & Maneuvering Remain Distance
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	**Active**	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x1: ParkIn_ParkOut_Selection	Inactive	**Active**	**Active**	**Active**	**Active**	Inactive	**Active**	Inactive	**Active**	**Active**	Inactive	Inactive	Inactive	Inactive	**Active**	**Active**	Inactive	Inactive	Inactive
		0x2: Searching_Moving	Inactive	**Active**	**Active**	**Active**	**Active**	Inactive	**Active**	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	Inactive
		0x3: Searching_Stop	Inactive	**Active**	**Active**	**Active**	**Active**	Inactive	**Active**	Inactive	**Active**	Inactive	**Active**	**Active**	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	Inactive
		0x4: Manuaring_ParkIn	Inactive	**Active**	**Active**	Inactive	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	**Active**
		0x5: ParkIn_Completed	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive
		0x6: ParkOut_SelectDirection	Inactive	**Active**	**Active**	**Active**	**Active**	Inactive	**Active**	Inactive	**Active**	Inactive	Inactive	Inactive	**Active**	Inactive	**Active**	Inactive	Inactive	**Active**	Inactive
		0x7: Manuaring_ParkOut	Inactive	**Active**	**Active**	Inactive	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	**Active**	**Active**	Inactive	**Active**
		0x8: ParkOut_Completed	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive
		0x9: RemotePark_Remind	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive
		0xA: RPA function on	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0xB~0xF: Reserved	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
All Other Cases		X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive

1.5.2.1.2 F-REQ-XXXXXX/X APA Exit Button

The driver can make APA/RPA function exit by pressing the “APA Exit Button”, the client communicates the driver’s intention via the signal Prk_ExitButton to the server.

When the driver presses the APA Exit Button, if the vehicle is not in the process of Automated parking in or out, it will exit the APA directly. If the vehicle is in the process of Automated parking in or out (APA_PageDispReq Signal = 0x4 or 0x7), it will display the Terminate Popup for 3s first, and then exit the APA.

State Matrix for Internal_APAExitButton_Status_Flag

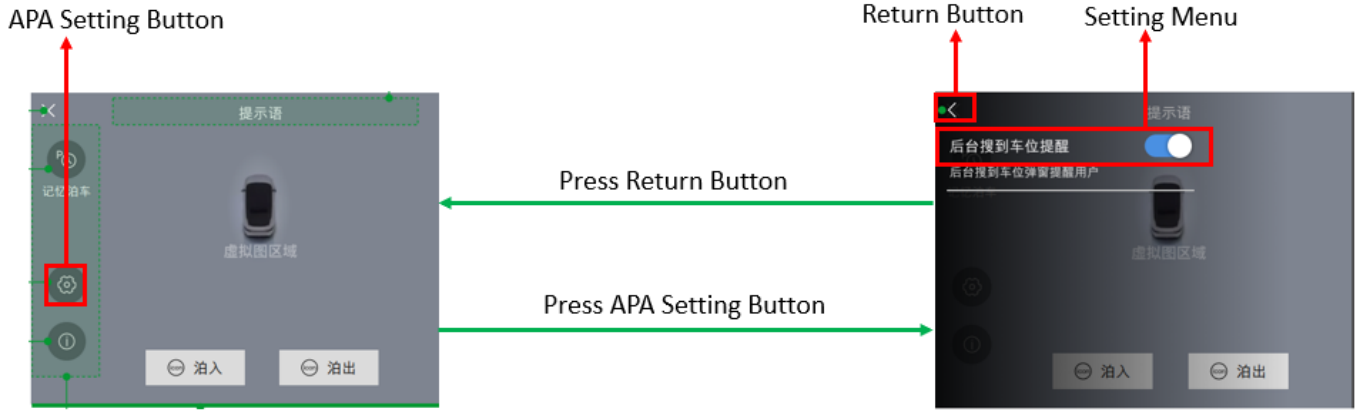
Operational_Mode	Feature Config	APA_PageDispReq Signal	Internal_APAExitButton_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	Inactive
		0x1: ParkIn_ParkOut_Selection	**Active**
		0x2: Searching_Moving	**Active**
		0x3: Searching_Stop	**Active**
		0x4: Manuaring_ParkIn	**Active**
		0x5: ParkIn_Completed	**Active**
		0x6: ParkOut_SelectDirection	**Active**
		0x7: Manuaring_ParkOut	**Active**
		0x8: ParkOut_Completed	**Active**
		0x9: RemotePark_Remind	Inactive

		0xA: RemotePark_PhoneControl	Inactive
		0xB~0xF: Reserved	Inactive
All Other Cases		X (Don't Care)	Inactive

1.5.2.1.3 F-REQ-XXXXXX/X Park Slot Indication

Park Slot Indication Menu is a settings menu, that allows the user to enable or disable the Parking Slot Notification. The pictures below will clarify this, but keep in mind the pictures are for information purposes ONLY and not a solid requirement that forces the Client HMI to look in certain way. The text and the "looks" of the menu could be different.

The option to control the Parking Slot Reminder whether to show or not show it, is controlled by the "Setting Menu" shown below. The client communicates the driver's intention via the signal APA_ParkSlotPopupButton to the server. The setting menu shows the state of the server as communicated by signal APA_ParkSlotPopupButtonFeedback.



If the driver presses the Park Slot Setup Detail, APIM will display the Park Slot Setup infobook, and when the driver pressed the Detail Confirm Button, APIM will back to display Setting Menu.

Menu level 0	Menu level 1	Menu level 2	Comments
APA/RPA	APA Setting	Park Slot Indication Setting • ON • OFF	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)

The below bar, circled in red, is the Parking Slot reminder. It is triggered from the states of signal APA_SearchParkRemindPopup, and it also follow the strategy of APIM toast display, which is:

- If the time that " APA_SearchParkRemindPopup= 0x0: ON " is greater than or equal to 3s, then the Park Slot Reminder Popup will disappear after 3s;
- If the time that " APA_SearchParkRemindPopup= 0x0: ON " is less than 3s, then the Park Slot Reminder Popup will disappear when the signal APA_SearchParkRemindPopup changes to "0x1: OFF".

1 Status Matrix for Internal_APASettingButton_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	Internal_ APASettingButton_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	Inactive
		0x1: ParkIn_ParkOut_Selection	**Active**
		0x2: Searching_Moving	**Active**
		0x3: Searching_Stop	**Active**
		0x4: Manuaring_ParkIn	Inactive
		0x5: ParkIn_Completed	Inactive
		0x6: ParkOut_SelectDirection	**Active**
		0x7: Manuaring_ParkOut	Inactive

		0x8: ParkOut_Completed	Inactive
		0x9~0xF: Reserved	Inactive
		0x9: RPA prompt	Inactive
		0xA: RemotePark_PhoneControl	Inactive
		0xB~0xF: Reserved	Inactive
All Other Cases		X (Don't Care)	Inactive

2 Status Matrix for Internal_ParkSoltIndication_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_ParkSlotPopup ButtonFeedback Signal	APA_SearchParkRem indPopup signal	Internal_ParkSoltIndi cation_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	0x0: ON	0x0: ON	**Active**
		0x0: No req	0x0: ON	0x1: OFF	Inactive
		0x0: No req	0x1: OFF	0x0: ON	Inactive
		0x0: No req	0x1: OFF	0x1: OFF	Inactive
		0x1: ParkIn_ParkOut_Selection	X (Don't Care)		Inactive
		0x2: Searching_Moving	X (Don't Care)		Inactive
		0x3: Searching_Stop	X (Don't Care)		Inactive
		0x4: Manuaring_ParkIn	X (Don't Care)		Inactive
		0x5: ParkIn_Completed	X (Don't Care)		Inactive
		0x6: ParkOut_SelectDirection	X (Don't Care)		Inactive
		0x7: Manuaring_ParkOut	X (Don't Care)		Inactive
		0x8: ParkOut_Completed	X (Don't Care)		Inactive
		0x9: RemotePark_Remind	X (Don't Care)		Inactive
		0xA: RemotePark_Phone Control	X (Don't Care)		Inactive
		0xB~0xF: Reserved	X (Don't Care)		Inactive
All Other Cases		X (Don't Care)	X (Don't Care)		Inactive

1.5.2.1.4 F-REQ-XXXXXX/X APA Info Book

Example Graphics:

The driver can enter the introduction interface of the APA feature by pressing the “Info Book Button”, the driver also can return to the APA launcher HMI by pressing the “Info Book Return Button’.

The content of Info Book is ultimately subject to the HMI, the pictures are for information purposes only.

Status Matrix for Internal_APAInfoBookButton_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	Internal_ APAInfoBookButton_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	Inactive
		0x1: ParkIn_ParkOut_Selection	**Active**
		0x2: Searching_Moving	**Active**
		0x3: Searching_Stop	**Active**
		0x4: Manuaring_ParkIn	Inactive
		0x5: ParkIn_Completed	Inactive
		0x6: ParkOut_SelectDirection	**Active**
		0x7: Manuaring_ParkOut	Inactive
		0x8: ParkOut_Completed	Inactive

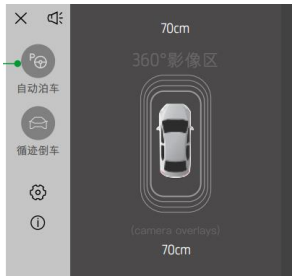
		0x9: RemotePark_Remind	Inactive
		0xA: RemotePark_PhoneControl	Inactive
		0xB~0xF: Reserved	Inactive
All Other Cases		X (Don't Care)	Inactive

1.5.2.1.5 F-REQ-XXXXXX/X HotKey Shortcut Menu General Introduction

There are 4 ways to activate the Automated Parking Assist and Remote Parking Assist feature for the driver: Hard Button｜P｜, two soft buttons and voice control.

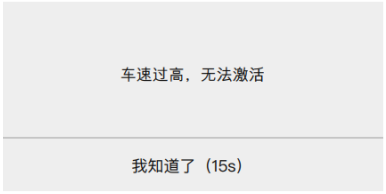
If the driver wants to activate the Automated Parking Assist and Remote Parking Assist feature by soft buttons or voice control, the APIM will transmit the corresponding signal to IPMB, but when the driver presses the Hard Button｜P｜, the Hard Button will transmit signal to IPMB directly, not through APIM.

NO.	items	Example Graphics	transmit signals	comment
1	Hard Button｜P｜	Hard Button, no HMI	/	
2	Soft Button in Launcher		APA_Launcher_SoftButton	This signal indicates the soft button of APA on launcher page, if user click this button, APIM will sent pressed status to IPMB.
~~3~~	~~Soft Button in Quick Panel~~	~~TBD~~	~~APA_QuickPanelButton~~	~~This signal indicates the soft button of APA on APIM quick panel page, if user click this button, APIM will sent pressed status to IPMB.~~

4	Soft Button in AVM		APA_AVM_SoftButton	This signal indicates the soft button of APA on AVM main page, if user click this button, APIM will sent pressed status to IPMB.
5	Voice Control	/	APA_VoiceActivationButton	This signal indicates the voice activation of APA, if user request APA ON by voice, APIM will sent this signal to IPMB.

1.5.2.1.6 F-REQ-XXXXXX/X Guide Popup Text Information

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



1 APA Guide Popup Status Flag to Guide Popup Text Information

Internal_APA_GuidePopup_X_Status_Flag	Text ID	Text content
Internal_APA_GuidePopup_1_Status_Flag	TBD	功能冲突，自动泊车无法启动
Internal_APA_GuidePopup_2_Status_Flag	TBD	车速过高，自动泊车无法启动
Internal_APA_GuidePopup_3_Status_Flag	TBD	非普通模式，自动泊车无法启动
Internal_APA_GuidePopup_4_Status_Flag	TBD	车辆无动力，自动泊车无法启动
Internal_APA_GuidePopup_5_Status_Flag	TBD	紧急呼叫中，自动泊车无法启动
Internal_APA_GuidePopup_6_Status_Flag	TBD	手机控车中，自动泊车无法启动
Internal_APA_GuidePopup_7_Status_Flag	TBD	泊车功能暂未开放，敬请期待！
Internal_APA_GuidePopup_8_Status_Flag	TBD	请先登录账号，再使用自动泊车功能
Internal_APA_GuidePopup_9_Status_Flag	TBD	该用户未被授权，无法使用自动泊车
Internal_APA_GuidePopup_10_Status_Flag	TBD	1st line: 自动泊车考试指南（此为标题，非正文） 2nd line: 请使用手机扫码并通过考试，再使用自动泊车功能
Internal_APA_GuidePopup_11_Status_Flag	TBD	功能启动中，请稍候...
Internal_APA_GuidePopup_12_Status_Flag	TBD	自动泊车功能启动失败

Internal_APA_GuidePopup_13_Status_Flag	TBD	系统升级中，请稍后再试
Internal_APA_GuidePopup_14_Status_Flag	TBD	记忆泊车建图中，无法激活

2 Status Matrix for Internal_APA_GuidePopup_X_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_GuidePopup Signal	Internal_APA_GuidePopup_1_Status_Flag	Internal_APA_GuidePopup_2_Status_Flag	Internal_APA_GuidePopup_3_Status_Flag	Internal_APA_GuidePopup_4_Status_Flag	Internal_APA_GuidePopup_5_Status_Flag	Internal_APA_GuidePopup_6_Status_Flag	Internal_APA_GuidePopup_7_Status_Flag	Internal_APA_GuidePopup_8_Status_Flag	Internal_APA_GuidePopup_9_Status_Flag	Internal_APA_GuidePopup_10_Status_Flag	Internal_APA_GuidePopup_11_Status_Flag	Internal_APA_GuidePopup_12_Status_Flag	Internal_APA_GuidePopup_13_Status_Flag	Internal_APA_GuidePopup_14_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	0x0: No Popup	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x1: Functional Conflict	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x2: Speed Too High	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x3: Not Normal Mode	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x4: No Dynamics	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x5: eCALL	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x6: Mobile Control	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x7: Under Developing	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x8: Log In	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0x9: Authorization	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0xA: Require Exam	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive	Inactive
		0x0: No req	0xB: Wake Up	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive	Inactive
		0x0: No req	0xC: APA Failure	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive	Inactive
		0x0: No req	0xD: ACU Updating	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**	Inactive
		0x0: No req	0xE: Reserved	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	**Active**
		0x0: No req	0xF: Reserved	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x1: ParkIn_ParkOut_Selection	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive

		0x2: Searching_Moving	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x3: Searching_Stop	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x4: Manuaring_ParkIn	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x5: ParkIn_Completed	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x6: ParkOut_SelectDirection	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x7: Manuaring_ParkOut	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x8: ParkOut_Completed	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0x9: RemotePark_Remind	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0xA: RemotePark_Phone Control	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
		0xB~0xF: Reserved	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
All Other Cases		X (Don't Care)	X (Don't Care)	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive

1.5.2.1.7 F-REQ-XXXXXX/X APA Processing Popup Text Information

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

1 APA Processing Popup Status Flag to Processing Popup Text Information

Internal_APA_ProcessingPopup_X_Status_Flag	Text ID	Text content
Internal_APA_ProcessingPopup _1_Status_Flag	TBD	请选择泊入或泊出
Internal_APA_ProcessingPopup_2_Status_Flag	TBD	正在搜索车位
Internal_APA_ProcessingPopup_3_Status_Flag	TBD	请减速搜车位
Internal_APA_ProcessingPopup_4_Status_Flag	TBD	搜车位暂停，请减速搜车位
~~Internal_APA_ProcessingPopup_5_Status_Flag~~	~~TBD~~	~~继续为您搜索车位~~
Internal_APA_ProcessingPopup_6_Status_Flag	TBD	已搜索到车位，如需泊入请停车
Internal_APA_ProcessingPopup_7_Status_Flag	TBD	请关闭车门
Internal_APA_ProcessingPopup_8_Status_Flag	TBD	请关闭前舱盖
Internal_APA_ProcessingPopup_9_Status_Flag	TBD	请关闭后备箱
Internal_APA_ProcessingPopup_10_Status_Flag	TBD	请踩刹车
Internal_APA_ProcessingPopup_11_Status_Flag	TBD	请挂N挡开始自动泊车，挂P挡开始遥控泊车
Internal_APA_ProcessingPopup_12_Status_Flag	TBD	请停车后再选择车位
Internal_APA_ProcessingPopup_13_Status_Flag	TBD	请松开手刹
Internal_APA_ProcessingPopup_14_Status_Flag	TBD	请松开手刹
Internal_APA_ProcessingPopup_15_Status_Flag	TBD	请选择“遥控泊车”开始泊车
Internal_APA_ProcessingPopup_16_Status_Flag	TBD	可选择“自动泊车”为你泊车
Internal_APA_ProcessingPopup_17_Status_Flag	TBD	正在泊入，请注意观察周围环境
Internal_APA_ProcessingPopup_18_Status_Flag	TBD	请点击“恢复”继续泊车
Internal_APA_ProcessingPopup_19_Status_Flag	TBD	泊车完成（泊车完成画面，非引导语）

Internal_APA_ProcessingPopup_20_Status_Flag	TBD	手机控车中，自动泊车无法启动
Internal_APA_ProcessingPopup_21_Status_Flag	TBD	请点击箭头选择泊出方向
Internal_APA_ProcessingPopup_22_Status_Flag	TBD	该方向不可用，请重新选择
Internal_APA_ProcessingPopup_23_Status_Flag	TBD	请点击“开始泊出”
Internal_APA_ProcessingPopup_24_Status_Flag	TBD	请不要踩油门
Internal_APA_ProcessingPopup_25_Status_Flag	TBD	当前无可用泊出方向
Internal_APA_ProcessingPopup_26_Status_Flag	TBD	泊出完成（泊出完成画面，非引导语）
Internal_APA_ProcessingPopup_27_Status_Flag	TBD	正在泊出，请注意观察周围环境
Internal_APA_ProcessingPopup_28_Status_Flag	TBD	请关闭充电枪
Internal_APA_ProcessingPopup_29_Status_Flag	TBD	请关闭充电口盖
Internal_APA_ProcessingPopup_30_Status_Flag	TBD	请开至平坦道路再激活该功能
Internal_APA_ProcessingPopup_31_Status_Flag	TBD	该车位不可用，请重新选择
Internal_APA_ProcessingPopup_32_Status_Flag	TBD	请松开刹车

2 Status Matrix for Internal_APA_ProcessingPopup_X_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_ProcessingPopup Signal	Internal_APA_ProcessingPopup_1_Status_Flag	Internal_APA_ProcessingPopup_2_Status_Flag	Internal_APA_ProcessingPopup_3_Status_Flag	Internal_APA_ProcessingPopup_4_Status_Flag	Internal_APA_ProcessingPopup_5_Status_Flag	Internal_APA_ProcessingPopup_6_Status_Flag	Internal_APA_ProcessingPopup_7_Status_Flag	Internal_APA_ProcessingPopup_8_Status_Flag	Internal_APA_ProcessingPopup_9_Status_Flag	Internal_APA_ProcessingPopup_10_Status_Flag	Internal_APA_ProcessingPopup_11_Status_Flag	Internal_APA_ProcessingPopup_12_Status_Flag	Internal_APA_ProcessingPopup_13_Status_Flag	Internal_APA_ProcessingPopup_14_Status_Flag	Internal_APA_ProcessingPopup_15_Status_Flag	Internal_APA_ProcessingPopup_16_Status_Flag	Internal_APA_ProcessingPopup_17_Status_Flag	Internal_APA_ProcessingPopup_18_Status_Flag	Internal_APA_ProcessingPopup_19_Status_Flag	Internal_APA_ProcessingPopup_20_Status_Flag	Internal_APA_ProcessingPopup_21_Status_Flag	Internal_APA_ProcessingPopup_22_Status_Flag	Internal_APA_ProcessingPopup_23_Status_Flag	Internal_APA_ProcessingPopup_24_Status_Flag	Internal_APA_ProcessingPopup_25_Status_Flag	Internal_APA_ProcessingPopup_26_Status_Flag	Internal_APA_ProcessingPopup_27_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x1: ParkIn_ParkOut_Selection OR 0x2: Searching_Moving OR 0x3: Searching_Stop OR 0x4: Manuaring_ParkIn OR 0x6: ParkOut_SelectDirection OR 0x7: Manuaring_ParkOut	0x0: No req	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1: Select park in or park out	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2: Searching park slot	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x3: Slow down to search park slot	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x4: Searching paused	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x5: Searching continue	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x6: Stop to park in	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x7: Close doors	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x8: Close hood door	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x9: Close back door	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xA: Fasten seat belt	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

			0xB: Presse brake pedal	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xC: Shift N or P	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xD: Stop to select park slot	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xE: Release EPB	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xF: Select button	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x10: Select RPA button	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x11: Parking In	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x12: Select Recover button	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x13: Park in completed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x14: Phone controing	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x15: Select park direction	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina
			0x16: Park direction unavailable	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina
			0x17: Select "Park Out" button	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina
			0x18: Don't press accelerator	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina
			0x19: All parking out direction unavailable	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina
			0x1A: Parking out completed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina
			0x1B: Parking out	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1C: Please pull out charging gun	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1D: Please close charging port cover	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

			0x1E: Please go to flat road to activate auto park	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1F: RPlease select available park slot	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x20-0x3F: Reserved	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x5: ParkIn_Completed	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x8: ParkOut_Completed	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x9: RemotePark_Remind	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xA: RemotePark_Phone Control	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xB~0xF: Reserved	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
All Other Cases		X (Don’t Care)	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_ProcessingPopup Signal	Internal_APA_ProcessingPopup_28_Status_Flag	Internal_APA_ProcessingPopup_29_Status_Flag	Internal_APA_ProcessingPopup_30_Status_Flag	Internal_APA_ProcessingPopup_31_Status_Flag	Internal_APA_ProcessingPopup_32_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled)	0x0: No req	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
		0x1:	0x0: No req	Ina	Ina	Ina	Ina	Ina

		ParkIn_ParkOut_Selection OR 0x2: Searching_Moving OR 0x3: Searching_Stop OR 0x4: Manuaring_ParkIn OR 0x6: ParkOut_SelectDirection 0x7: Manuaring_ParkOut	0x1: Select park in or park out	Ina	Ina	Ina	Ina	Ina
			0x2: Searching park slot	Ina	Ina	Ina	Ina	Ina
			0x3: Slow down to search park slot	Ina	Ina	Ina	Ina	Ina
			0x4: Searching paused	Ina	Ina	Ina	Ina	Ina
			0x5: Searching continue	Ina	Ina	Ina	Ina	Ina
			0x6: Stop to park in	Ina	Ina	Ina	Ina	Ina
			0x7: Close doors	Ina	Ina	Ina	Ina	Ina
			0x8: Close hood door	Ina	Ina	Ina	Ina	Ina
			0x9: Close back door	Ina	Ina	Ina	Ina	Ina
			0xA: Fasten seat belt	Ina	Ina	Ina	Ina	Ina
			0xB: Presse brake pedal	Ina	Ina	Ina	Ina	Ina
			0xC: Shift N or P	Ina	Ina	Ina	Ina	Ina
			0xD: Stop to select park slot	Ina	Ina	Ina	Ina	Ina
			0xE: Release EPB	Ina	Ina	Ina	Ina	Ina
			0xF: Select button	Ina	Ina	Ina	Ina	Ina
			0x10: Select RPA button	Ina	Ina	Ina	Ina	Ina
			0x11: Parking In	Ina	Ina	Ina	Ina	Ina
			0x12: Select Recover button	Ina	Ina	Ina	Ina	Ina
			0x13: Park in completed	Ina	Ina	Ina	Ina	Ina
			0x14: Phone controing	Ina	Ina	Ina	Ina	Ina
			0x15: Select park direction	Ina	Ina	Ina	Ina	Ina

			0x16: Park direction unavailable	Ina	Ina	Ina	Ina	Ina
			0x17: Select "Park Out" button	Ina	Ina	Ina	Ina	Ina
			0x18: Don't press accelerator	Ina	Ina	Ina	Ina	Ina
			0x19: All parking out direction unavailable	Ina	Ina	Ina	Ina	Ina
			0x1A: Parking out completed	Ina	Ina	Ina	Ina	Ina
			0x1B: Parking out	**Act**	Ina	Ina	Ina	Ina
			0x1C: Please pull out charging gun	Ina	**Act**	Ina	Ina	Ina
			0x1D: Please close charging port cover	Ina	Ina	**Act**	Ina	Ina
			0x1E: Please go to flat road to activate auto park	Ina	Ina	Ina	**Act**	Ina
			0x1F: RPlease select available park slot	Ina	Ina	Ina	Ina	**Act**
			0x20-0x3F: Reserved	Ina	Ina	Ina	Ina	Ina
		0x5: ParkIn_Completed	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
		0x8: ParkOut_Completed	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
		0x9: RemotePark_Remind	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
		0xA: RemotePark_Phone Control	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
		0xB~0xF: Reserved	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina
All Other Cases		X (Don’t Care)	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina

1.5.2.1.8 F-REQ-XXXXXX/X APA Suspend Popup Text Information

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

1 APA Suspend Popup Status Flag to Suspend Popup Text Information

Internal_APA_SuspendPopup_X_Status_Flag	Text ID	Text content
Internal_APA_SuspendPopup_1_Status_Flag	TBD	1st line: 检测到障碍物 2nd line: 请移除后点击恢复
Internal_APA_SuspendPopup_2_Status_Flag	TBD	1st line: 车门未关闭 2nd line: 请关闭后点击恢复
Internal_APA_SuspendPopup_3_Status_Flag	TBD	1st line: 前舱盖未关闭 2nd line: 请移除后点击恢复
Internal_APA_SuspendPopup_4_Status_Flag	TBD	1st line: 后备箱未关闭 2nd line: 请移除后点击恢复
Internal_APA_SuspendPopup_5_Status_Flag	TBD	请系上安全带
Internal_APA_SuspendPopup_6_Status_Flag	TBD	请松开刹车
Internal_APA_SuspendPopup_7_Status_Flag	TBD	1st line: 充电枪未拔出 2nd line: 请拔出后点击恢复

2 Status Matrix for Internal_APA_SuspendPopup_X_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_ProcessingPopupSignal	Internal_APA_SuspendPopup_1_Status_Flag	Internal_APA_SuspendPopup_2_Status_Flag	Internal_APA_SuspendPopup_3_Status_Flag	Internal_APA_SuspendPopup_4_Status_Flag	Internal_APA_SuspendPopup_5_Status_Flag	Internal_APA_SuspendPopup_6_Status_Flag	Internal_APA_SuspendPopup_7_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x1: ParkIn_ParkOut_Selection	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x2: Searching_Moving	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x3: Searching_Stop	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x4: Manuaring_ParkIn OR 0x7: Manuaring_ParkOut	0x0: No req	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1: Req_Paused_Waiting obstacles remove	**Act**	Ina	Ina	Ina	Ina	Ina	Ina
			0x2: Req_Paused_CloseDoor	Ina	**Act**	Ina	Ina	Ina	Ina	Ina
			0x3: Req_Paused_CloseHoodDoor	Ina	Ina	**Act**	Ina	Ina	Ina	Ina
			0x4: Req_Paused_CloseBackDoor	Ina	Ina	Ina	**Act**	Ina	Ina	Ina
			0x5: Req_Paused_FastenSeatBelt	Ina	Ina	Ina	Ina	**Act**	Ina	Ina
			0x6: Req_Paused_ReleaseBrakePedal	Ina	Ina	Ina	Ina	Ina	**Act**	Ina
			0x7: Req_Paused_Charging or filler flap	Ina	Ina	Ina	Ina	Ina	Ina	**Act**

			0x8~0x1F: Reserved	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x5: ParkIn_Completed	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x6: ParkOut_SelectDirection	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x8: ParkOut_Completed	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x9: RemotePark_Remind	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xA: RemotePark_Phone Control	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xB~0xF: Reserved	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina
All Other Cases		X (Don't Care)	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina

1.5.2.1.9 F-REQ-XXXXXX/X APA Terminate Popup Text Information

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

1 APA Terminate Popup Status Flag to Terminate Popup Text Information

Internal_APA_TerminatePopup_X_Status_Flag	Text ID	Text content
Internal_APA_TerminatePopup _1_Status_Flag	TBD	1st line: 非普通模式 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_2_Status_Flag	TBD	1st line: 系统升级中 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_3_Status_Flag	TBD	1st line: 功能冲突 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_4_Status_Flag	TBD	1st line: 功能冲突 2nd line: 泊车即将退出

Internal_APA_TerminatePopup_5_Status_Flag	TBD	1st line: 功能冲突 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_6_Status_Flag	TBD	1st line: 功能冲突 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_7_Status_Flag	TBD	1st line: 紧急呼叫开启 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_8_Status_Flag	TBD	1st line: 摄像头被遮挡 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_9_Status_Flag	TBD	1st line: 雷达遮挡 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_10_Status_Flag	TBD	1st line: 坡度过大 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_11_Status_Flag	TBD	1st line: 车速过高 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_12_Status_Flag	TBD	1st line: 胎压过低 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_13_Status_Flag	TBD	1st line: 远程启动被禁止 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_14_Status_Flag	TBD	1st line: 车辆就绪失败 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_15_Status_Flag	TBD	1st line: 车辆低电量 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_16_Status_Flag	TBD	1st line: 拖车模式中 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_17_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_18_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_19_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_20_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_21_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_22_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出

Internal_APA_TerminatePopup_23_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_24_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_25_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_26_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_27_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_28_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_29_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_30_Status_Flag	TBD	1st line: 泊车控制系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_31_Status_Flag	TBD	1st line: 系统故障 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_32_Status_Flag	TBD	1st line: 功能开启超时 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_33_Status_Flag	TBD	1st line: 车端退出 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_34_Status_Flag	TBD	1st line: 手机端退出 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_35_Status_Flag	TBD	1st line: 档位干预 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_36_Status_Flag	TBD	1st line: 电子手刹干预 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_37_Status_Flag	TBD	1st line: 方向盘干预 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_38_Status_Flag	TBD	1st line: 后视镜被折叠 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_39_Status_Flag	TBD	1st line: 不安全行为 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_40_Status_Flag	TBD	1st line: 车辆充电 2nd line: 泊车即将退出

Internal_APA_TerminatePopup_41_Status_Flag	TBD	1st line: 车辆下电 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_42_Status_Flag	TBD	1st line: 摄像头被遮挡 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_43_Status_Flag	TBD	1st line: 操作超时 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_44_Status_Flag	TBD	1st line: 泊车控车超时 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_45_Status_Flag	TBD	1st line: 恢复超时 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_46_Status_Flag	TBD	1st line: 中断次数超限 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_47_Status_Flag	TBD	1st line: 车控距离大于30m 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_48_Status_Flag	TBD	1st line: 关联系统握手失败 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_49_Status_Flag	TBD	1st line: 方向盘角度超限 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_50_Status_Flag	TBD	1st line: 换挡失败 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_51_Status_Flag	TBD	1st line: 偏离轨迹 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_52_Status_Flag	TBD	1st line: 路径规划失败
Internal_APA_TerminatePopup_53_Status_Flag	TBD	1st line: 空间超限 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_54_Status_Flag	TBD	1st line: 泊车完成（泊车完成画面，非弹窗）
Internal_APA_TerminatePopup_55_Status_Flag	TBD	1st line: 搜索车位超时 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_56_Status_Flag	TBD	1st line: 车速过高 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_57_Status_Flag	TBD	1st line: 充电枪插入 2nd line: 泊车即将退出
Internal_APA_TerminatePopup_58_Status_Flag	TBD	1st line: 系统故障，泊车功能退出 2nd line: 泊车即将退出

Internal_APA_TerminatePopup_59_Status_Flag	TBD	车速过高，搜车位退出
Internal_APA_TerminatePopup_60_Status_Flag	TBD	车辆未达安全状态（P+EPB）

2 Status Matrix for Internal_APA_TerminatePopup_X_Status_Flag

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_TerminatePopup Signal	Internal_APA_TerminatePopup_1_Status_Flag	Internal_APA_TerminatePopup_2_Status_Flag	Internal_APA_TerminatePopup_3_Status_Flag	Internal_APA_TerminatePopup_4_Status_Flag	Internal_APA_TerminatePopup_5_Status_Flag	Internal_APA_TerminatePopup_6_Status_Flag	Internal_APA_TerminatePopup_7_Status_Flag	Internal_APA_TerminatePopup_8_Status_Flag	Internal_APA_TerminatePopup_9_Status_Flag	Internal_APA_TerminatePopup_10_Status_Flag	Internal_APA_TerminatePopup_11_Status_Flag	Internal_APA_TerminatePopup_12_Status_Flag	Internal_APA_TerminatePopup_13_Status_Flag	Internal_APA_TerminatePopup_14_Status_Flag	Internal_APA_TerminatePopup_15_Status_Flag	Internal_APA_TerminatePopup_16_Status_Flag	Internal_APA_TerminatePopup_17_Status_Flag	Internal_APA_TerminatePopup_18_Status_Flag	Internal_APA_TerminatePopup_19_Status_Flag	Internal_APA_TerminatePopup_20_Status_Flag	Internal_APA_TerminatePopup_21_Status_Flag	Internal_APA_TerminatePopup_22_Status_Flag	Internal_APA_TerminatePopup_23_Status_Flag	Internal_APA_TerminatePopup_24_Status_Flag	Internal_APA_TerminatePopup_25_Status_Flag	Internal_APA_TerminatePopup_26_Status_Flag	Internal_APA_TerminatePopup_27_Status_Flag	Internal_APA_TerminatePopup_28_Status_Flag	Internal_APA_TerminatePopup_29_Status_Flag	Internal_APA_TerminatePopup_30_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x1: ParkIn_ParkOut_Selection OR 0x2: Searching_Moving OR 0x3: Searching_Stop OR 0x4: Manuaring_ParkIn OR 0x5: ParkIn_Completed OR 0x6: ParkOut_SelectDirection OR 0x7:	0x0: No req	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1: Req_Quit_Car mode invalid	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2: Req_Quit_OTA active	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x3: Req_Quit_ADAS	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x4: Req_Quit_ABS actvie	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x5: Req_Quit_TCS active	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x6: Req_Quit_ESC active	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x7: Req_Quit_eCALL	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x8: Req_Quit_Camera Blockage	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x9: Req_Quit_USS Blockage	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xA: Req_Quit_Slope_Too large	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

		Manuaring_ParkOut OR 0x8: ParkOut_Completed OR 0x9: RemotePark_Remind	0xB: Req_Quit_Speed high	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xC: Req_Quit_Tire Pressure Too Low	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xD: Req_Quit_Remote start forbid	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xE: Req_Quit_PT READY FAILED	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xF: Req_Quit_Vehicle Low Battery	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x10: Req_Quit_Trailer connected	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x11: Req_Quit_Traction Control System off	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x12: Req_Quit_Powerpack torque status changes to not available	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x13: Req_Quit_Power management failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x14: Req_Quit_LSC error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x15: Req_Quit_EPAS error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x16: Req_Quit_ABS error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x17: Req_Quit_BCM error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x18: Req_Quit_BLEM_ failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x19: Req_Quit_Remote Device error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina
			0x1A: Req_Quit_Unexpected deactivation of LSC	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina
			0x1B: Req_Quit_Unexpected deactivation of ABS	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina

			0x1C: Req_Quit_Unexpected deactivation of EPAS	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina
			0x1D: Req_Quit_External ECU failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina
			0x1E: Req_Quit_Sys_Failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**
			0x1F: Req_Quit_CAN_Communication_failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x20: Req_Quit_Function on check overtime	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x21: Req_Quit Terminate Button Pressed HMI Cancel	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x22: Req_Quit_App exit	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x23: Req_Quit_Gear Intervention	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x24: Req_Quit_EPB_Apply	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x25: Req_Quit_Steering Wheel Intervention	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0X26: Req_Quit_Mirror fold	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x27: Req_Quit_Unsafe_Behavior	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x28: Req_Quit_Vehcle_Charging	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x29: Req_PowerOFF	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2A: Req_Quit_Insurmountable obstacle detected	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2B: Req_Quit_Timing overtime	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2C: Req_Quit_Matime overtime	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

			0x2D: Req_Quit_Recovery Timeout	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2E: Req_Quit_Interrupt Times Overflow	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2F: Req_Quit_Remote move distance out of range	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x30: Req_Quit_Handshake failed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x31: Req_Quit_SteeringAngle_Out_of_Limit	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x32: Req_Quit_Shift_Operate_Failed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x33: Req_Quit_Trajectory	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x34: Req_Quit_Path planning error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x35: Req_Quit_Space limit	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x36: Parking succeed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x37: Req_Quit_Searching_Timeout	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x38: Req_Quit_Searching_Overspeed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x39: Req_Quit_Charge Gun	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x3A: Req_Quit_Actuator feedback abnormal	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x3B-0x3F: Not used	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xA: RemotePark_Phone Control	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0xB~0xF: Reserved	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
All Other Cases		X (Don’t Care)	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	

Operational_Mode	Feature Config	APA_PageDispReq Signal	APA_TerminatePopup Signal	Internal_APA_TerminatePopup_31_Status_Flag	Internal_APA_TerminatePopup_32_Status_Flag	Internal_APA_TerminatePopup_33_Status_Flag	Internal_APA_TerminatePopup_34_Status_Flag	Internal_APA_TerminatePopup_35_Status_Flag	Internal_APA_TerminatePopup_36_Status_Flag	Internal_APA_TerminatePopup_37_Status_Flag	Internal_APA_TerminatePopup_38_Status_Flag	Internal_APA_TerminatePopup_39_Status_Flag	Internal_APA_TerminatePopup_40_Status_Flag	Internal_APA_TerminatePopup_41_Status_Flag	Internal_APA_TerminatePopup_42_Status_Flag	Internal_APA_TerminatePopup_43_Status_Flag	Internal_APA_TerminatePopup_44_Status_Flag	Internal_APA_TerminatePopup_45_Status_Flag	Internal_APA_TerminatePopup_46_Status_Flag	Internal_APA_TerminatePopup_47_Status_Flag	Internal_APA_TerminatePopup_48_Status_Flag	Internal_APA_TerminatePopup_49_Status_Flag	Internal_APA_TerminatePopup_50_Status_Flag	Internal_APA_TerminatePopup_51_Status_Flag	Internal_APA_TerminatePopup_52_Status_Flag	Internal_APA_TerminatePopup_53_Status_Flag	Internal_APA_TerminatePopup_54_Status_Flag	Internal_APA_TerminatePopup_55_Status_Flag	Internal_APA_TerminatePopup_56_Status_Flag	Internal_APA_TerminatePopup_57_Status_Flag	Internal_APA_TerminatePopup_58_Status_Flag	Internal_APA_TerminatePopup_59_Status_Flag	Internal_APA_TerminatePopup_60_Status_Flag
Normal	Enhance_APA_Cfg = 0x1 (Enabled) and Enhance_RPA_Cfg = 0x1 (Enabled)	0x0: No req	X (Don't Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
		0x1: ParkIn_ParkOut_Selection OR 0x2: Searching_Moving OR 0x3: Searching_Stop OR 0x4: Manuaring_ParkIn OR 0x5: ParkIn_Completed OR 0x6: ParkOut_SelectDirection OR 0x7:	0x0: No req	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1: Req_Quit_Car mode invalid	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2: Req_Quit_OTA active	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x3: Req_Quit_ADAS	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x4: Req_Quit_ABS actvie	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x5: Req_Quit_TCS active	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x6: Req_Quit_ESC active	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x7: Req_Quit_eCALL	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x8: Req_Quit_Camera Blockage	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x9: Req_Quit_USS Blockage	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xA: Req_Quit_Slope_Too large	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

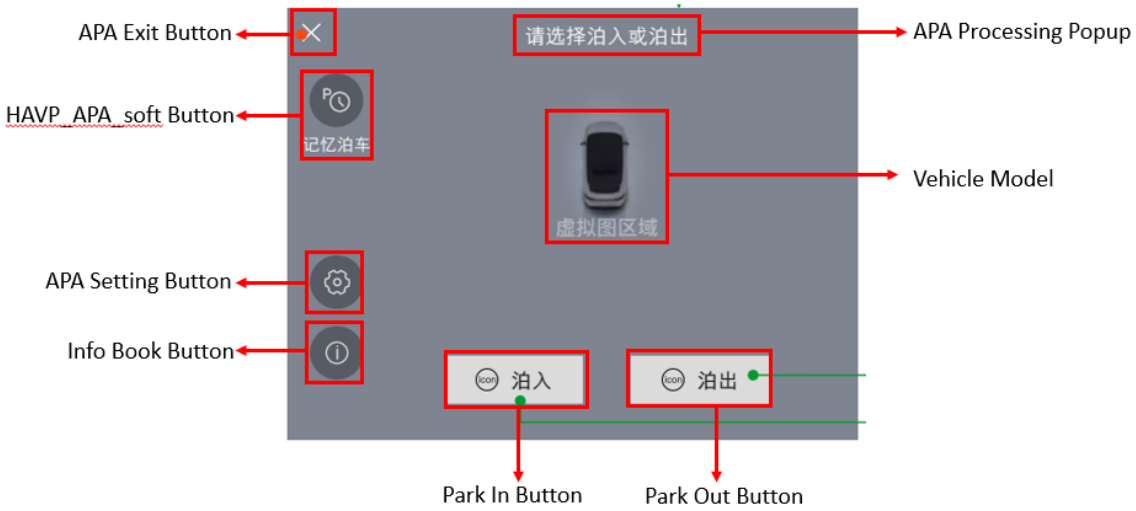
		Manuaring_ParkOut OR 0x8: ParkOut_Completed OR 0x9: RemotePark_Remind	0xB: Req_Quit_Speed high	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xC: Req_Quit_Tire Pressure Too Low	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xD: Req_Quit_Remote start forbid	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xE: Req_Quit_PT READY FAILED	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0xF: Req_Quit_Vehicle Low Battery	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x10: Req_Quit_Trailer connected	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x11: Req_Quit_Traction Control System off	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x12: Req_Quit_Powerpack torque status changes to not available	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x13: Req_Quit_Power management failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x14: Req_Quit_LSC error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x15: Req_Quit_EPAS error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x16: Req_Quit_ABS error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x17: Req_Quit_BCM error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x18: Req_Quit_BLEM_ failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x19: Req_Quit_Remote Device error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1A: Req_Quit_Unexpected deactivation of LSC	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1B: Req_Quit_Unexpected deactivation of ABS	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

			0x1C: Req_Quit_Unexpected deactivation of EPAS	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1D: Req_Quit_External ECU failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1E: Req_Quit_Sys_Failure	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x1F: Req_Quit_CAN_Communication_failure	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x20: Req_Quit_Function on check overtime	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x21: Req_Quit Terminate Button Pressed HMI Cancel	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x22: Req_Quit_App exit	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x23: Req_Quit_Gear Intervention	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x24: Req_Quit_EPB_Apply	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x25: Req_Quit_Steering Wheel Intervention	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0X26: Req_Quit_Mirror fold	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x27: Req_Quit_Unsafe_Behavior	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x28: Req_Quit_Vehcle_Charging	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x29: Req_PowerOFF	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2A: Req_Quit_Insurmountable obstacle detected	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2B: Req_Quit_Timing overtime	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2C: Req_Quit_Matime overtime	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

			0x2D: Req_Quit_Recovery Timeout	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2E: Req_Quit_Interrupt Times Overflow	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x2F: Req_Quit_Remote move distance out of range	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x30: Req_Quit_Handshake failed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x31: Req_Quit_SteeringAngle_Out_of_Limit	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x32: Req_Quit_Shift_Operate_Failed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x33: Req_Quit_Trajectory	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x34: Req_Quit_Path planning error	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x35: Req_Quit_Space limit	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x36: Parking succeed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina	Ina
			0x37: Req_Quit_Searching_Timeout	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina	Ina
			0x38: Req_Quit_Searching_Overspeed	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina	Ina
			0x39: Req_Quit_Charge Gun	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina	Ina
			0x3A: Req_Quit_Actuator feedback abnormal	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**	Ina	Ina	Ina
			0x3B-0x3F: Not used	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**		
		0xA: RemotePark_Phone Control	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	**Act**
		0xB~0xF: Reserved	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina
All Other Cases		X (Don’t Care)	X (Don’t Care)	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina	Ina

1.5.2.1.10 F-REQ-XXXXXX/X APA Parking In/Out Seclect Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



The display information of APA/RPA client on the APA Parking In/Out Seclect Page includes the following:

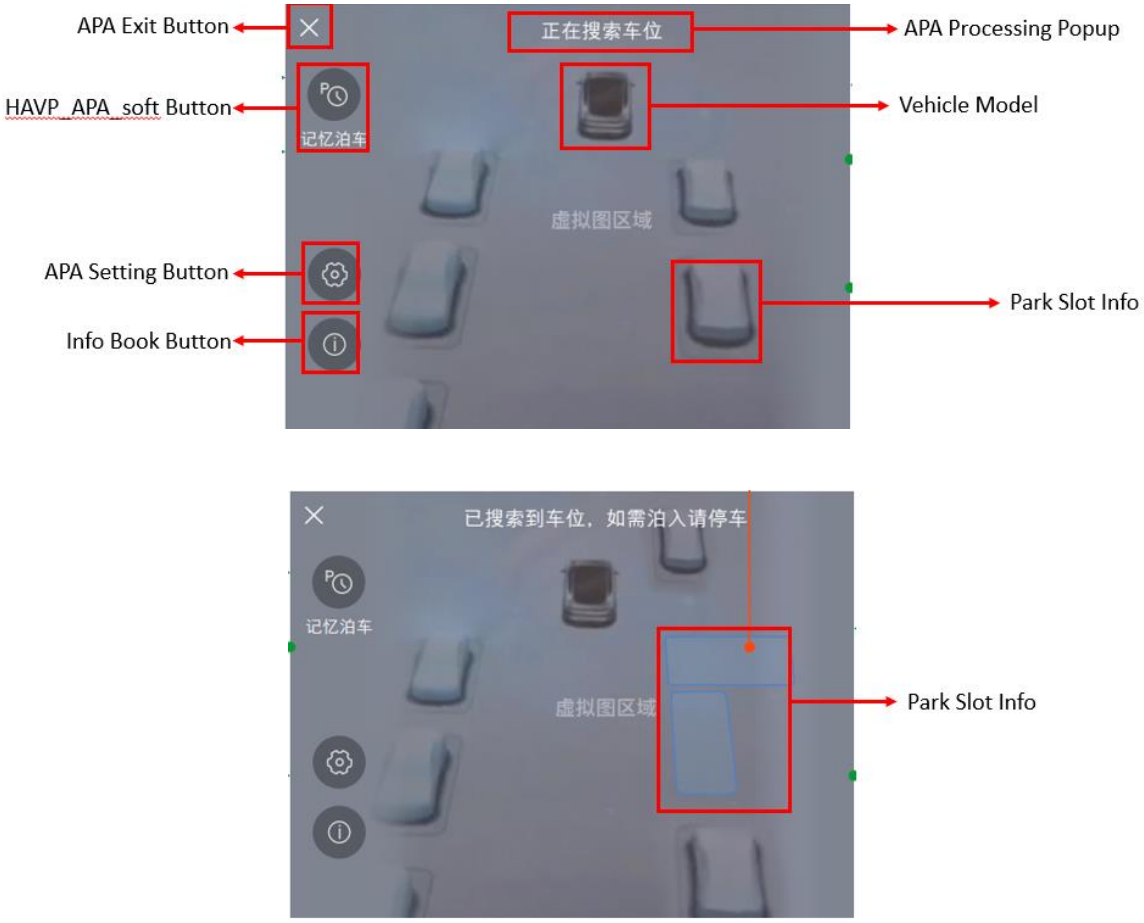
- APA Processing Popup
- Vehicle Model
- Parking In Button
- Parking Out Button
- APA Exit Button
- HAVP_APA_soft Button
- APA Setting Button
- Info Book Button

The visual angle of vehicle model in APA Parking In/Out Select Page is 45°.

The driver can select whether to park the vechicle into the park slot or drive out of the park slot by clicking the Parking In Button or the Parking out Button. When the driver clicks the button, APIM will convey the driver's intention to APA/RPA sever by signal "APA_DriverParkTypeReq".

1.5.2.1.11 F-REQ-XXXXXX/X APA Parking Slot Searching Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



The display information of APA/RPA client on the APA Parking Slot Searching Page includes the following:

- APA Processing Popup
- Vehicle Model
- Park Slot Info
- Obstacle
- APA Exit Button
- HAVP_APA_soft Button
- APA Setting Button
- Info Book Button

The visual angle of vehicle model in APA Parking In/Out Select Page is 45°.

The Park Slot Info shows what is determined by the Ethernet signal “ParkingSpaceInfo”, and up to 5 park slots can be displayed on the left and right sides. The Park Solt Info contains the id of park slot, the coordinateds of park slot, the type of park slot, the status of the park slot.
The Park Solt can be divided into three types: cross, parallel, and diagonal.

The Park Slot includes two statuses: available and unavailable. The Park Slot appears as a blue box when it is available, and the Park Slot appears as a gray box when it is unavailable.

The Obstacle shows what is determined by the Ethernet signals “Obstacle” and “bounding_box”. There are 3 types of obstacles, which are: other cars, pedestrian, and cone. The Ethernet signal “Obstacle” describes the contents of the obstacle, and the Ethernet signal “bounding_box” describes the coordinateds of the obstacle.

If the driver clicks the available park slot in this page, APIM will send the driver’s intention to the APA/RPA sever via the signal “APA_DriverParkSlotReq”.

1.5.2.1.12 F-REQ-XXXXXX/X APA Parking Slot and Parking In Mode Select Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

The display information of APA/RPA client on the APA Parking Slot and Parking In Mode Select Page includes the following:

- APA Processing Popup
- Vehicle Model
- Park Slot Info
- Park Slot NO.
- Recommend/Selected Park Slot
- Obstacle
- APA Parking In Activation Button

- RPA Parking In Activation Button
- APA Exit Button
- HAVP_APA_soft Button
- APA Setting Button
- Info Book Button

The visual angle of vehicle model in APA Parking In/Out Select Page is 60°.

The numbering strategy of the Park Slot No. is implementd by APIM, and the specific numbering strategy is as follows: APIM numbers the available park slots according to the distance from the local car, and the numbering stars from the right side.
For example: if there are 3 available park slots on the right side and 4 available park slots on the left side, the available parking slots on the right are numbered 1, 2 and 3 respectively according to their distance from the near to the far; the available parking slots on the left are numbered 4, 5, 6 and 7 respectively according to their distance from the near to the far.

The APA/RPA sever determines the optimal available park slot and sends it via the signal “APA_RecommendParkSlot”. APIM needs to mark “P” on the Recommend Park Slot according to the value of signal “APA_RecommendParkSlot”, and the Park Slot No. is not displayed on the Recommend Park Slot.

The driver can select other available park slot in addition to the recommended one.
If the driver wants to select another park slot, he/she needs to click the available park slot identifier on APIM, and the driver’s intention will be sent to the APA/RPA sever by the signal “APA_DriverParkSlotReq”. After receiving the driver’s intention, the APA/RPA sever will feedback the signal “APA_DriverParkSlotReqFeedback”. According to the value of the signal “APA_DriverParkSlotReqFeedback”, APIM marks “P” on the corresponding available park slot, and that park slot no longer displays the Park Slot Number.

The status of APA Parking In Activation Button is controlled by the signal “APA_ParkInIconSts”, the specific strategy is as follows:

- APA_ParkInIconSts = 0×0, APA Parking In Activation Button is not displayed.
- APA_ParkInIconSts = 0×1, APA Parking In Activation Button is displayed, and the status of APA Parking In Activation Button is clickable.
- APA_ParkInIconSts = 0×2, APA Parking In Activation Button is displayed, but the status of APA Parking In Activation Button is not clickable.
- APA_ParkInIconSts = 0×3, APA Parking In Activation Button is not displayed.

When the driver clicks the APA Parking In Activation Button, APIM will convey the driver’s intention to APA/RPA sever by signal “APA_ParkInControlReq”.

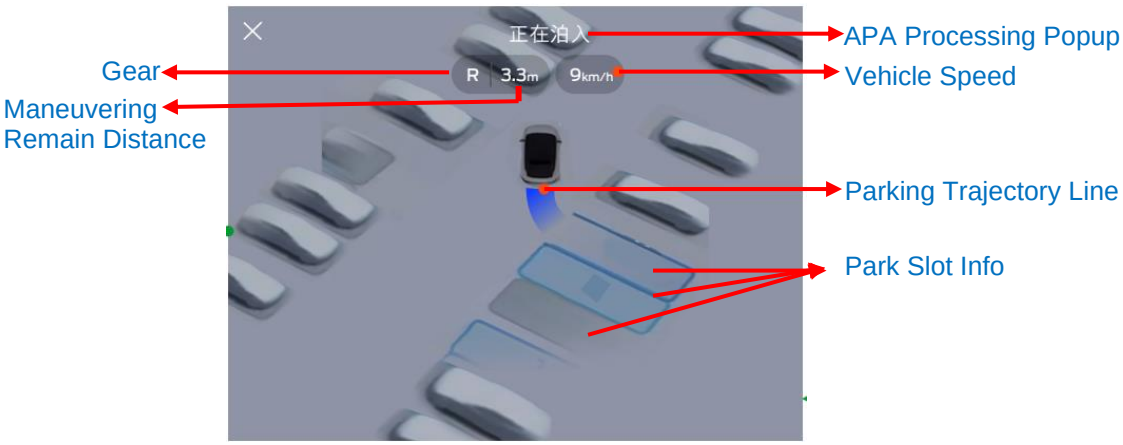
The status of RPA Parking In Activation Button is controlled by the signal “RPA_ParkInIconSts”, the specific strategy is as follows:

- RPA_ParkInIconSts = 0×0, RPA Parking In Activation Button is not displayed.
- RPA_ParkInIconSts = 0×1, RPA Parking In Activation Button is displayed, and the status of RPA Parking In Activation Button is clickable.
- RPA_ParkInIconSts = 0×2, RPA Parking In Activation Button is displayed, but the status of RPA Parking In Activation Button is not clickable.
- RPA_ParkInIconSts = 0×3, RPA Parking In Activation Button is not displayed.

When the driver clicks the RPA Parking In Activation Button, APIM will convey the driver's intention to APA/RPA sever by signal "RPA_ParkInControlReq".

1.5.2.1.13 F-REQ-XXXXXX/X APA Parking In Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



The display information of APA/RPA client on the APA Parking In Page includes the following:

- APA Processing Popup
- Vehicle Model
- Park Slot Info
- Obstacle
- Gear
- Vehicle Speed
- Maneuvering Remain Distance
- Parking Trajectory Line
- APA Exit Button

The visual angle of vehicle model in APA Parking In/Out Select Page is 60°.

When parking starts, the target park slot is shown as an open blue rectangle, other available park slots are shown as a closed blue rectangle, and the unavailable park slots are shown as gray rectangle.

Please refer to the spec < EPRNDL ES v2022.2_[VDOC000567_S] > for display of gear.

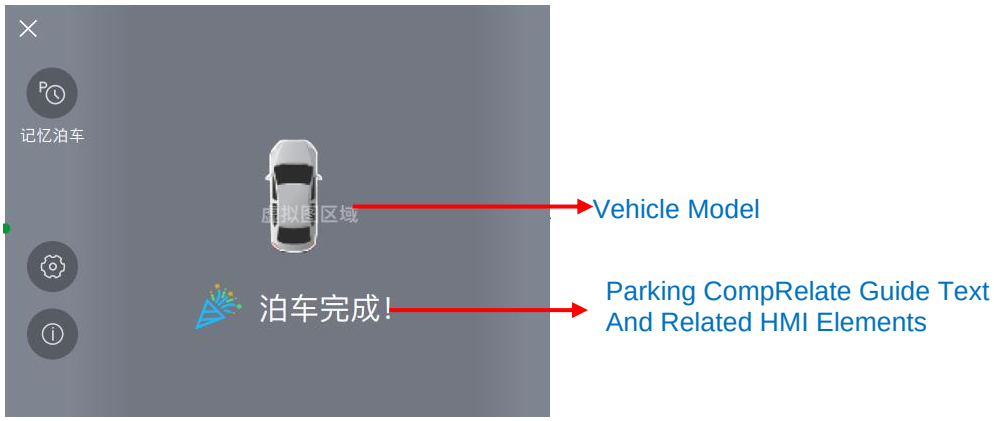
Please refer to the spec < Speedometer Secondary Scale Control Function - CGEA1.3_v4.3_[VDOC041624_G] > for display of Vehicle Speed.

The display range of Maneuvering Remain Distance is 0~25.5 meters. The value of Maneuvering Remain Distance comes from signal "APA_ManeuveringRemainDistance", and the resolution rate is 0.1 meter.

The Parking Trajectory Line is fitted according to the information from ETHERNET signal Planing.

1.5.2.1.14 F-REQ-XXXXXX/X APA Parking In Complete Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



The display information of APA/RPA client on the APA Parking In Complete Page includes the following:

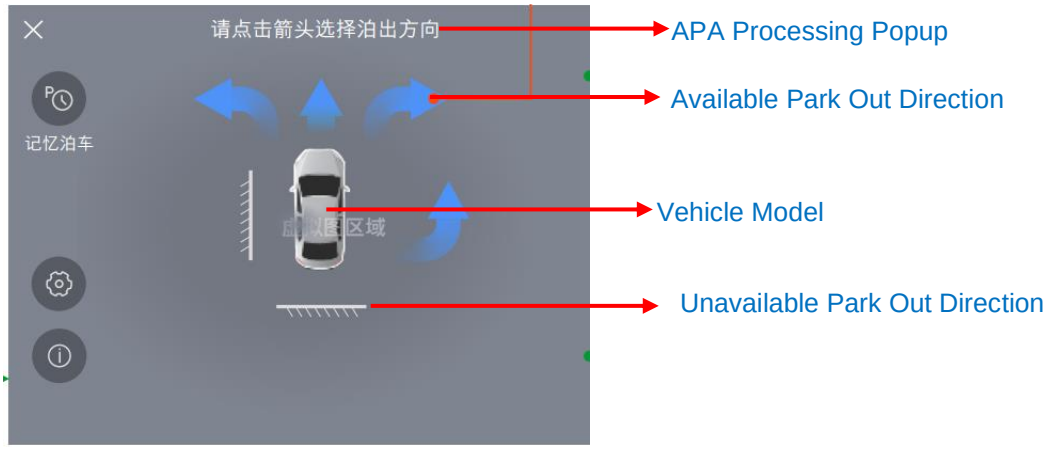
- Vehicle Model
- Parking Complete Guide Text and Related HMI Elements
- APA Exit Button

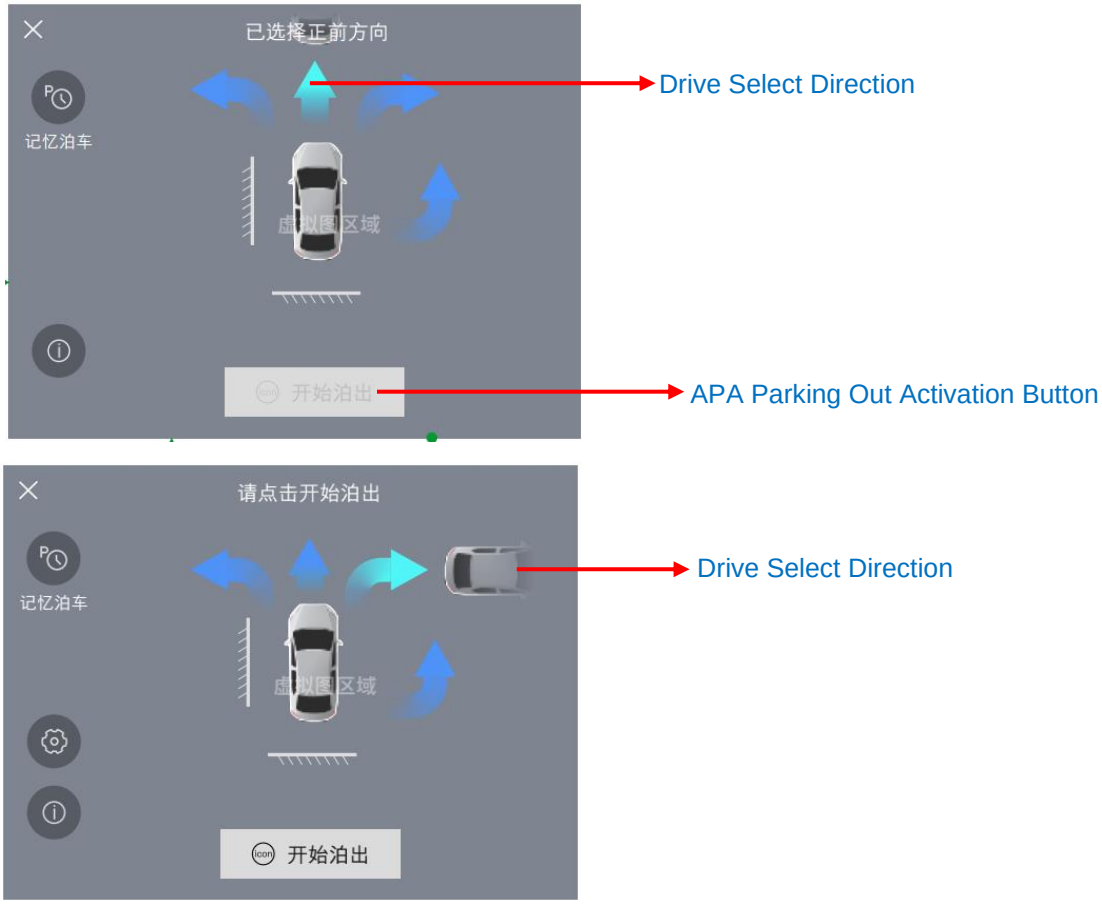
The visual angle of vehicle model in APA Parking In Complete Page is 90°.

After the APA Parking In Complete Page is displayed for 3s, it will automatically exit to the launcher page.
If the driver clicks the APA Exit Button within 3s, it will also exit directly to the launcher page.

1.5.2.1.15 F-REQ-XXXXXX/X APA Parking Out Direction Select Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):





The display information of APA/RPA client on the APA Parking Out Direction Select Page includes the following:

- APA Processing Popup
- Vehicle Model
- Feasibility of Parking Out Direction
- Driver Select Direction
- APA Parking Out Activation Button
- APA Exit Button
- HAVP_APA_soft Button
- APA Setting Button
- Info Book Button

The visual angle of vehicle model in APA Parking Out Direction Select Page is 90°.

The Feasibility of the six Parking Out Directions (front, rear, left front, right front, left front and right front) are controlled by the signals “APA_ParkOutDirectionFront” “APA_ParkOutDirectionRear” “APA_ParkOutDirectionFrontLeftCross” “APA_ParkOutDirectionFrontRightCross” “APA_ParkOutDirectionFrontLeftParallel” “APA_ParkOutDirectionFrontRightParallel” respectively.
When the signal value is “0x0”, it indicates that the corresponding Parking Out Direction is available. And when the signal value is “0x1”, it indicates that the corresponding Parking Out Direction is unavailable.

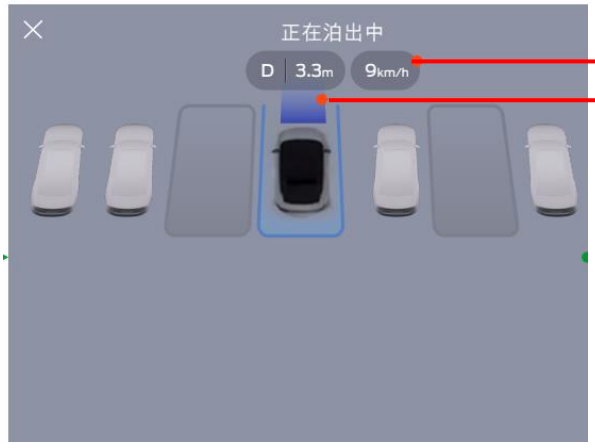
The Driver can select the one he/she wants among the available parking out directions by clicking the corresponding icon on APIM. And the driver's intention will be sent to the APA/RPA sever by the signal "APA_DriverSelectDirection". After receiving the driver's intention, the APA/RPA sever will feedback the signal "APA_DriverSelectDirectionConfirm". According to the value of the signal "APA_DriverSelectDirectionConfirm", APIM highline the corresponding parking out direction.

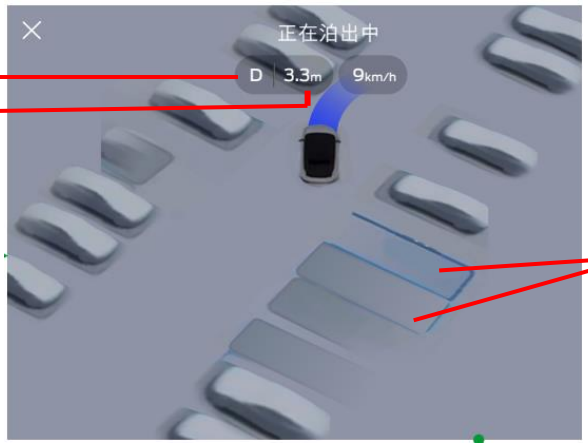
The status of Parking Out Activation Button is controlled by the signal "APA_ParkOutIconSts', the specific strategy is as follows:

- APA_ParkOutIconSts = 0×0, Parking Out Activation Button is not displayed.
- APA_ParkOutIconSts = 0×1, Parking Out Activation Button is displayed, and the status of Parking Out Activation Button is clickable.
- APA_ParkOutIconSts = 0×2, Parking Out Activation Button is Displayed, but the status of Parking Out Activation Button is not clickable.
- APA_ParkOutIconSts = 0×3, Parking Out Activation Button is not diaplayed.

1.5.2.1.16 F-REQ-XXXXXX/X APA Parking Out Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):





The display information of APA/RPA client on the APA Parking Out Page includes the following:

- APA Processing Popup
- Vehicle Model
- Park Slot Info
- Obstacle
- Gear
- Vehicle Speed
- Parking Trajectory Line
- APA Exit Button

The visual angle of vehicle model in APA Parking Out Page is 60°.

The park slot which the local vehicle has been parked is shown

where the vehicle has been parked is shown as an open rectangle as an open blue rectangle, other available park slots are shown as a closed blue rectangle, and the unavailable park slots are shown as gray rectangle.

Please refer to the spec < EPRNDL ES v2022.2_[VDOC000567_S] > for display of gear.

Please refer to the spec < Speedometer Secondary Scale Control Function - CGEA1.3_v4.3_[VDOC041624_G] > for display of Vehicle Speed.

The display range of Maneuvering Remain Distance is 0~25.5 meters. The value of Maneuvering Remain Distance comes from signal “APA_ManeuveringRemainDistance”, and the resolution rate is 0.1 meter.

The Parking Trajectory Line is fitted according to the information from Ethernet signal Planing.

1.5.2.1.17 F-REQ-XXXXXX/X APA Parking Out Complete Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

The display information of APA/RPA client on the APA Parking Out Complete Page includes the following:

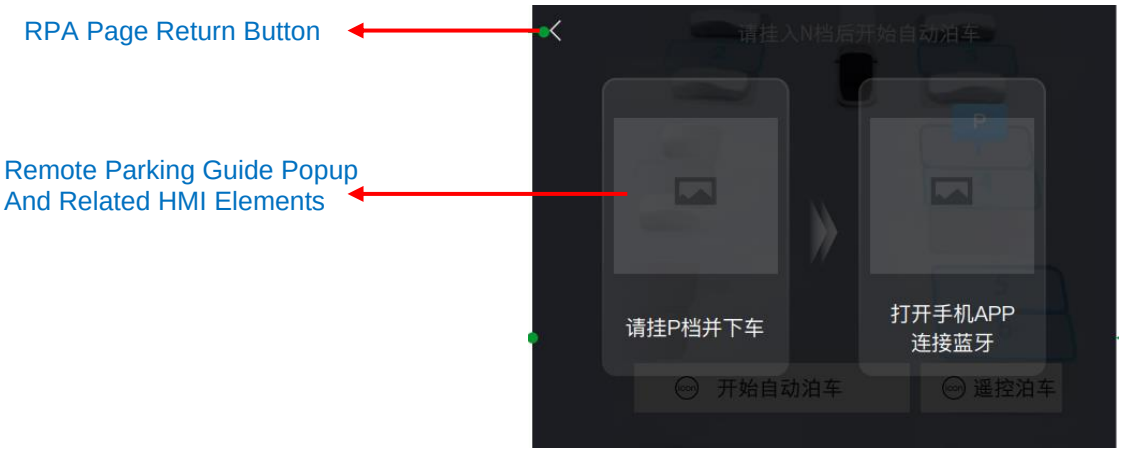
- Vehicle Model
- Parking Complete Guide Text and Related HMI Elements

The visual angle of vehicle model in APA Parking Out Complete Page is 90°.

After the APA Parking Out Complete Page is displayed for 3s, it will automatically exit to the launcher page.
If the driver clicks the APA Exit Button within 3s, it will also exit directly to the launcher page.

1.5.2.1.18 F-REQ-XXXXXX/X Remote Parking Guide Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):



The display information of APA/RPA client on the RPA Parking Guide Page includes the following:

- RPA Page Return Button
- Remote Parking Guide Popup and Related HMI Elements

When the driver clicks the RPA Return Button, APIM will send the driver's intention to return to the APA Parking Slot Searching Page to APA/RPA sever by signal "RPA_PageReturn_Button". After receiving the driver's intention, the APA/RPA sever will feedback the new value (0X3) of signal "APA_PageDispReq". According to the new value of signal "APA_PageDispReq", APIM returns to the APA Parking Slot Searching Page.

1.5.2.1.19 F-REQ-XXXXXX/X Remote Parking Page

Example Graphics (final graphics and texts to be provided by HMI wallpaper):

The display information of APA/RPA client on the RPA Parking Page includes the following:

- Mobile Control Guide Text and Related HMI Elements

When the vehicle is in Remote Parking Process, APIM will display the “mobile controlling” prompt, at the same time, and APIM cannot perform any operations.

1.5.3 Voice Control

TBD

1.5.4 PFM-REQ-XXXXXX/X-Syatem Accuracy

Within a 100 msec of receiving a message that results in a change of state the APIM will update the display to the proper status.

1.5.5 FS-REQ-XXXXXX/X-Function Safety Classification (EMC)

Class B

1.5.6 Functional Safety Requirements

QM

1.5.7 NVM-REQ-XXXXXX/X-Memory Storage Parameters

Parameter Name	Description	Value at Battery Connect	Value at Wake-up
Enhance_APA_Cfg	State indicator for feature presence controlled via CAN at EOL at VO plant.	Use Stored Value	Use Stored Value
Enhance_RPA_Cfg	State indicator for feature presence controlled via CAN at EOL at VO plant.	Use Stored Value	Use Stored Value
Internal_ParkSoltIndication_Setup_MC	control the setting menu display output for Park Slot Indication selection.	Inactive	Use Stored Value
Internal_APAExitButton_Status_Flag	Output display status flag used to activate APA Exit Button.	Inactive	Inactive

Parameter Name	Description	Value at Battery Connect	Value at Wake-up
Internal_APASettingButton_Status_Flag	Output display status flag used to activate APA Setting Button.	Inactive	Inactive
Internal_ParkSoltIndication_Dis_Status_Flag	Output display status flag used to activate APA Park Slot Indication.	Inactive	Inactive
Internal_ APAInfoBookButton_Status_Flag	Output display status flag used to activate APA InfoBook Button.	Inactive	Inactive
Internal_ APAInfoBook_Status_Flag	Output display status flag used to activate APA InfoBook Popup.	Inactive	Inactive
Internal_APA_GuidePopup_X_Status_Flag	Output display status flag used to activate Popup.	Inactive	Inactive
Internal_APA_ProcessingPopup _X_Status_Flag	Output display status flag used to activate Popup.	Inactive	Inactive
Internal_APA_SuspendPopup X_Status_Flag	Output display status flag used to activate Popup.	Inactive	Inactive
Internal_APA_TerminatePopup X_Status_Flag	Output display status flag used to activate Popup.	Inactive	Inactive
APA_SoftButton Signal	This signal indicates the soft button of APA on APIM screen, if user click this button, APIM will sent pressed status to IPMB.	0×0	Do Not Init
APA_Launcher_SoftButton Signal	This signal indicates the soft button of APA on launcher page, if user click this button, APIM will sent pressed status to IPMB.	0×0	Do Not Init
APA_QuickPanelButton Signal	This signal indicates the soft button of APA on APIM quick panel page, if user click this button, APIM will sent pressed status to IPMB.	0×0	Do Not Init
APA_AVM_SoftButton Signal	This signal indicates the soft button of APA on AVM main page, if user click this button, APIM will sent pressed status to IPMB.	0×0	Do Not Init
APA_VoiceActivationButton Signal	This signal indicates the voice activation of APA, if user request APA ON by voice, APIM will sent this signal to IPMB.	0×0	Do Not Init
APIM_APA_PassExamination Signal	This signal indicates whether APA is enabled, log in with authentication, test passed, configured, etc.	0×0	Do Not Init
APA_ParkSlotPopupButton Signal	This signal indicates that user can turn off popup reminder when park slot is searched eventhough APA is not be activated.	0×0	Do Not Init

Parameter Name	Description	Value at Battery Connect	Value at Wake-up
APA_DriverParkTypeReq	This signal indicates the request APA parking mode by user selected on APIM screen.	0×0	Do Not Init
APA_ParkInControlReq Signal	This signal indicates the selected status of APA parking in activation button.	0×0	Do Not Init
APA_ParkOutControlReq Signal	This signal indicates the selected status of APA parking out activation button.	0×0	Do Not Init
RPA_ParkControlReq Signal	This signal indicates the selected status of RPA activation button.	0×0	Do Not Init
APA_DriverParkSlotReq Signal	This signal indicates the selected APA parking slot by user on APIM screen.	0×0	Do Not Init
APA_DriverSelectDirection Signal	This signal indicates the APA parking out direction which is selected by user on APIM screen.	0×0	Do Not Init
Prk_DriverResume_Req Signal	This signal indicates whether user click the parking function resume button on APIM screen after suspend recovery.	0×0	Do Not Init
RPA_PageReturn_Button Signal	This signal indicates the exit button status of RPA page, which means user could click this button to exit RPA and went to APA page when waiting for bluetooth connecting.	0×0	Do Not Init

* Refer to Message Center X Display_Y Button Interface Section, where X and Y are appropriate values in this document.

1.5.8 Prove Out

No Applicable.

1.5.9 Diagnostics

1.5.9.1 Self Test

None.

1.5.9.2 Engineering Test Mode

Reference section “Dealer / Engineering Test Mode (ETM)”.

1.5.9.3 DTC-REQ-343117/A-Supported Diagnostic Trouble Codes (DTCs)

DTC	Description
TBD	Lost Communication with IPMA (Image Processing Module “B”)
TBD	Invalid Data from IPMA (Image Processing Module “B”)

1.5.10 Non-Functional Requirements

No Non-Functional Requirements specified.

1.5.11 Other Requirements

No Other Requirements specified.

1.5.12 Design Requirements

No Design Requirements specified.

2 OPEN CONCERNS

No Open Concerns (Ford Modeling Action Items) in the Magicdraw model.

3 REVISION HISTORY

No Revision History found.

4 APPENDIX

4.1 Data Dictionary

4.1.1 Logical Signals

No “Logical Interface Table” or “Logical Signals” tables found.

4.1.2 Logical Parameters

(No parameters have been defined)

4.1.3 Encoding Types

Document ends here.