Document Title	RS_SystemTemplate: Specification Changes contributing to this Requirement Document 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 Requirement Item RS_SYST_00042

Support for Partial Networking

Specification Items contributing to this requirement that have changed:

1.1 Specification Item TPS_SYST_02165

Trace References:

RS_SYST_00042

Content:

The CanCommunicationConnector.pncWakeupDataMask should not be computed from the PncMapping.pncIdentifier values in order to support future introduction of additional PNCs.

Note that for one EcuInstance all contributing CanCommunicationConnector.CanCommunicationConnector.pncWakeupDataMask will be bitwise ORed to obtain the value of Can NmPnFilterMaskByte. Note that this data mask is calculated over the whole payload of the NmPdu ignoring the leading bytes which do not contain pncVector information. The number of leading bytes which shall be ignored is equivalent to the value of System.System.pncVectorOffset.

Contribution paths:

- RS_SYST_00042 ⟵ TPS_SYST_02165

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #77605: [RfC # 76718] Move notes from CanCommunicationConnector.pncWakeupDataMask and clarify

1.2 Specification Item TPS_SYST_02166

Trace References:

RS_SYST_00042

Content:

The UdpNmPnFilterMaskByte should not be computed from the PncMapping.pncIdentifier values in order to support future introduction of additional PNCs.

Note that for one EcuInstance all contributing EthernetCommunicationConnector.Ethernet CommunicationConnector.pncFilterDataMask will be bitwise ORed to obtain the value of UdpNmPnFilterMaskByte. Note that this data mask is calculated over the whole payload of the NmPdu ignoring the leading bytes which do not contain pncVector information. The number of leading bytes which shall be ignored is equivalent to the value of System.System.pncVectorOffset.

Contribution paths:

- RS_SYST_00042 ⟵ TPS_SYST_02166

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #77605: [RfC # 76718] Move notes from CanCommunicationConnector.pncWakeupDataMask and clarify

1.3 Specification Item TPS_SYST_02167

Trace References:

RS_SYST_00042

Content:

The FrNmPnFilterMaskByte should not be computed from the PncMapping.pncIdentifier values in order to support future introduction of additional PNCs.

Note that for one EcuInstance all contributing FlexrayCommunicationConnector.Flexray CommunicationConnector.pncFilterDataMask will be bitwise ORed to obtain the value of FrNmPnFilterMaskByte. Note that this data mask is calculated over the whole payload of the NmPdu ignoring the leading bytes which do not contain pncVector information. The number of leading bytes which shall be ignored is equivalent to the value of System.System.pncVectorOffset.

Contribution paths:

- RS_SYST_00042 ⟵ TPS_SYST_02167

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #77605: [RfC # 76718] Move notes from CanCommunicationConnector.pncWakeupDataMask and clarify

2 Requirement Item RS_SYST_00049

Support of Efficient COM for large data configuration

Specification Items contributing to this requirement that have changed:

2.1 Specification Item TPS_SYST_02164

Trace References:

RS_SYST_00049

Content:

Only if the ISignalPort which the ISignalTriggering is referring to has no ISignalPort.ISignal Port.firstTimeout defined and the LdCom module is present, this ISignal shall be handled by LdCom.

Contribution paths:

- RS_SYST_00049 ⟵ TPS_SYST_02164

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #77548: [RfC # 76604] Update spec item to handle firstTimeout in LdCom

3 Requirement Item RS_SYST_00054

Support of Secured Pdus

Specification Items contributing to this requirement that have changed:

3.1 Specification Item TPS_SYST_02171

Trace References:

RS_SYST_00054

Content:

The area within the payload Pdu that is secured is specified by the SecureCommunication Props.securedAreaOffset and SecureCommunicationProps.securedAreaLength. In case that these two attributes are not configured the complete payload Pdu is secured.

Contribution paths:

- RS_SYST_00054 ⟵ TPS_SYST_02171

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #78168: [RfC # 77090] [SecOC] Configuration of secured area within a Pdu

3.2 Specification Item TPS_SYST_02172

Trace References:

RS_SYST_00054

Content:

If the SecuredIPdu.useAsCryptographicIPdu is set to false only the SecuredIPdu shall be

- mapped into a Frame by the PduToFrameMapping or
- assigned to SocketConnectionBundle or SocketConnection or
- assigned to ContainerIPdu

Contribution paths:

- RS_SYST_00054 ⟵ TPS_SYST_02172

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #78346: [RfC # 77803] Enhance description of SecuredIPdu by big picture and example

3.3 Specification Item TPS_SYST_02173

Trace References:

RS_SYST_00054

Content:

If the SecuredIPdu.useAsCryptographicIPdu is set to true then the SecuredIPdu and the SecuredIPdu.payloadIPdu shall be

- mapped into a Frame by the PduToFrameMapping or

- assigned to SocketConnectionBundle or SocketConnection or

- assigned to ContainerIPdu

Contribution paths:

- RS_SYST_00054 ⟵ TPS_SYST_02173

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #78346: [RfC # 77803] Enhance description of SecuredIPdu by big picture and example

3.4 Specification Item TPS_SYST_02189

Trace References:

RS_SYST_00054

Content:

The SecuredIPdu.useSecuredPduHeader shall be set to a value other than SecuredPdu HeaderEnum.noHeader if the length of the payload Pdu is dynamic and is transmitted over a network which may insert padding bytes depending on the length (e.g. CANFD, Flexray).

Contribution paths:

- RS_SYST_00054 ⟵ TPS_SYST_02189

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #79133: [RfC # 77336] [SECOC] Dynamic length PDUs (Container) not possible / clear

4 Requirement Item RS_SYST_00055

Support of Container Pdus

Specification Items contributing to this requirement that have changed:

4.1 Specification Item TPS_SYST_02098

Trace References:

RS_SYST_00055

Content:

A contained IPdu shall always have the same headerId per header type (long or short header), regardless in which ContainerIPdu it is collected. If ContainerIPduHeaderType Enum.noHeader is set then the contained IPdu does not need to have a headerId.

Contribution paths:

- RS_SYST_00055 ⟵ TPS_SYST_02098

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #79127: [RfC # 76543] [IpduM] Container Pdu not usable for CAN-FD

4.2 Specification Item TPS_SYST_02100

Trace References:

RS_SYST_00055

Content:

On receiver side, it is not necessarily required to statically define which IPdus may be contained inside a ContainerIPdu if the header mode is used. Thus it would be possible to update the senders of ContainerIPdus and put different or additional IPdus inside.

Contribution paths:

- RS_SYST_00055 ⟵ TPS_SYST_02100

ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #79127: [RfC # 76543] [IpduM] Container Pdu not usable for CAN-FD

Document ID 695: ChangeDocumentation