

# LLR DOC

## OVSP – MODES

### SOFTWARE DETAILED DESIGN DESCRIPTION

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# 1. MODES REQUIREMENTS SPECIFICATION

## 1.1. COMMON DESIGN AND PHYSICAL CONSTRAINTS

~~The Modes component doesn't contain any requirement or constraint which concern several or all functionalities simultaneously. This paragraph gathers requirements and constraints, which concern several or all functionalities simultaneously.~~

## 1.2. MODES\_GET\_SW\_MODE

### 1.2.1. Modes\_Get\_SW\_Mode

This function provides the sSoftware mode.

#### 1.2.1.1. Parameters and Return Value

**Parameters**

- Function ~~return~~:return; The OVSP software mode (V\_Modes\_SW\_Mode) (TE\_Modes\_SW\_Mode)

**Pre-conditions on parameters**

None

#### 1.2.1.2. Called Functions

None

#### 1.2.1.3. Input/Output Data

**Data**

- IN: {V\_Modes\_SW\_Mode}

**Pre-conditions on data**

None

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a mis en forme : Anglais (États-Unis)

1.2.1.4. Requirements

REQ-SDDD\_Modes\_Get\_SW\_Mode\_0001-01

Modes\_Get\_SW\_Mode

Effects	Causes	
	ALWAYSAlways	
	Return {V_Modes_SW_Mode}	

Traceability  
Rationale

Derived  
This function is used to determine the Software mode to apply and provides it to the other features allowing them to adapt their behaviour.  
This function is needed to provide the Software mode.

Verification Method

Test

[END\_REQ]

a mis en forme : Retrait : Gauche : 1 cm, Suspendu : 3,4 cm

1.3. MODES\_INITIALIZE

1.3.1. Modes\_Initialize

This function initializes the Modes CSC.

1.3.1.1. Parameters and Return Value

Parameters

- Function return: Not used.

Pre-conditions on parameters

None

1.3.1.2. Called Functions

None

1.3.1.3. Input/Output Data

Data

- OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

1.3.1.4. Requirements

REQ-SDDD\_Modes\_Initialize\_0001-01

[COV.REQ\_OVSP\_SRD-00001]

Modes\_Initialize

	Causes	
Effects	AlwaysALWAYS	
	Set {V_Modes_SW_Mode} to E_Modes_Init	
Traceability		Refined
Rationale		-
Verification Method		Test

[END\_REQ]

1.4. MODES\_MANAGE\_DEGRADED\_TR

1.4.1. Modes\_Manage\_Degraded\_Tr

This function manages the SW-software mMode transition in dDegraded mode.

1.4.1.1. Parameters and Return Value

Parameters

- Function return: Not usedused.

Pre-conditions on parameters

None

1.4.1.2. Called Functions

Calls

- CBIT\_Get\_Test\_Result
- Config\_Get\_Integrity\_Status
- DrvFTM\_Start\_NxOSy\_Acq

Post-conditions

None

1.4.1.3. Input/Output Data

Data

- IN/OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

a mis en forme le tableau

1.4.1.4. Requirements

REQ-SDDD\_Modes\_Manage\_Degraded\_Tr\_0001-01

[COV.REQ\_OVSP\_SRD-00004;COV.REQ\_OVSP\_SRD-00007; COV.REQ\_OVSP\_SRD-00004; COV.REQ\_OVSP\_SRD-00021]

Modes\_Manage\_Degraded\_Tr

Causes			
Effects	AlwaysALWAYS		
	[Get the CBIT Test Result][Provide the CBIT tTest rResult]		
	"CBIT Test Resultv_CBIT_Result"(V_CBIT_Test_Result) is equal to E_CBIT_Fatal_Error	All the other cases	
	Set {V_Modes_SW_Mode} to E_Modes_Fail	[Get the OVSP Config table Integrity Status] "OVSP Config table Integrity Statusv_OVSP_Config_Validity" {V_Config_OVSP_Cfg_Integrity} is equal to E_Config_Integrity_OK	All the other cases
		Set {V_Modes_SW_Mode} to E_Modes_Operational CALL CallCALL DrvFTM_Start_NxOSy_Acq	No effect

a mis en forme le tableau

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

[Get the CBIT Test Result] [Provide the CBIT tTest rResult]: corresponds to the following CALL:

- CALL CBIT\_Get\_Test\_Result with the following parameters:
  - RETURN Function return: "CBIT Test Resultv\_CBIT\_Result"(V\_CBIT\_Test\_Result)

[Get the OVSP Config table Integrity Status] [Provide the OVSP sConfig table iIntegrity sStatus]: corresponds to the following CALL:

- CALL Config\_Get\_Integrity\_Status with the following parameters:
    - RETURN Function return: "OVSP Config table Integrity Statusv\_OVSP\_Config\_Validity" {V\_Config\_OVSP\_Cfg\_Integrity}
- Traceability  
Rationale  
Verification Method
- Refined  
-  
Test

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[END\_REQ]

1.5. MODES\_MANAGE\_INIT\_TR

1.5.1. Modes\_Manage\_Init\_Tr

This function manages the SW-software mMode transition in iInit mode.

1.5.1.1. Parameters and Return Value

Parameters

- Function return: Not used.

Pre-conditions on parameters

None

1.5.1.2. Called Functions

Calls

- Boot\_Get\_Side\_Id
- PBIT\_Get\_Test\_Result
- Config\_Get\_Integrity\_Status
- DrvFTM\_Start\_NxOSy\_Acq

Post-conditions

None

1.5.1.3. Input/Output Data

Data

- OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

1.5.1.4. Requirements

REQ-SDDD\_Modes\_Manage\_Init\_Tr\_00015-01

[COV.REQ\_OVSP\_SRD-0000014; COV.REQ\_OVSP\_SRD-00002; COV.REQ\_OVSP\_SRD-00004; COV.REQ\_OVSP\_SRD-00021]

Modes\_Manage\_Init\_Tr

Causes			
Effects	Always		
	[Get the OVSP side identification]		
	[Get the PBIT test result]		
	"OVSP Side Identification" is equal to BOOT_SIDE_ID_INVALID OR "PBIT test Result" is equal to E_PBIT_Failed	All the other cases	
	Set {V_Modes_SW_Mode} to E_Modes_Fail	[Get the OVSP config table integrity status]	
		"OVSP Config table Integrity Status" is equal to E_Config_Integrity_KO	All the other cases
		Set {V_Modes_SW_Mode} to E_Modes_Operational	Set {V_Modes_SW_Mode} to E_Modes_Operational

a mis en forme : Pas de saut de page avant, Pas de paragraphes solidaires, Pas de lignes solidaires

a mis en forme : Pas de paragraphes solidaires

a mis en forme : Pas de paragraphes solidaires

		e) to E_Modes_Degraded	CALL DrvFTM_Start_NxOSy_Acq
	Causes		
	Always ALWAYS		
	[GetProvide the OVSP side identification] [Provide_Get the PBIT tTest rResult]		
Effects	"OVSP_Side Identificationv_OVSP_Side_Id(V_Boot_OV SP_Side_Id)" is equal to BOOT_SIDE_ID_INVALID OR "PBIT test Resultv_PBIT_Result(V_PBIT_Test_Result) " is equal to E_PBIT_Failed	All the other cases	
	Set {V_Modes_SW_Mode} to E_Modes_Fail	[Provide_Get the OVSP cConfig table iIntegrity sStatus]	
		"OVSP-Config table Integrity Status" is equal to E_Config_Integrity- KO	All the other cases
		Set {V_Modes_SW_Mod e} to E_Modes_Degraded	Set {V_Modes_SW_Mode} to E_Modes_Operational CALL DrvFTM_Start_NxOSy_Acq

a mis en forme : Pas de paragraphes solidaires

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Pas de paragraphes solidaires

[Provide\_Get the OVSP side identification]: corresponds to the following CALL:

- CALL **Boot\_Get\_Side\_Id** with the following parameters:

— **RETURN Function** **return:** "OVSP Side

Identificationv\_OVSP\_Side\_Id" {V\_Boot\_OVSP\_Side\_Id}

[Provide\_Get the PBIT tTest rResult]: corresponds to the following CALL:

- CALL **PBIT\_Get\_Test\_Result** with the following parameters:

— **RETURN Function** **return:** "PBIT test Resultv\_PBIT\_Result" {V\_PBIT\_Test\_Result}

[Provide\_Get the OVSP cConfig table iIntegrity sStatus]: corresponds to the following CALL:

- CALL **Config\_Get\_Integrity\_Status** with the following parameters:

— **RETURN Function** **return:** "OVSP Config table Integrity  
Statusv\_OVSP\_Config\_Validity" {V\_Config\_OVSP\_Cfg\_Integrity}

Traceability Rationale Verification Method - Test

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Pas de paragraphes solidaires, Lignes solidaires

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces, Éviter veuves et orphelines, Lignes solidaires

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Pas de paragraphes solidaires, Lignes solidaires

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces, Éviter veuves et orphelines, Lignes solidaires

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[END\_REQ]

## 1.6. MODES\_MANAGE\_OPERATIONAL\_TR

### 1.6.1. Modes\_Manage\_Operational\_Tr

This function manages the SW-software mMode transition in oOperational mode.



1.6.1.1. Parameters and Return Value

Parameters

- Function return: Not ~~used~~used.

Pre-conditions on parameters

None

1.6.1.2. Called Functions

Calls

- CBIT\_Get\_Test\_Result
- Config\_Get\_Integrity\_Status
- DrvFTM\_Stop\_NxOSy\_Acq
- CAN\_Get\_TriggTest\_Cmd
- OVSP\_Get\_Engine\_SpeedLevel
- CAN\_Get\_Test\_Speed
- ~~DrvFTM\_Stop\_NxOSy\_Acq~~
- DrvFTM\_Manage\_TSpeed

Post-conditions

None

1.6.1.3. Input/Output Data

Data

- IN/OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

1.6.1.4. Requirements

REQ-SDDD\_Modes\_Manage\_Operational\_Tr\_0001-01

[COV.REQ\_OVSP\_SRD-00007; COV.REQ\_OVSP\_SRD-00021; COV.REQ\_OVSP\_SRD-00005]  
[COV.REQ\_OVSP\_SRD-00007; COV.REQ\_OVSP\_SRD-00021; COV.REQ\_OVSP\_SRD-00005]  
[COV.REQ\_OVSP\_SRD-00003; COV.REQ\_OVSP\_SRD-00007; COV.REQ\_OVSP\_SRD-00069; COV.REQ\_OVSP\_SRD-00007]

Modes\_Manage\_Operational\_Tr

Causes			
Effects	AlwaysALWAYS		
	[Get the CBIT Test Result][Provide the CBIT tTest rResult]		
	"CBIT Test Result{ V_CBIT_Test_Result} " is equal to E_CBIT_Fatal_Error	All the other cases	
	Set {V_Modes_SW_Mode} to E_Modes_Fail	[Provide-Get the OVSP cConfig table iIntegrity sStatus]	
		"OVSP Config table Integrity Status{ V_OVSP_Config_VValidity{V_Config_OVS P_Cfg_Integrity} is equal to E_Config_Integrity_KO	All the other cases
		[Provide-Get the CAN tTriggered tTest command]	
		[Provide-Get the eEngine sSpeed lLevel]	
		"CAN Triggered Test command{ V_CAN_T riggTest_cmd} is equal to E_CAN_TriggTest_On AND "Engine Speed Level{ V_OVSP_Context_Out.V_Engine_Sp eedLevel} is equal to E_OVSP_SW_Low_Speed	All the other cases
	Set {V_Modes_SW_Mode} to E_Modes_Degraded	Set {V_Modes_SW_Mode} to E_Modes_TriggeredTest	
		[Provide-Get the CAN tTriggered tTest speed]	
		No effect	

[Get the CBIT Test Result][Provide the CBIT tTest rResult]: corresponds to the following CALL:

- CALL CBIT\_Get\_Test\_Result with the following parameters:

a mis en forme le tableau

a mis en forme : Police :Non Gras

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a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces

– **RETURN Function** return: “CBIT Test Result” (V\_CBIT\_Test\_Result)

[Get the OVSP config table integrity status] [Provide the OVSP cConfig table integrity sStatus]: corresponds to the following CALL:

- CALL **Config\_Get\_Integrity\_Status** with the following parameters:
  - **RETURN Function** return: “OVSP Config table Integrity Status” (V\_Config\_OVSP\_Cfg\_Integrity)

[Get the CAN triggered test command] [Provide the CAN tTriggered tTest command]: corresponds to the following CALL:

- CALL **CAN\_Get\_TriggerTest\_Cmd** with the following parameters:
  - **RETURN Function** return: “CAN Triggered Test command” (V\_CAN\_TriggerTest\_cmd)

[Get the engine speed level] [Provide the eEngine sSpeed tLevel]: corresponds to the following CALL:

- CALL **OVSP\_Get\_Engine\_SpeedLevel** with the following parameters:
  - **RETURN Function** return: “Engine Speed” (V\_OVSP\_Context\_Out.V\_Engine\_SpeedLevel)

[Get the CAN triggered test speed] [Provide the CAN tTriggered tTest speed]: corresponds to the following CALL:

- CALL **CAN\_Get\_Test\_Speed** with the following parameters:
  - **RETURN Function** return: “CAN Triggered Test speed” (V\_CAN\_Test\_Speed.U\_Value\_32BitFloat)

[Manage the Test Speed]: corresponds to the following CALL

- CALL **DrvFTM\_Manage\_TSpeed** with the following parameters:
  - **IN:** {V\_CAN\_Test\_Speed.U\_Value\_32BitFloat}

Traceability	Refined
Rationale	-
Verification Method	Test

[END\_REQ]

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- a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces
- a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces
- a mis en forme : Police :Non Gras
- a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces
- a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces
- a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces
- a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces
- a mis en forme : Police :Non Gras
- a mis en forme : Retrait : Gauche : 0,4 cm, Sans numérotation ni puces
- a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces
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- a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

## 1.7. MODES\_MANAGE\_TRIGGTEST\_TR

### 1.7.1. Modes\_Manage\_TriggerTest\_Tr

This function manages the SW software mMode transition in TtTriggered TtTest mode.

#### 1.7.1.1. Parameters and Return Value

##### Parameters

- Function return: Not used.

##### Pre-conditions on parameters

None

#### 1.7.1.2. Called Functions

##### Calls

- CBIT\_Get\_Test\_Result
- CAN\_Get\_TriggTest\_Cmd
- Boot\_Get\_Side\_Id
- DrvGPIO\_Write
- DrvFTM\_Stop\_CAM\_Generation
- DrvFTM\_Stop\_Tspeed
- DrvFTM\_Init\_TSpeedOut\_Values
- DrvFTM\_Start\_NxOSy\_Acq
- CAN\_Reset\_TestDiscrete\_Cmd
- CAN\_Get\_Test\_Speed
- DrvFTM\_Manage\_TSpeed

Post-conditions

None

1.7.1.3. Input/Output Data

Data

- IN/OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

1.7.1.4. Requirements

REQ-SDDD\_Modes\_Manage\_TriggTest\_Tr\_0001-01

[COV.REQ\_OVSP\_SRD-00007; COV.REQ\_OVSP\_SRD-00021; COV.REQ\_OVSP\_SRD-00006;  
COV.REQ\_OVSP\_SRD-00069;COV.REQ\_OVSP\_SRD-00006; COV.REQ\_OVSP\_SRD-00007]

a mis en forme : Lignes solidaires

## Modes\_Manage\_TriggTest\_Tr

Causes	
Always ALWAYS	
[Provide-Get the CBIT tTest rResult]	
"CBIT Test Resultv-CBIT_Result {V_CBIT_Test_Result} is equal to E_CBIT_Fatal_Error	All the other cases
[Provide-Get the CAN tTriggered tTest command]	
"CAN Triggered Test commandv-TriggTest_Cmd{V_CAN_TriggTest_cmd} is equal to E_CAN_TriggTest_Off	All the other cases
Set {V_Modes_SW_Mode} to E_Modes_Operational [Provide-Get the OVSP side identification]	
"OVSP side identificationv-OVSP_Side_Id{V_Boot_OVSP_Side_Id} is equal to BOOT_SIDE_ID_LS	All the other cases
CALL DrvGPIO_Write with JN DRVGPI_O_OUT_CAM_CMD1 and E_OVSP_SW_Cmd_Off[Write the CAM first command on the dDiscrete output]	Call CALL ALL DrvFTM_Stop_CAM_Generation
CALL ALL CALL DrvFTM_Stop_Tspeed CALL DrvFTM_Init TSpeedOut Values CALL Call CALL DrvFTM_Start_NxOSy_Acq CALL DrvGPIO_Write with JN DRVGPI_O_OUT_CAM_CMD2 and E_OVSP_SW_Cmd_Off[Write the CAM second command on the dDiscrete output]	[Provide-Get the CAN tTriggered tTest speed] CALL ALL CALL DrvFTM_Manage TSpeed with JN "CAN Triggered Test speedv-TriggTest_Speed" [Manage the test speed]
CALL DrvGPIO_Write with JN DRVGPI_O_OUT_DOUTINHIB and E_OVSP_SW_Cmd_Off[Write the DOUTINHIB command on the dDiscrete output]	
CALL DrvGPIO_Write with JN DRVGPI_O_OUT_OSARM_CMD and E_OVSP_SW_Cmd_Off[Write the OSARM command on the dDiscrete output]	
CALL Call CALL CAN_Reset_TestDiscrete_Cmd	

[Get the CBIT test result] [Provide the CBIT tTest rResult]: corresponds to the following CALL:  
CALL CBIT\_Get\_Test\_Result with the following parameters:

- RETURN Function-return: "CBIT Test Resultv-CBIT\_Result" {V\_CBIT\_Test\_Result}

a mis en forme : Lignes solidaires

a mis en forme : Police :Non Gras

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a mis en forme : Police :Gras

a mis en forme : Lignes solidaires

a mis en forme : Police :Non Gras

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a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Lignes solidaires

a mis en forme : Police :Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Police :Gras

a mis en forme : Police :Non Gras

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Get the CAN triggered test command] [Provide the CAN {Triggered {Test command}}]: corresponds to the following CALL:

CALL CAN\_Get\_TriggerTest\_Cmd with the following parameters:

- RETURN Function return: "CAN Triggered Test commandv TriggTest\_Cmd" {V\_CAN\_TriggerTest\_cmd}

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Get the OVSP side identification] [Provide the OVSP side identification]: corresponds to the following CALL:

CALL Boot\_Get\_Side\_Id with the following parameters:

- RETURN Function return: "OVSP side identificationv OVSP\_Side\_Id" {V\_Boot\_OVSP\_Side\_Id}

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Write the CAM first command on the dDiscrete output]: corresponds to the following CALL:

a mis en forme : Police :Non Gras

- CALL DrvGPIO\_Write with the following parameters:

- IN: {E\_OVSP\_SW\_Cmd\_Off}
- OUTIN: {DRVGPIO\_OUT\_CAM\_CMD1}
- IN E\_OVSP\_SW\_Cmd\_Off

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Write the CAM second command on the dDiscrete output]: corresponds to the following CALL:

a mis en forme : Police :Non Gras

- CALL DrvGPIO\_Write with the following parameters:

- IN: {E\_OVSP\_SW\_Cmd\_Off}
- OUTIN: {DRVGPIO\_OUT\_CAM\_CMD2}
- IN E\_OVSP\_SW\_Cmd\_Off

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Write the DOUTINHIB command on the dDiscrete output]: corresponds to the following CALL:

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

- CALL DrvGPIO\_Write with the following parameters:

- IN: {E\_OVSP\_SW\_Cmd\_Off}
- OUTIN: {DRVGPIO\_OUT\_DOUTINHIB}
- IN E\_OVSP\_SW\_Cmd\_Off

a mis en forme : Police :Non Gras

[Write the OSARM command on the dDiscrete output]: corresponds to the following CALL:

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

- CALL DrvGPIO\_Write with the following parameters:

- IN: {E\_OVSP\_SW\_Cmd\_Off}
- OUTIN: {DRVGPIO\_OUT\_OSARM\_CMD}
- IN E\_OVSP\_SW\_Cmd\_Off

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[Provide Get the CAN {Triggered {Test speed}}]: corresponds to the following CALL:

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

CALL CAN\_Get\_Test\_Speed with the following parameters:

- RETURN Function return: "CAN Triggered Test speedv TriggTest\_Speed" {V\_CAN\_Test\_Speed.U\_Value\_32BitFloat}

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

[Manage the test speed]: corresponds to the following CALL:

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

- CALL DrvFTM\_Manage\_TSpeed with the following parameters:

- IN: {V\_CAN\_Test\_Speed.U\_Value\_32BitFloat}
- Traceability Rationale Verification Method
- Refined - Test

a mis en forme : Retrait : Gauche : 0,8 cm, Sans numérotation ni puces

[END\_REQ]

1.8. MODES\_TREATMENTS

1.8.1. Modes\_Treatments

This function performs the modes management treatments.

1.8.1.1. Parameters and Return Value

Parameters

- Function return: Not ~~used~~used.

Pre-conditions on parameters

None

1.8.1.2. Called Functions

Calls

- Modes\_Manage\_Init\_Tr
- Modes\_Manage\_Operational\_Tr
- Modes\_Manage\_Degraded\_Tr
- Modes\_Manage\_TriggTest\_Tr
- DrvGPIO\_Write
- Logbook\_Is\_Failure\_to\_Write
- OVSP\_SW\_Return\_True

Post-conditions

None

1.8.1.3. Input/Output Data

Data

- IN/OUT: {V\_Modes\_SW\_Mode}

Pre-conditions on data

None

1.8.1.4. Requirements

REQ-SDDD\_Modes\_Treatments\_0001-01

~~[COV.REQ\_OVSP\_SRD-00001; COV,COV.REQ\_OVSP\_SRD-00008;REQ\_OVSP\_SRD-00003;~~  
~~COV.REQ\_OVSP\_SRD-00004; COV.REQ\_OVSP\_SRD-00006; COV.REQ\_OVSP\_SRD-00008;~~  
~~COV.REQ\_OVSP\_SRD-00001]~~

a mis en forme : Pas de saut de page avant

a mis en forme : Non Surlignage

Modes\_Treatments

Causes				
Effects	{V_Modes_SW_Mode} is equal to E_Modes_Init	{V_Modes_SW_Mode} is equal to E_Modes_Operational	{V_Modes_SW_Mode} is equal to E_Modes_Degraded	{V_Modes_SW_Mode} is equal to E_Modes_TriggeredTest
	<del>CALL Call_CALL</del> Modes_Manage_Init_Tr	<del>CALL Call_CALL</del> Modes_Manage_Operational_Tr	<del>CALL Call_CALL</del> Modes_Manage_Degraded_Tr	<del>CALL Call_CALL</del> Modes_Manage_TriggerTest_Tr
	{V_Modes_SW_Mode} is equal to E_Modes_Fail			
	CALL DrvGPIO_Write with IN DRVGPIO_OUT_OSARM_CMD and E_OVSP_SW_Cmd_On			
	[Provide_Get the flag indicating there is a fFailure to write in FlexNVM]			
	[v_Log_to_WriteLogbook failure to write]{V_Logbook_Failure_to_Write} is FALSE			
[Wait until an external interrupt is executed]		No effect		
[Halt the microcontroller]		No effect		

[Provide\_Get the flag indicating there is a fFailure to write in FlexNVM]: corresponds to the following CALL:  
CALL Logbook\_Is\_Failure\_to\_Write with the following parameters:  
RETURN Function return: {V\_Logbook\_Failure\_to\_Write} "v\_Log\_to\_WriteLogbook failure to write"

[Wait until an external interrupt is executed] corresponds to the following CALL: to a CALL of a function provided in next version of OVSP software.  
CALL OVSP\_SW\_Return\_True with the following parameters:  
RETURN TRUE

[Halt the microcontroller]: Enter in an infinite loop.

Traceability	RefinedExtended
Rationale	The transition to E_Modes_Fail in the default case is used to handle an incident that could lead to a corrupted value of {V_Modes_SW_Mode}. It is a functional case but not specified in SRD.
Verification Method	Test

[END\_REQ]

a mis en forme le tableau

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Police :Non Gras

a mis en forme : Justifié, Retrait : Gauche : 1 cm, Suspendu : 3,41 cm



## APPENDIX 1. DATA DICTIONARY

~~Refer to the FADEX OVSP SDDD. The data dictionary is common for all the OVSP CSCs and it is attached in OVSP Software Detailed Design Description.~~ **Erreur ! Source du renvoi introuvable..**

## APPENDIX 2. CALL TREE

Refer to the FADEX OVSP SDDD. The call Tree is common for all the OVSP CSCs and it is attached in OVSP Software Detailed Design Description. **Erreur ! Source du renvoi introuvable..**

### **APPENDIX 3. DELETED REQUIREMENTS**

This Appendix provides all the Identifiers of requirements deleted from the project start:

- None.

## APPENDIX 4. COVERAGE MATRIX

~~The COVERAGE MATRIX is common for all the OVSP CSCs and it is attached in OVSP Software Detailed Design Description [R1]. Refer to the FADEX OVSP SDDD The COVERAGE MATRIX is common for all the OVSP CSCs and it is attached in OVSP Software Detailed Design Description~~  
**Erreur ! Source du renvoi introuvable..**

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