Document Title	SWS_EEPROMAbstraction: Complete Change Documentation 4.3.0 - 4.3.1
Document Owner	AUTOSAR
Document Responsibility	AUTOSAR
Document Identification No	695

Document Status	Final
Part of AUTOSAR Standard	Classic Platform
Part of Standard Release	4.3.1

Table of Contents

1 SWS_EEPROMAbstraction

1.1 Specification Item ECUC_Ea_00130

Trace References:

Content:

Name	EaBlockNumber		
Description	Block identifier (handle). 0x0000 and 0xFFFF shall not be used for block numbers (see EA006SWS_Ea_00006). Range: min = 2ÑVM_DATASET_SELECTION_BITS max = 0xFFFF -2ÑVM_DATASET_SELECTION_BITS Note: Depending on the number of bits set aside for dataset selection several other block numbers shall also be left out to ease implementation.		
Multiplicity	1		
Type	EcucIntegerParamDef (Symbolic Name generated for this parameter)		
Range	1 .. 65534		
Default value	–		
Post-Build Variant Value	false		
Value Configuration Class	Pre-compile time	X	All Variants
	Link time	–	
	Post-build time	–	
Scope / Dependency	scope: ECU		

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

Problem description:

AR 4.3.0.
- In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
- The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184

SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.2   Specification Item SWS_Ea_00097

Trace References:

RS_BRF_01056

Content:

API function	Description
Det_ReportRuntimeError	Service to report runtime errors. If a callout has been configured then this callout shall be called.
Eep_Cancel	Cancels a running job.
Eep_Erase	Service for erasing EEPROM sections.
Eep_GetJobResult	This service returns the result of the last job.
Eep_GetStatus	Returns the EEPROM status.
Eep_Read	Reads from EEPROM.
Eep_SetMode	Sets the mode.
Eep_Write	Writes to EEPROM.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

Document ID 695: ChangeDocumentation

solution in Column "G" of the new attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another.
Please also check the related requirements (and background information) which is
referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification
"belongs".

*** BSW UML Model ***
SWS_CanNm:
————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.3   Specification Item SWS_Ea_00158

Trace References:

SRS_MemHwAb_14029, SRS_BSW_00323

Content:

If a read request is rejected by the function Ea_Read, i.e. requirements SWS_Ea_00130, SWS_Ea_00147, SWS_Ea_00167, SWS_Ea_00168, SWS_Ea_00169, SWS_Ea_00170 , EA179 or EA180 or SWS_Ea_00179 apply, the function Ea_Read shall not change the current module status or job result.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

  SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
  SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
  SWS_Ea_00161 -> remove reference to EA184
  SWS_Ea_00162 -> remove reference to EA185
  SWS_EA_00179 -> change to SWS_Ea_00179
  SWS_EA_00181 -> change to SWS_Ea_00181
  SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
  SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
  ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
  –Last change on issue 76728 comment 7–

  BW-C-Level:

Application	Specification	Bus
1	1	1

1.4 Specification Item SWS_Ea_00159

Trace References:

SRS_MemHwAb_14010, SRS_BSW_00323

Content:

If a write request is rejected by the function Ea_Write, i.e. requirements SWS_Ea_00131, SWS_Ea_00171, SWS_Ea_00148, SWS_Ea_00172 , EA181 or EA183 or SWS_Ea_00181 apply, the function Ea_Write shall not change the current module status or job result.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

  SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
  SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
  SWS_Ea_00161 -> remove reference to EA184
  SWS_Ea_00162 -> remove reference to EA185
  SWS_EA_00179 -> change to SWS_Ea_00179
  SWS_EA_00181 -> change to SWS_Ea_00181
  SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
  SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
  ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
  –Last change on issue 76728 comment 7–

  BW-C-Level:

Application	Specification	Bus
1	1	1

1.5   Specification Item SWS_Ea_00161

Trace References:

SRS_BSW_00323

Content:

If an invalidation request is rejected by the function Ea_InvalidateBlock, i.e. requirements SWS_Ea_00135, SWS_Ea_00149 , or SWS_Ea_00175 or EA184 apply, the function Ea_InvalidateBlock shall not change the current module status or job result.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

  SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
  SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
  SWS_Ea_00161 -> remove reference to EA184
  SWS_Ea_00162 -> remove reference to EA185
  SWS_EA_00179 -> change to SWS_Ea_00179
  SWS_EA_00181 -> change to SWS_Ea_00181
  SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
  SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
  ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
  –Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.6 Specification Item SWS_Ea_00162

Trace References:

SRS_BSW_00323

Content:

If an erase request for an immediate block is rejected by the function Ea_EraseImmediateBlock, i.e. requirements SWS_Ea_00136, SWS_Ea_00176, SWS_Ea_00152 , or SWS_Ea_00065 or EA185 apply, the function Ea_EraseImmediateBlock shall not change the current module status or job result.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

  SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
  SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
  SWS_Ea_00161 -> remove reference to EA184
  SWS_Ea_00162 -> remove reference to EA185
  SWS_EA_00179 -> change to SWS_Ea_00179
  SWS_EA_00181 -> change to SWS_Ea_00181
  SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
  SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after require-

ments ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.7   Specification Item SWS_Ea_00165

Trace References:

SRS_BSW_00323

Content:

If development error detection is enabled for the module: the The function Ea_SetMode shall check if the module state is MEMIF_BUSY. If this is the case, the function Ea_Set Mode shall raise the development runtime error EA_E_BUSY and return to the caller without executing the mode switch.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution   in   Column   "G"   of   the   new   attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification "belongs".

  *** BSW UML Model ***
  SWS_CanNm:

Document ID 695: ChangeDocumentation

————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:

————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.8   Specification Item SWS_Ea_00167

Trace References:

SRS_BSW_00323

Content:

If development error detection is enabled for the module: the The function Ea_Read shall
check if the module state is MEMIF_BUSY. If this is the case, the function Ea_Read shall
reject the read request, raise the development runtime error EA_E_BUSY and return with
E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

Document ID 695: ChangeDocumentation

Agreed solution:

solution in Column "G" of the new attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.9   Specification Item SWS_Ea_00171

Trace References:

SRS_BSW_00406

Content:

If development error detection is enabled for the module: the The function Ea_Write shall check if the module state is MEMIF_BUSY. If this is the case, the function Ea_Write shall reject the write request, raise the development runtime error EA_E_BUSY and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution   in   Column   "G"   of   the   new   attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

    *** BSW UML Model ***
    SWS_CanNm:
    ———-
    Chapter 8.6.1 Optional Interfaces:
    Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

    SWS_LinIf:
    ———-
    SWS_LinIf_00359: add Det_ReportRuntimeError

    SWS_UdpNm:
    ———-
    Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.10 Specification Item SWS_Ea_00173

Trace References:

SRS_BSW_00323

Content:

If development error detection is enabled for the module: If the the current module status is not MEMIF_BUSY (i.e. there is no job to cancel and therefore the request to cancel a pending job is rejected by the function Ea_Cancel), the function Ea_Cancel shall raise the development runtime error EA_E_INVALID_CANCEL.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution in Column "G" of the new attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***

SWS_CanNm:

——–

Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:

——–

SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

——–

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.11   Specification Item SWS_Ea_00175

Trace References:

SRS_BSW_00323

Content:

If development error detection is enabled for the module: the The function Ea_Invalidate
Block shall check if the module state is MEMIF_BUSY. If this is the case, the function
Ea_InvalidateBlock shall reject the invalidation request, raise the development runtime
error EA_E_BUSY and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

Inconsistencies in SWS with semantics of Default errors
–Last change on issue 59085 comment 26–

Agreed solution:

solution in Column "G" of the new attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
———-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
———-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
———-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.12 Specification Item SWS_Ea_00176

Trace References:

SRS_BSW_00323

Content:

If development error detection is enabled for the module: the The function Ea_EraseImmediateBlock shall check if the module state is MEMIF_BUSY. If this is the case, the function Ea_EraseImmediateBlock shall reject the erase request, raise the development runtime error EA_E_BUSY and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification "belongs".

  *** BSW UML Model ***
  SWS_CanNm:
  ———-
  Chapter 8.6.1 Optional Interfaces:
  Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

  SWS_LinIf:
  ———-
  SWS_LinIf_00359: add Det_ReportRuntimeError

  SWS_UdpNm:

‾‾‾-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

● RfC #76874: [Ea] Set MEMIF_BUSY module state in Ea_InvalidateBlock and in Ea_EraseImmediateBlock

Problem description:

SWS_Ea_00194 is a new requirement in AR 4.3.0 for Ea_InvalidateBlock. Basically the pair of SWS_Ea_00025 for Ea_Write, and SWS_Ea_00022 for Ea_Read.

1. Why is SWS_Ea_00194 lack of mentioning that "set Ea module status to MEMIF_BUSY, set the job result to MEMIF_JOB_PENDING"?
2. Why is similar requirement missing for Ea_EraseImmediateBlock?

Agreed solution:

Change SWS_Ea_00194
from
< The function Ea_InvalidateBlock shall check if the module state is MEMIF_IDLE or MEMIF_BUSY_INTERNAL. If this is the case the module shall accept the invalidation request and shall return E_OK to the caller.
< The block invalidation shall be executed asynchronously in the module's main function as soon as the module has finished the internal management operation.
to
> The function Ea_InvalidateBlock shall check if the module state is MEMIF_IDLE or MEMIF_BUSY_INTERNAL. If this is the case the module shall accept the invalidation request, set the EA module status to MEMIF_BUSY, set the job result to MEMIF_JOB_PENDING and return E_OK to the caller.
(delete the second sentence of the requirement, since this is given in SWS_Ea_00195 below)

Change SWS_Ea_00176
from

> If development error detection is enabled for the module: the function Ea_EraseImmediateBlock shall check if the module state is MEMIF_BUSY. If this is the case, the function Ea_EraseImmediateBlock shall reject > the erase request, raise the development error EA_E_BUSY and return with E_NOT_OK.
to
< The function Ea_EraseImmediateBlock shall check if the module state is MEMIF_BUSY. If this is the case, the function shall reject the erase request and return with E_NOT_OK. If development error detection is
< enabled for the module, the function shall raise the development error EA_E_BUSY."
–Last change on issue 76874 comment 16–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.13   Specification Item SWS_EA_00179

Trace References:

SRS_MemHwAb_14029

Content:

If the current module status is MEMIF_UNINIT or MEMIF_BUSY, the function Ea_Read shall reject the job request and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

  SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180

Document ID 695: ChangeDocumentation

SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.14   Specification Item SWS_Ea_00179

Trace References:

SRS_MemHwAb_14029

Content:

If the current module status is MEMIF_UNINIT or MEMIF_BUSY, the function Ea_Read shall reject the job request and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

  Agreed solution:

Document ID 695: ChangeDocumentation

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.15 Specification Item SWS_EA_00181

Trace References:

SRS_MemHwAb_14010

Content:

If the current module status is MEMIF_UNINIT or MEMIF_BUSY, the function Ea_Write shall reject the job request and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
  (Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
  –Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.16   Specification Item SWS_Ea_00181

Trace References:

SRS_MemHwAb_14010

Content:

If the current module status is MEMIF_UNINIT or MEMIF_BUSY, the function Ea_Write shall reject the job request and return with E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
  - The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).

Document ID 695: ChangeDocumentation

(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.17   Specification Item SWS_Ea_00188

Trace References:

SRS_MemHwAb_14014

Content:

If an internal management operation has been suspended because of a job request from the upper layer, the function Ea_MainFunction shall resume this internal management operation once the job requested by the upper layer has been finished.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

  Problem description:

  AR 4.3.0.
  - In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).

- The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.18 Specification Item SWS_EA_00188

Trace References:

SRS_MemHwAb_14014

Content:

If an internal management operation has been suspended because of a job request from the upper layer, the function Ea_MainFunction shall resume this internal management operation once the job requested by the upper layer has been finished.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

Problem description:

AR 4.3.0.

- In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
- The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).

(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.19   Specification Item SWS_Ea_00189

Trace References:

SRS_MemHwAb_14014

Content:

If an internal management operation has been aborted because of a job request from the upper layer, the function Ea_MainFunction shall restart this internal management operation once the job requested by the upper layer has been finished.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

Problem description:

AR 4.3.0.
- In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
- The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.20 Specification Item SWS_EA_00189

Trace References:

SRS_MemHwAb_14014

Content:

If an internal management operation has been aborted because of a job request from the upper layer, the function Ea_MainFunction shall restart this internal management operation once the job requested by the upper layer has been finished.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76728: [Ea] Correcting some links, typos

Problem description:

AR 4.3.0.
- In SWS_Ea_00159 there is a link to the non-existing EA183, as EA183 was removed (maybe in other places too?).
- The requirement tags are different in the range of SWS_EA_00179-SWS_EA_00189 from the rest of the document(s).
(Would you mind to change them? Like "[SWS_EA_00188]:" to "[SWS_Ea_00188]".)
–Last change on issue 76728 comment 9–

Agreed solution:

SWS_Ea_00158 -> change reference from EA179 to SWS_Ea_00179, remove reference to EA180
SWS_Ea_00159 -> change reference from EA181 to SWS_Ea_00181, remove reference to EA183
SWS_Ea_00161 -> remove reference to EA184
SWS_Ea_00162 -> remove reference to EA185
SWS_EA_00179 -> change to SWS_Ea_00179
SWS_EA_00181 -> change to SWS_Ea_00181
SWS_EA_00188 -> change to SWS_Ea_00188 and remove colon after requirements ID
SWS_EA_00189 -> change to SWS_Ea_00189 and remove colon after requirements ID
ECUC_Ea_00130 -> replace EA006 with SWS_Ea_00006
–Last change on issue 76728 comment 7–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.21   Specification Item SWS_Ea_00194

Trace References:

SRS_MemHwAb_14028

Content:

The function Ea_InvalidateBlock shall check if the module state is MEMIF_IDLE or MEMIF_BUSY_INTERNAL. If this is the case the module shall accept the invalidation requestand shall , set the Ea module status to MEMIF_BUSY, set the job result to

MEMIF_JOB_PENDING and return E_OK to the caller. The block invalidation shall be executed asynchronously in the module's main function as soon as the module has finished the internal management operation.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76874: [Ea] Set MEMIF_BUSY module state in Ea_InvalidateBlock and in Ea_EraseImmediateBlock

   Problem description:

   SWS_Ea_00194 is a new requirement in AR 4.3.0 for Ea_InvalidateBlock. Basically the pair of SWS_Ea_00025 for Ea_Write, and SWS_Ea_00022 for Ea_Read.

   1. Why is SWS_Ea_00194 lack of mentioning that "set Ea module status to MEMIF_BUSY, set the job result to MEMIF_JOB_PENDING"?
   2. Why is similar requirement missing for Ea_EraseImmediateBlock?

   Agreed solution:

   Change SWS_Ea_00194
   from
   < The function Ea_InvalidateBlock shall check if the module state is MEMIF_IDLE or MEMIF_BUSY_INTERNAL. If this is the case the module shall accept the invalidation request and shall return E_OK to the caller.
   < The block invalidation shall be executed asynchronously in the module's main function as soon as the module has finished the internal management operation.
   to
   > The function Ea_InvalidateBlock shall check if the module state is MEMIF_IDLE or MEMIF_BUSY_INTERNAL. If this is the case the module shall accept the invalidation request, set the EA module status to MEMIF_BUSY, set the job result to MEMIF_JOB_PENDING and return E_OK to the caller.
   (delete the second sentence of the requirement, since this is given in SWS_Ea_00195 below)

   Change SWS_Ea_00176
   from
   > If development error detection is enabled for the module: the function Ea_EraseImmediateBlock shall check if the module state is MEMIF_BUSY. If this is the case, the function Ea_EraseImmediateBlock shall reject > the erase request, raise the development error EA_E_BUSY and return with E_NOT_OK.
   to
   < The function Ea_EraseImmediateBlock shall check if the module state is MEMIF_BUSY. If this is the case, the function shall reject the erase request and return with E_NOT_OK. If development error detection is

< enabled for the module, the function shall raise the development error EA_E_BUSY."
–Last change on issue 76874 comment 16–

BW-C-Level:

Application	Specification	Bus
1	1	1