VECTOR

MICROSAR FEE

VECTOR

Document Information

History

Author	Date	Version	Remarks
	- -		- - - - - - - -
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Reference Documents

No.	Title	Version
		--

[redacted]

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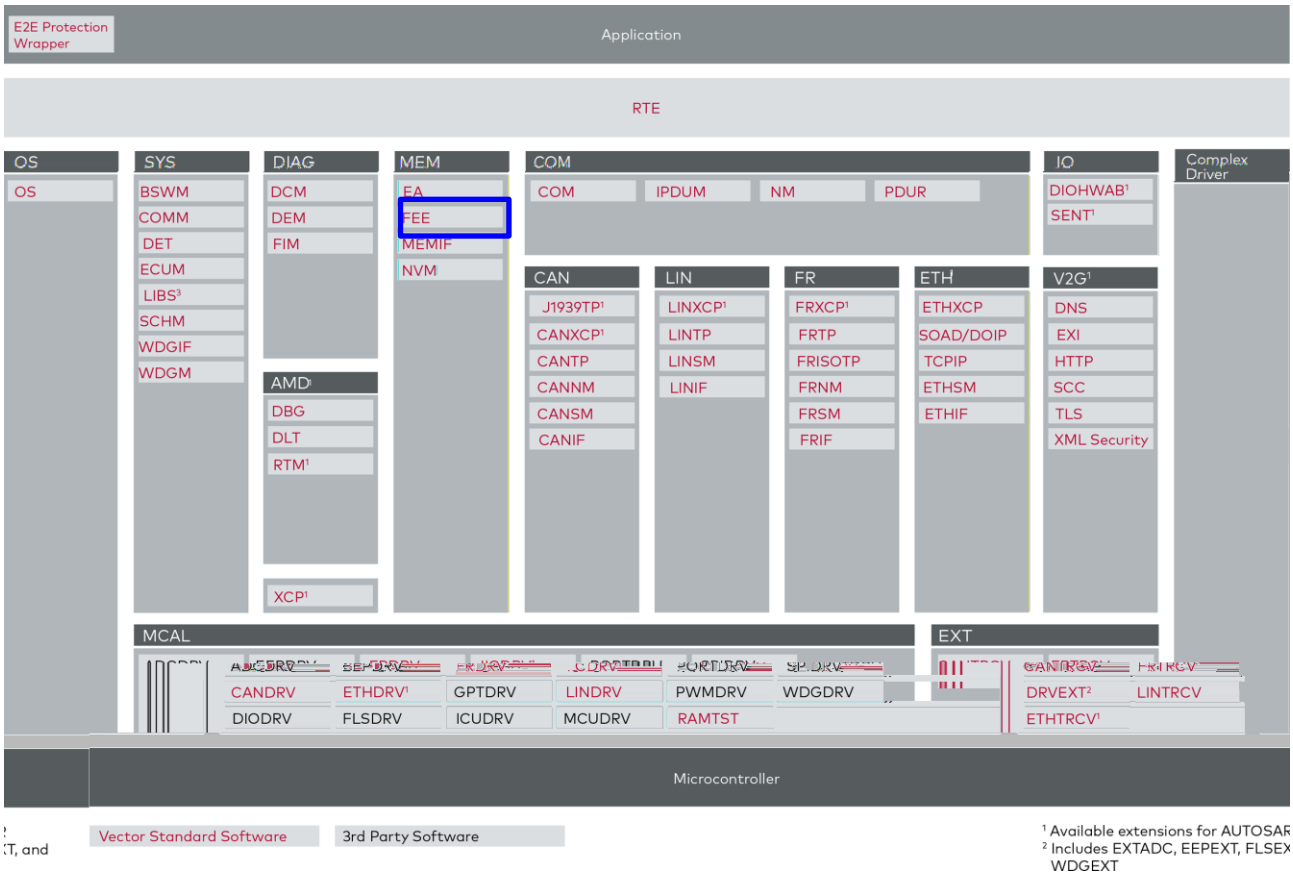
- .....

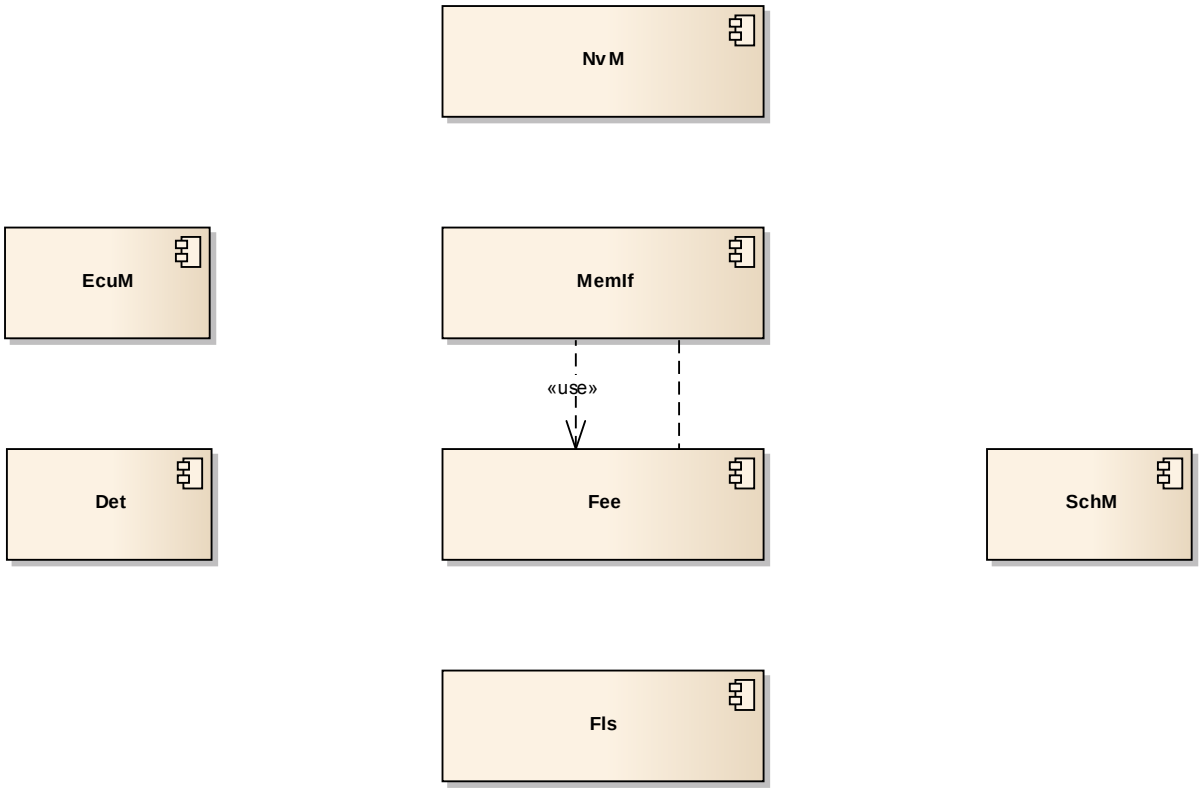
1 Introduction

Supported AUTOSAR Release*:		
Supported Configuration Variants:	- -	
Vendor ID:		-
Module ID:		

- - -

1.1 Architecture Overview





-

Note

-

```
Fee_MainFunction
```

Caution

2 Functional Description

2.1 Features

Feature
-
-
Fee_GetEraseCycle() -
Fee_GetWriteCycle() -
Fee_ForceSectorSwitch() -
- - **Info**
0x00000000 0x7FFFFFFF
Fee_MainFunction Fee_MainFunction

-

Feature
MAXIMUM_BLOCK_TIME

-

2.2 Initialization

Fee_Init() Fee_InitEx()

Caution

Fee_MainFunction()

>

Fee_SetMode(MEMIF_MODE_SLOW)

>

> Fee_EnableFss()

> Fee_Write() Fee_InvalidateBlock() Fee_EraseImmediateBlock()

-

Caution

-

2.3 States

2.3.1 Module States

Point in Time	Module State
	MEMIF_UNINIT
	MEMIF_ BUSY_INTERNAL
	MEMIF_BUSY
Fee_SetMode()	MEMIF_BUSY_INTERNAL
	MEMIF_BUSY_INTERNAL
	MEMIF_IDLE

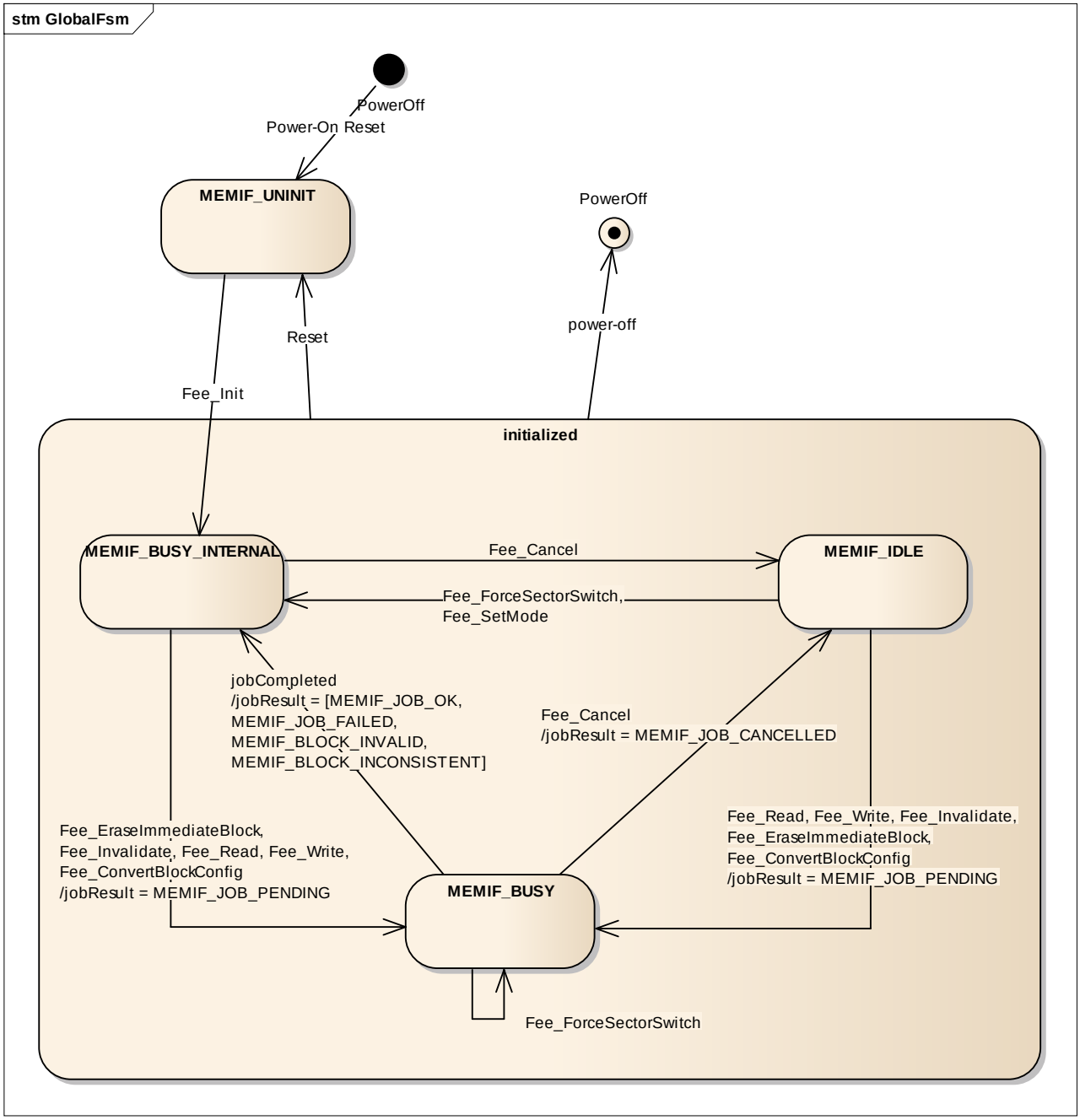
-

Note

-
FEE_START_SEC_VAR_INIT_UNSPECIFIED

Note

Fee_MainFunction


stm GlobalFsm
PowerOff
Power-On Reset
MEMIF_UNINIT
PowerOff
power-off
Reset
Fee_Init
initialized
MEMIF_BUSY_INTERNAL
Fee_Cancel
MEMIF_IDLE
Fee_ForceSectorSwitch,
Fee_SetMode
jobCompleted
/jobResult = [MEMIF_JOB_OK,
MEMIF_JOB_FAILED,
MEMIF_BLOCK_INVALID,
MEMIF_BLOCK_INCONSISTENT]
Fee_Cancel
/jobResult = MEMIF_JOB_CANCELLED
Fee_EraseImmediateBlock,
Fee_Invalidate, Fee_Read, Fee_Write,
Fee_ConvertBlockConfig
/jobResult = MEMIF_JOB_PENDING
Fee_Read, Fee_Write, Fee_Invalidate,
Fee_EraseImmediateBlock,
Fee_ConvertBlockConfig
/jobResult = MEMIF_JOB_PENDING
MEMIF_BUSY
Fee_ForceSectorSwitch

-

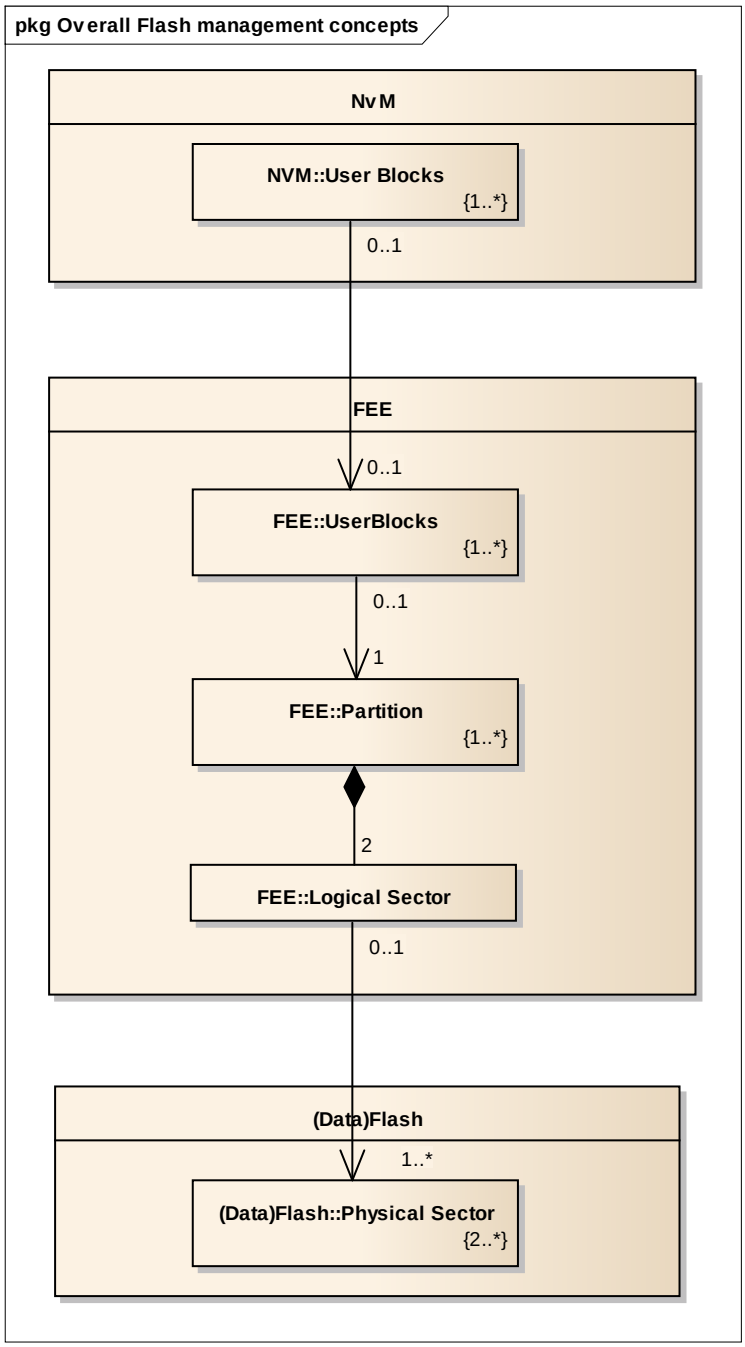
2.3.2 Job States/Results

Point in Time	Job State
	MEMIF_JOB_OK
	MEMIF_JOB_PENDING
Fee_Cancel()	MEMIF_JOB_CANCELLED
	MEMIF_BLOCK_INVALID
	MEMIF_BLOCK_INCONSISTENT
	MEMIF_JOB_FAILED

-

2.4 Flash organization

-



-

2.4.1 Block Handling

2.4.1.1 Block Chunks

2.4.1.2 Block Search

2.4.2 Partitions

>
> -
>

>
>
>
>

Note

Example

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2.4.3 Logical Sectors

Note

Caution

Info

2.5 Processing

Caution

Caution

`MEMIF_BUSY_INTERNAL`

2.5.1.1 Initial processing

Expert Knowledge

Info

2.5.1.2 Processing of Read Job

Fee_Read()

Fee_Read()
Fee_MainFunction()

2.5.1.3 Processing of Write Job

Fee_Write()

Fee_Write()
Fee_MainFunction()

2.5.1.4 Processing of InvalidateBlock Job

Fee_InvalidateBlock()
MEMIF_BLOCK_INVALID

Expert Knowledge

Fee_InvalidateBlock()
Fee_MainFunction()

2.5.1.5 Processing of EraseImmediateBlock Job

Fee_EraseImmediateBlock()

Expert Knowledge

Fee_EraseImmediateBlock()
Fee_MainFunction()

2.5.1.6 Processing of GetEraseCycle Job

Fee_GetEraseCycle() -

Fee_GetEraseCycle()
Fee_MainFunction()

2.5.1.7 Processing of GetWriteCycle Job

Fee_GetWriteCycle() -

Fee_GetWriteCycle()
Fee_MainFunction()

2.6 Error Handling

2.6.1 Development Error Reporting

Det_ReportError()

Det_ReportError()

Service ID	Service
0x00u	Fee_Init() / Fee_InitEx()
0x01u	Fee_SetMode()
0x02u	Fee_Read()
0x03u	Fee_Write()
0x04u	Fee_Cancel()
0x05u	Fee_GetStatus()
0x06u	Fee_GetJobResult()
0x07u	Fee_InvalidateBlock()

Service ID	Service
0x08u	Fee_GetVersionInfo()
0x09u	Fee_EraseImmediateBlock()
0x10u	Fee_JobEndNotification()
0x11u	Fee_JobErrorNotification()
0x12u	Fee_MainFunction()
0x20u	Fee_GetEraseCycle()
0x21u	Fee_GetWriteCycle()
0x22u	Fee_GetSectorSwitchStatus()
0x23u	Fee_ForceSectorSwitch()
0x24u	Fee_ConvertBlockConfig()

-

Error Code		Description
0x02	FEE_E_INVALID_BLOCK_NO	
0x10	FEE_E_PARAM_DATABUFFERPTR	NULL_PTR
0x11	FEE_E_PARAM_SECTOR_NUMBER	Fee_GetEraseCycle()
0x12	FEE_E_PARAM_LENGTH_OFFSET	Fee_Read() BlockOffset Length
0x13	FEE_E_BUSY	
0x14	FEE_E_NO_INIT	

-

Expert Knowledge

2.6.1.1 Parameter Checking

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-

-

FEE_DEV_ERROR_DETECT

Service \ Check	FEE_E_INVALID_BLOCK_NO	FEE_E_PARAM_DATABUFFERPTR	FEE_E_PARAM_SECTOR_NUMBER	FEE_E_PARAM_LENGTH_OFFSET	FEE_E_BUSY	FEE_E_NO_INIT
Fee_Init()						
Fee_InitEx()		■				
Fee_SetMode()						■
Fee_Read()	■	■		■	■	■
Fee_Write()	■	■			■	■
Fee_Cancel()						■
Fee_GetStatus()						
Fee_GetJobResult()						■
Fee_InvalidateBlock()	■				■	■
Fee_GetVersionInfo()		■				
Fee_EraseImmediateBlock()	■				■	■
Fee_JobEndNotification()						
Fee_JobErrorNotification()						
Fee_MainFunction()						■[1]
Fee_GetEraseCycle()		■	■		■	■
Fee_GetWriteCycle()	■	■			■	■
Fee_GetSectorSwitchStatus()						■
Fee_ForceSectorSwitch()						■

[1] Check only; no error reporting to DET

Service \ Check	FEE_E_INVALID_BLOCK_NO	FEE_E_PARAM_DATABUFFERPTR	FEE_E_PARAM_SECTOR_NUMBER	FEE_E_PARAM_LENGTH_OFFSET	FEE_E_BUSY	FEE_E_NO_INIT
Fee_ConvertBlockConfig()		■			■	■
Fee_SuspendWrites()						■
Fee_ResumeWrites()						■
Fee_EnableFss()						■
Fee_DisableFss()						■

-

2.6.2 Production Code Error Reporting

2.6.3 Error notification

Prototype	
Parameter	
Return code	
	--
Functional Description	
Fee_Errorhook	

Particularities and Limitations
>
> -
>
>

-

2.7 Sector Switch

Expert Knowledge

-
-
-

2.7.1 Background Sector Switch (BSS)

2.7.2 Foreground Sector Switch (FSS)

Expert Knowledge

2.7.3 Sector Overflow

Caution

>
>
>

-

2.7.4 Sector switch reserves and thresholds

Basic Knowledge

is

Note

-

2.7.5 Background Sector Switch Reserve/Threshold

2.7.6 Foreground Sector Switch/Threshold

-

`Fee_DisableFss()`

Expert Knowledge

2.8 Data Conversion

Info

MEMIF_BLOCK_INVALID	-

Info

Caution

-

`Fee_ConvertBlockConfig`

`Fee_ForceSectorSwitch`

2.9 Flash Page Size impacts

2.10 Services for handling under-voltage situations

-

`Fee_SuspendWrites()` -

Fee_ResumeWrites()

Fee_EnableFss() Fee_DisableFss()

Caution

Fee_Init()
Fee_EnableFss() -

Basic Knowledge

Caution

Fee_EnableFss() -
-

Expert Knowledge

Fee_DisableFss()

2.11 Critical Data Blocks

Basic Knowledge

-

Note

Basic Knowledge

—

—

—

Expert Knowledge

Caution

Note

2.12 Fee_MainFunction Triggering

Fee_MainFunction

Fee_MainFunction
ackground task runs when the system has nothing to do further.
Fee_MainFunction

Caution

Note
Fee_MainFunction Fls_MainFunction

3 Integration

3.1 Scope of Delivery

3.1.1 Static Files

File Name	Description
Fee.h	
Fee_InitEx.h	Fee_InitEx()
Fee_Types.h	
Fee.c	
Fee_Processing.c	
Fee_IntBase.h Fee_JopParams.h	
Fee_Int.h	
Fee_Partition.h Fee_PartitionDefs.h Fee_Partition.c	
Fee_Sector.h Fee_SectorDefs.h Fee_Sector.c	
Fee_ChunkInfo.h Fee_ChunkInfoDefs.h Fee_ChunkInfo.c	
Fee_Cbk.h	
Fee_bswmd.arxml	
Identifier.xml	[2]
Fee.xml	
If_AsrIfFee.jar	-

-

[2] AUTOSAR 3.x deliveries only

3.1.2 Dynamic Files

File Name	Description
Fee_Cfg.h	
Fee_Lcfg.c	-
Fee_PrivateCfg.h	

-

3.2 Compiler Abstraction and Memory Mapping

Memory Mapping Sections \ Compiler Abstraction Definitions	FEE_API_CODE	FEE_APPL_CODE	FEE_APPL_CONFIG	FEE_APPL_DATA	FEE_CONST	FEE_PRIVATE_CODE	FEE_PRIVATE_CONST	FEE_PRIVATE_DATA	FEE_VAR	FEE_VAR_NOINIT
FEE_START_SEC_CODE	■					■				
FEE_START_SEC_CONST_UNSPECIFIED					■		■			
FEE_START_SEC_APPL_CONFIG_UNSPECIFIED			■							
FEE_START_SEC_VAR_NOINIT_UNSPECIFIED										■
FEE_START_SEC_VAR_INIT_UNSPECIFIED									■	

-

- FEE_START_SEC_CODE / FEE_STOP_SEC_CODE

  FEE_API_CODE

FEE_PRIVATE_CODE

- FEE_START_SEC_APPL_CONFIG_UNSPECIFIED / FEE_STOP_SEC_APPL_CONFIG_UNSPECIFIED

  FEE_APPL_CONFIG

- FEE_START_SEC_CONST_UNSPECIFIED / FEE_STOP_SEC_CONST_UNSPECIFIED

  FEE_PRIVATE_CONST

  FEE_CONST

Expert Knowledge

- FEE_START_SEC_VAR_NOINIT_UNSPECIFIED / FEE_STOP_SEC_VAR_NOINIT_UNSPECIFIED

  FEE_VAR_NOINIT

- FEE_START_SEC_VAR_INIT_UNSPECIFIED / FEE_STOP_SEC_VAR_INIT_UNSPECIFIED

  FEE_VAR

-

Note

Fee_ModuleStatus_t

-

Caution

FEE_APPL_DATA
FEE_VAR_NOINIT

FEE_APPL_DATA

3.3 Dependencies on SW Modules

3.3.1 OSEK/AUTOSAR OS

Note

3.3.2 Module SchM

Note

3.3.3 Module Det

FEE_DEV_ERROR_DETECT

Det_ReportError()

3.3.4 Module Fls

3.3.5 Callback Functions

3.3.5.1 Lower layer interaction

```
Fee_JobEndNotification()
      Fee_JobErrorNotification()
```

Note

3.3.5.2 Upper layer interaction

```
                                    Nvm_JobEndNotification()
                                         Nvm_JobErrorNotification()
```

Note

3.3.5.3 User Error Callback

Prototype	
uint8 (uint8 partitionId, Fee_SectorError errCode)	
Parameter	
Return code	
FEE_ERRCBK_REJECT_WRITE	MEMIF_JOB_FAILED
FEE_ERRCBK_REJECT_ALL	MEMIF_JOB_FAILED
FEE_ERRCBK_RESOLVE_AUTOMATICALLY	
Functional Description	
Info FEE_SECTOR_FORMAT_FAILED -	
Particularities and Limitations	
-	

FEE_ERRCBK_RESOLVE_AUTOMATICALLY.

Error Code	Default behavior
FEE_SECTORS_CORRUPTED	-
FEE_SECTOR_OVERFLOW	
FEE_SECTOR_FORMAT_FAILED	FEE_ERRCBK_RESOLVE_AUTOMATICALLY -
FEE_SECTOR_CRITICAL_FILL_LEVEL	

-

3.4 Dependencies on HW modules

3.5 Critical Sections

Fee_MainFunction

FEE_EXCLUSIVE_AREA_0

Fee_MainFunction
NvM_MainFunction

Changes

FEE_EXCLUSIVE_AREA_1

-
Fee_MainFunction -

NvM_MainFunction
Fls_MainFunction

4 API Description

4.1 Interfaces Overview

-

4.2 Type Definitions

4.2.1 Fee_SectorSwitchStatusType

Description

Range	
FEE_SECTOR_SWITCH_IDLE	
FEE_SECTOR_SWITCH_BLOCK_COPY	
FEE_SECTOR_SWITCH_ERASE	
FEE_SECTOR_SWITCH_UNINIT	

-

Info

4.2.2 Fee_SectorErrorType

Description

Range	
FEE_SECTORS_CORRUPTED	
FEE_SECTOR_OVERFLOW	
FEE_SECTOR_FORMAT_FAILED	

FEE_SECTOR_CRITICAL_FILL_LEVEL	

Note

-

Info

4.3 Services provided by FEE

Info

4.3.1 Fee_Init

Prototype	
`void (void)`	
Parameter	
--	--
Return code	
	--
Functional Description	

Info

Particularities and Limitations
>
> -
>
>
>

-

4.3.2 Fee_InitEx

Prototype	
void (Fee_ConfigRefType ConfigPtr)	
Parameter	
	Fee_Config **Expert Knowledge**
Return code	
	--
Functional Description	
Particularities and Limitations	
>	
> -	
>	
>	
>	

-

4.3.3 Fee_SetMode

Prototype	
void (MemIf_ModeType Mode)	
Parameter	
	MEMIF_MODE_SLOW MEMIF_MODE_FAST
Return code	
	--

Functional Description

Expert Knowledge

Fls_SetMode()

Info

Fee_MainFunction()

Note

enum

Caution

Fee_SetMode()
-
MEMIF_MODE_SLOW

-
MEMIF_MODE_FAST

Particularities and Limitations

>
> -
>

>

-

4.3.4 Fee_Read

Prototype

```
Std_ReturnType
(
  uint16 BlockNumber,
  uint16 BlockOffset,
  uint8 *DataBufferPtr,
  uint16 Length
)
```

Parameter

Return code

Functional Description

Info

Fee_GetJobResult()

Particularities and Limitations

>
> -
>

>

-

4.3.5 Fee_Write

Prototype

Std_ReturnType
(
  uint16 BlockNumber,
  uint8 *DataBufferPtr
)

Parameter
Return code
Functional Description

Info

Fee_GetJobResult()

Particularities and Limitations
>
> -
>
>

-

4.3.6 Fee_Cancel

Prototype	
void (void)	
Parameter	
--	--
Return code	
	--
Functional Description	

MEMIF_IDLE

IDLE

Expert Knowledge

Changes

-

Particularities and Limitations
>
> -
>
>

-

4.3.7 Fee_GetStatus

Prototype	
MemIf_StatusType (void)	
Parameter	
--	--
Return code	
	- Fee_Init()
	-
	-
Functional Description	
Particularities and Limitations	
>	
> -	
>	
>	

-

4.3.8 Fee_GetJobResult

Prototype	
MemIf_JobResultType (void)	
Parameter	
--	--
Return code	
	Fee_Cancel()
	Fee_InvalidateBlock() Fee_EraseImmediateBlock()

Functional Description
Particularities and Limitations
>
> -
>
>

-

4.3.9 Fee_InvalidateBlock

Prototype	
`Std_ReturnType (uint16 BlockNumber)`	
Parameter	
Return code	
Functional Description	

Info

`Fee_GetJobResult()`

Particularities and Limitations
>
> -
>
>

-

4.3.10 Fee_GetVersionInfo

Prototype	
void (Std_VersionInfoType *VersionInfoPtr)	
Parameter	
Return code	
	--
Functional Description	
> > > >	
Particularities and Limitations	
> > - > -	
>	

-

4.3.11 Fee_EraseImmediateBlock

Prototype	
Std_ReturnType (uint16 BlockNumber)	
Parameter	
Return code	

Functional Description
MEMIF_BLOCK_INVALID **Info** Fee_GetJobResult()
Note

Particularities and Limitations
>
> -
>
> -
>

-

4.3.12 Fee_MainFunction

Prototype	
void (void)	
Parameter	
--	--
Return code	
	--
Functional Description	

Particularities and Limitations
>
> -
>
>

-

4.3.13 Fee_GetEraseCycle

Prototype
Std_ReturnType (
uint8 SectorNumber,
uint32 *DataPtr
)

Parameter	

Return code	

Functional Description
Info
Info `Fee_GetJobResult()`
Info

Particularities and Limitations
>
> -
> -
>

-

4.3.14 Fee_GetWriteCycle

Prototype

`Std_ReturnType`
`(`
`  uint16 BlockNumber,`
`  uint32 *DataPtr`
`)`

Parameter	

Return code	

Functional Description
Info
Info `Fee_GetJobResult()`
Info

Particularities and Limitations
>
> -
> -
>

-

4.3.15 Fee_GetSectorSwitchStatus

Prototype	
`Fee_SectorSwitchStatusType`	`(void)`
Parameter	
--	--
Return code	
`Fee_SectorSwitchStatusType`	

Functional Description

Info

current

```
FEE_SECTOR_SWITCH_IDLE
FEE_SECTOR_SWITCH_IDLE
```

Info

Particularities and Limitations

>
> -
>

>

-

4.3.17 Fee_ForceSectorSwitch

Prototype	
Std_ReturnType	(void)
Parameter	
--	--
Return code	
Functional Description	

```
Fee_ForceSectorSwitch();
<wait until IDLE>
Fee_ForceSectorSwitch();
```

Note
is not mandatory
Fee_ForceSectorSwitch
is mandatory

Note

MEMIF_BUSY
MEMIF_BUSY_INTERNAL MEMIF_BUSY

Caution
Fee_ForceSectorSwitch()

Note

Note

MEMIF_IDLE

Note

Particularities and Limitations
>
> -
> -
>

-

4.3.18 Fee_ConvertBlockConfig

Prototype
Std_ReturnType (const Fee_ConversionOptionsType* options)

Parameter		
	Fee_ConversionOptionsType	

Return code	

Functional Description

options->userBuffer
options->notificationPtr

Caution

()

Basic Knowledge

Info

Info

Fee_GetStatus()
Fee_GetJobResult()

Info

Particularities and Limitations

>
> -
> -

>

-

4.3.19 Fee_SuspendWrites

Prototype	
void (void)	
Parameter	
-	-
Return code	
	--
Functional Description	
- ***Info***	
Particularities and Limitations	
>	
> -	
>	
>	

-

4.3.20 Fee_ResumeWrites

Prototype	
void (void)	
Parameter	
-	–
Return code	
	--

Functional Description
Fee_SuspendWrites()
Particularities and Limitations
>
> -
>
>

-

4.3.21 Fee_DisableFss

Prototype	
void (void)	
Parameter	
-	-
Return code	
	-
Functional Description	

Info

Particularities and Limitations
>
> -
>
>

-

4.3.22 Fee_EnableFss

Prototype	
void (void)	
Parameter	
-	-
Return code	
	-
Functional Description	
Particularities and Limitations	
>	
> -	
>	
>	

-

4.4 Services used by FEE

Component	API

-

4.4.1 Data Conversion Callback

-

Fee_ConvertBlockConfig

Prototype	
uint8 *<Function_Name>* (uint8* userBuffer, uint32 blockId, uint16 oldLength, uint16 newLength)	
Parameter	
	Fee_ConvertBlockConfig
	[3]
	oldLength
Return code	
FEE_CONVERSION_WRITE_OLD_LENGTH	Fee_Read Fee_ConvertBlockConfig Fee_ConvertBlockConfig
FEE_CONVERSION_WRITE_NEW_LENGTH	
FEE_CONVERSION_SKIP	Fee_ConvertBlockConfig
Functional Description	
Particularities and Limitations	
>	

[3] Bit 0 is defined to be the least significant bit, regardless of used platform.

> Fee_MainFunction

-

4.5 Callback Functions

4.5.1 Fee_JobEndNotification

Prototype	
void (void)	
Parameter	
--	--
Return code	
	--
Functional Description	
Info - FEE_POLLING_MODE	
Particularities and Limitations	
>	
> -	
>	
>	

-

4.5.2 Fee_JobErrorNotification

Prototype	
void (void)	
Parameter	
--	--
Return code	
	--

Functional Description
Info - FEE_POLLING_MODE
Particularities and Limitations
>
> -
>
>

-

4.6 Configurable Interfaces

API	Description
Fee_GetVersionInfo()	
Fee_GetEraseCycle()	
Fee_GetWriteCycle()	
Fee_ForceSectorSwitch()	
Fee_JobEndNotification() Fee_JobErrorNotification()	
Fee_EnableFss() Fee_DisableFss()	
Fee_ConvertBlockConfig()	

-

5 Configuration

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>

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5.1 Configuration with DaVinci Configurator

5.1.1 Start configuration of the FEE

- -

5.1.2 Useful Chunk-Sizes (instance counts)

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Note

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VECTOR

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5.1.3 Update of block configuration

Note

`Fee_ForceSectorSwitch()`

`Fee_ForceSectorSwitch()`

`Fee_ForceSectorSwitch()`

5.1.4 FEE Configuration tab

Attribute Name	Value Type	Values	Description
	--	**OFF**	
	--	**--**	
	--	**--**	
	--	**--**	

Attribute Name	Value Type	Values	Description
	--	--	
	--	--	**Caution**
		no default	- **Caution**
	--	--	**Info**

Attribute Name	Value Type	Values	Description
	-	Fee_User Block<n>	**Info**
			Caution
	--	1	**Info**
		1	**Info**

Attribute Name	Value Type	Values	Description
	--	**1**	**Caution**
		--	
	--	**10000**	**Info**
	--	**OFF**	**Info** **Caution** `Fee_EraseImmediateBlock()`
	--	**OFF**	
	--	**OFF**	

-

5.1.5 General Settings tab

5.1.5.1 Error Detection – Development Mode

Attribute Name	Value Type	Values	Description
	--	**OFF**	> >
	--	**ON**	
	-	- **Det_ Report Error**	
		Det.h	

-

5.1.5.2 Area “Error Callback”

Attribute Name	Value Type	Values	Description
	--	**OFF**	
	-	- **Appl_CriticalError Callback**	
		Appl_Include.h	

-

5.1.5.3 Area Buffer

Attribute Name	Value Type	Values	Description
		64,	Info

5.1.5.4 Area “Upper Layer”

Attribute Name	Value Type	Values	Description
	-	- NvM_JobEnd Notification	
	-	- NvM_JobError Notification	
		NvM_Cbk.h	

-

5.1.5.5 Area “Critical Section Handling”

Changes

Attribute Name	Value Type	Values	Description
-	--	**Use Suspend Functions**	-
-	--	**Use Suspend Functions**	- -

-

Note

5.1.6 Partitions

-

Attribute Name	Value Type	Values	Description
		--	/AUTOSAR/Fls/FlsConfigSet
	--	**--**	
	--	**1024**	

Attribute Name	Value Type	Values	Description
	--	**--**	
	--	**1024**	
	--	**8,**	
	--	**8,**	

-

5.1.6.1 Area “Management”

Attribute Name	Value Type	Values	Description
		--	**Info**
		--	**Info**

-

5.1.6.2 Area “Lower Layer”

Attribute Name	Value Type	Values	Description

	--	**ON**	`Fee_JobEndNotification()`
			`Fee_JobErrorNotification(),`
			 Info

-

5.1.7 Module API tab

5.1.7.1 API Configuration

Attribute Name	Value Type	Values	Description
	--	**ON**	`Fee_GetVersionInfo()` **Info**
	--	**OFF**	`Fee_GetEraseCycle()` **Info**
	--	**OFF**	`Fee_GetWriteCycle()`
	--	**OFF**	`Fee_ForceSectorSwitch()`
	--	**OFF**	`Fee_ConvertDataBlocks` **Info**
	--	**OFF**	`Fee_EnableFss()` `Fee_DisableFss()`

-

5.1.7.2 Provided API

Attribute Name	Value Type	Values	Description
	--	--	

-

5.2 Configuration Parameters only visible in GCE

-

Attribute Name	Value Type	Values	Description
		4095	

-

5.2.1 Fls API deviating from AUTOSAR naming convention

-

Example

1. FeeFlsApi FeeGeneral
2.
3.
4. -
   Fls_Read
   MyVeryOwn_ReadFunction
5. FeeFlsDeviceIndex
   Fls/FlsGeneral

Expert Knowledge
FeeFlsApi

6 AUTOSAR Standard Compliance

6.1 Deviations

6.1.1 Maximum Blocking Time

FEE_MAXIMUM_BLOCK_TIME

6.2 Additions/ Extensions

6.2.1 Parameter Checking

-

-

6.2.2 Fee_InitEx

6.2.3 GetEraseCycle

6.2.4 GetWriteCycle

6.2.5 GetSectorSwitchStatus

6.2.6 ForceSectorSwitch

6.2.7 Fee_ConvertBlockConfig

6.2.8 Fee_SuspendWrites / Fee_ResumeWrites

6.2.9 Fee_EnableFss / Fee_DisableFss

6.3 Limitations

6.3.1 Partitions

6.3.2 Flash Usage

6.3.3 Performance

-

Expert Knowledge

—

6.3.4 Aborts/Resets

-

-

6.3.5 Write Cycle and Erase Cycle Counters

-

-

Caution

7 Glossary and Abbreviations

7.1 Glossary

Term	Description

-

7.2 Abbreviations

Abbreviation	Description

-

8 Contact

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