

	- -		
	- -		
	- -		
	- -		
	- -		
	- -		
	- -		
	- -		

[1]			
[2]			
[3]	- - -		
[4]			
[5]			
[6]			
[7]			

[illegible]

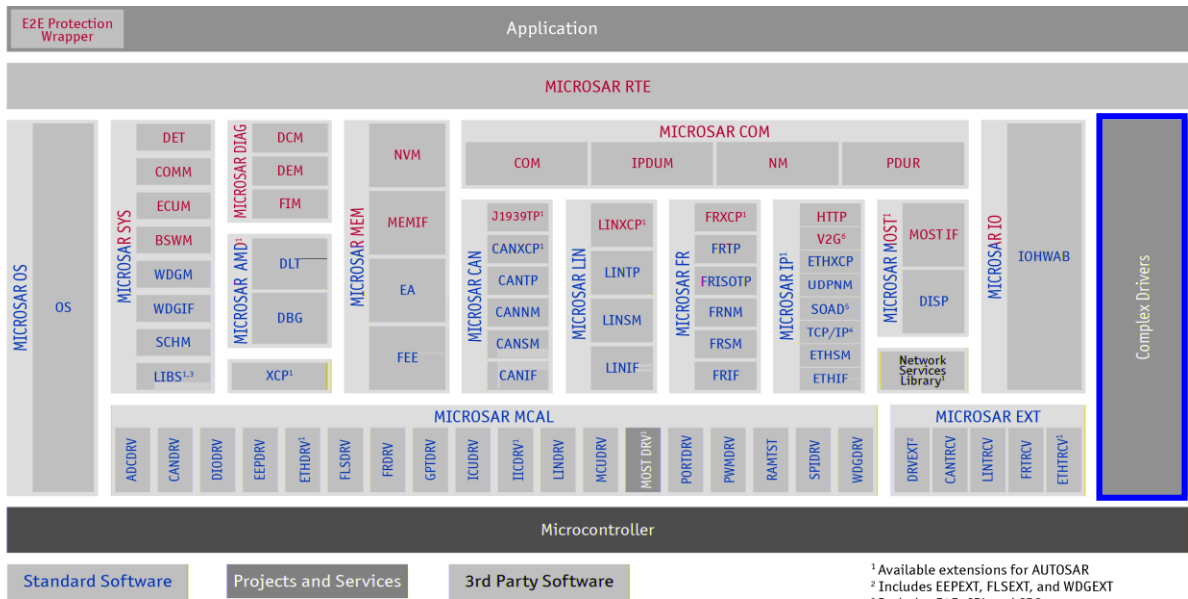
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[illegible]

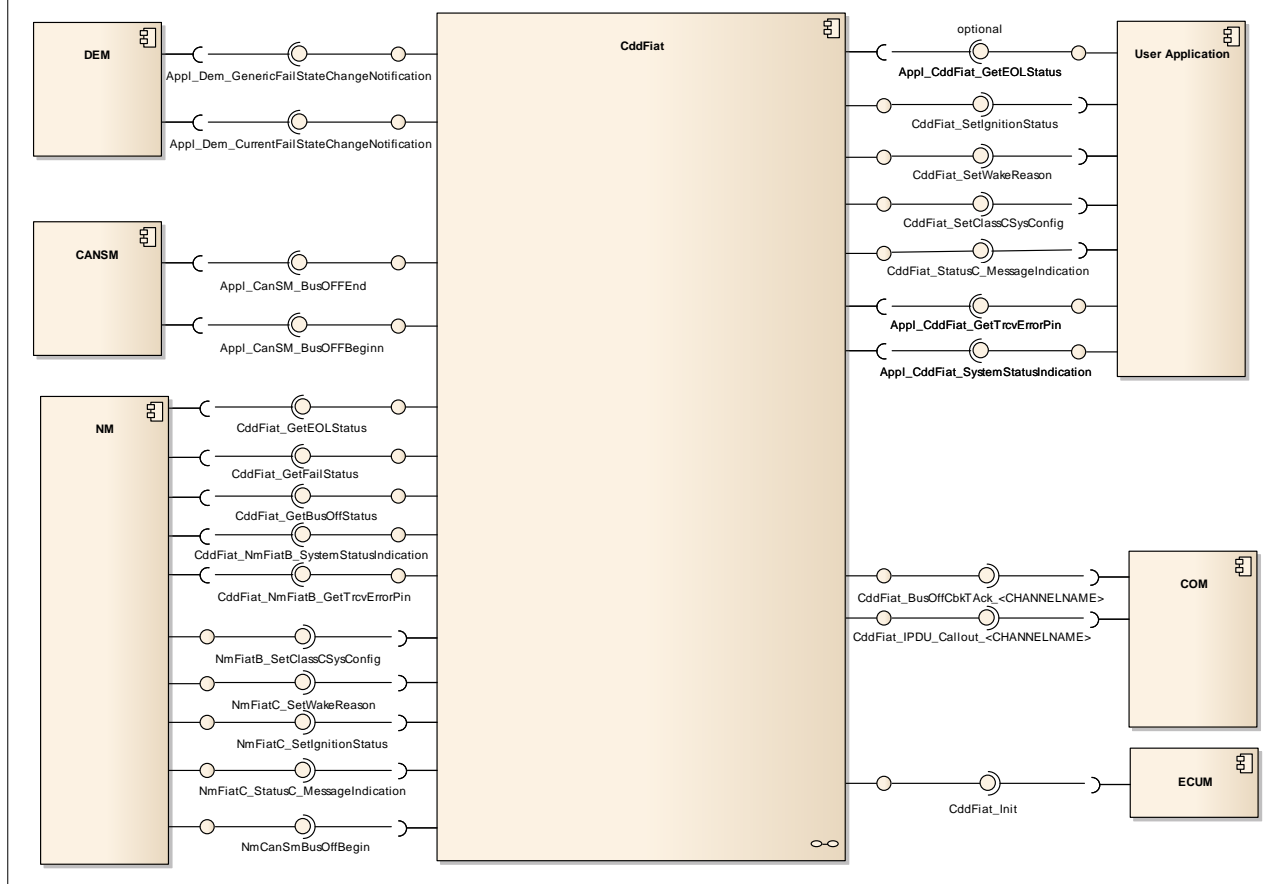
1

	-	
		-

2.1 Architecture Overview



cmp CddFiat_Interface_Structure



3

3.1 Features

-

-



3.2 System Status Indication

```
void                ()
```

	-	
SystemConfig		arraySize
SystemEolConfig		arraySize
SystemFailConfig		arraySize
SystemCurFailConfig		arraySize
SystemPhysStatus		arraySize
SystemActiveLoads		<div>■</div> <div>■</div>



3.3 Error Handling

3.3.1 Development Error Reporting

Det_ReportError()
-

CDDFIAT_DEV_ERROR_DETECT == STD_ON.

If another module is used for development error reporting, the function prototype for reporting the error can be configured by the integrator, but must have the same signature as the service Det_ReportError()

CDDFIAT_SID_INIT = 0x01	
CDDFIAT_SID_BUSOFF_CBK_T_ACK = 0x02	
CDDFIAT_SID_IPDU_CALLOUT = 0x03	
CDDFIAT_SID_BUSOFF_BEGINN = 0x04	

CDDFIAT_SID_BUSOFF_END = 0x05	
CDDFIAT_SID_GENERIC_DEM_FAIL_STATE_NOTIFICATION = 0x06	
CDDFIAT_SID_CURRENT_DEM_FAIL_STATE_NOTIFICATION = 0x07	
CDDFIAT_SID_GET_BUS_OFF_STATUS = 0x08	
CDDFIAT_SID_GET_EOL_STATUS = 0x09	
CDDFIAT_SID_GET_FAIL_STATUS = 0x0A	

	CDDFIAT_E_UNINIT	
	CDDFIAT_E_PARAM	
	CDDFIAT_E_INVALID_CHANNEL	

3.3.1.1 Parameter Checking

	CDDFIAT_E_PARAM	CDDFIAT_E_UNINIT	CDDFIAT_E_INVALID_CHANNEL
	■		
		■	
	■	■	
		■	
		■	
	■	■	

	CDDFIAT_E_PARAM	CDDFIAT_E_UNINIT	CDDFIAT_E_INVALID_CHANNEL
Appl_Dem_CurrentFailStateChangeNotification	■	■	
CddFiat_GetBusOffStatus	■	■	■
CddFiat_GetEOLStatus	■	■	
CddFiat_GetFailStatus	■	■	

CDDFIAT_DEV_ERROR_DETECT

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4.1 Scope of Delivery

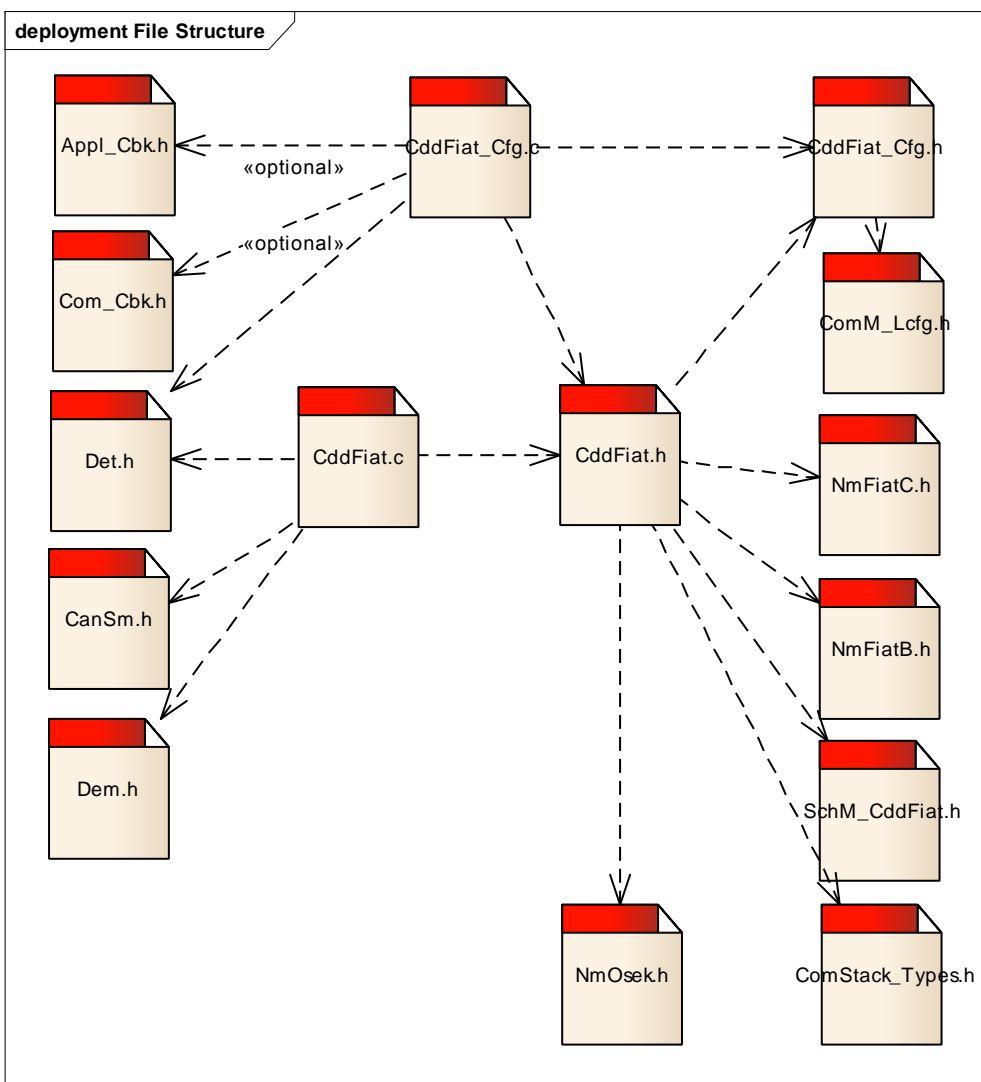
4.1.1 Static Files

	■		
	■		

4.1.2 Dynamic Files

	■		
	■		

4.2 Include Structure



4.3 Compiler Abstraction and Memory Mapping

The visualization shows a 6x6 grid representing a 2D convolution operation. The top row is a dark gray 1x6 block. The next five rows are light gray 1x6 blocks. The bottom row is a dark gray 1x6 block. The grid shows the spatial arrangement of the input, kernel, and output feature maps.

4.4 Critical Sections

4.5 Initialization

```
void CddFiat_Init(void).
```



4.6 Dependencies on SW modules

4.6.1 Det

4.6.2 Dem

Appl_Dem_GenericFailStateChangeNotification
Appl_Dem_CurrentFailStateChangeNotification

4.6.3 CanSM

Appl_CanSM_BusOffBegin Appl_CanSM_BusOffEnd

4.6.4 Com

CddFiat_IPDU_Callout_<CHANNELNAME>

CddFiat_BusOffCbktAck_<CHANNELNAME>

4.6.5 SchM

5

-

5.1 Services provided by CddFiat

5.1.1 CddFiat_Init

void (void)	
-	-
-	-
■	
■	-
■	

-

5.1.2 CddFiat_InitMemory

The diagram illustrates a memory stack with 10 frames. The frames are represented by horizontal bars, with the bottom frame being white and the others gray. The bottom frame contains the text "void" and "(void)". The other frames contain a hyphen "-".

Frame	Content
1	void (void)
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
10	-

5.1.3 CddFiat_GetBusOffStatus

Std_ReturnType		(NetworkHandleType nmChannelHandle, boolean
*statePtr)		
nmChannelHandle		
statePtr		
E_OK		
E_NOT_OK		
		-
	-	

5.1.4 CddFiat_GetEOLStatus

Std_ReturnType		(boolean *statePtr)
statePtr		
E_OK		
E_NOT_OK		
■		
■		
■	-	
■		

5.1.5 CddFiat_GetFailStatus

Std_ReturnType (boolean *genericFailStatePtr, boolean *currentFailStatePtr)	
genericFailStatePtr	
currentFailStatePtr	
E_OK	
E_NOT_OK	
■	
■	
■	-
■	

5.1.6 CddFiat_SetWakeReason

Nm_ReturnType WakeReason)		(NetworkHandleType nmChannelHandle, uint8
nmChannelHandle		-
WakeReason		

5.1.7 CddFiat_SetIgnitionStatus

Nm_ReturnType (NetworkHandleType nmChannelHandle, uint8 IgnitionStatus)	
nmChannelHandle	-
WakeReason	
NM_E_OK	
NM_E_NOT_OK	
■	-
■	
■	-
■	

5.2 Callback Functions

5.2.1

5.2.3 Appl_Dem_GenericFailStateChangeNotification

void		(boolean failState)
failState		
-	-	
■		
■	-	
■		

-

5.2.4 Appl_Dem_CurrentFailStateChangeNotification

void		(boolean failState)
failState		
-	-	
■		
■	-	
■		

-

5.3 Callout Functions

5.3.1 Appl_CddFiat_GetEOLStatus

The diagram illustrates a memory stack with 10 frames, numbered 1 to 10 from top to bottom. Each frame is represented by a horizontal bar. Frame 1 contains the text 'boolean' and '(void)'. Frame 2 is empty. Frame 3 contains the text '-' and '-'. Frame 4 contains the text 'boolean'. Frames 5 through 9 are empty. Frame 10 contains a small red square.

5.3.2 Appl_CddFiat_SystemStatusIndication

[illegible]

5.3.3 Appl_CddFiat_GetTrcvErrorPin

boolean	(NetworkHandleType nmChannelHandle)
nmChannelHandle	-
boolean	
■	
■	
■	-
■	

5.4 Services used by CddFiat

	Det_ReportError

5.5 Configurable Interfaces

5.5.1 Callback Functions

5.5.1.1 CddFiat_BusOffCbktAck_<CHANNELNAME>

void		(void)	
-		-	
-		-	
■			
■			
■		-	
■			

5.5.2 Callout Functions

5.5.2.1 CddFiat_IPDU_Callout_<CHANNELNAME>

void (PduIdType ID, const PduInfoType * PduInfoPtr)	
ID	
PduInfoPtr	
-	-
■	
■	
■	-
■	

6

6.1 Signal Description AUTOSAR ECU

6.2 Signal Description Class C ECU

	-	

6.3 Signal Description Class B ECU

6.4 Signals not handled by the CddFiat component

7

7.1 Configuration with GENy

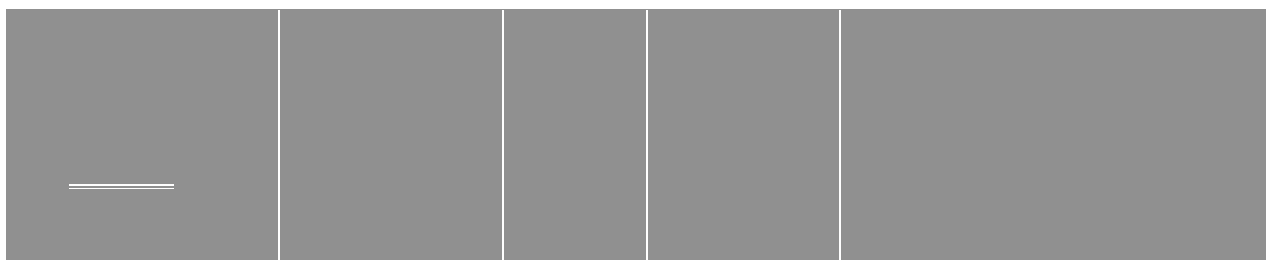
7.1.1 Activation of the module CddFiat in GENy

Software Components	ECU	CAN00	CAN01	CAN02	CAN03
Cdd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CddFiat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Com	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ComM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dcm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EcuM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FiM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hw_CanoeemuCpu	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Nm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NmFiatB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NmFiatC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nm_DirOsek	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PduR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SchM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

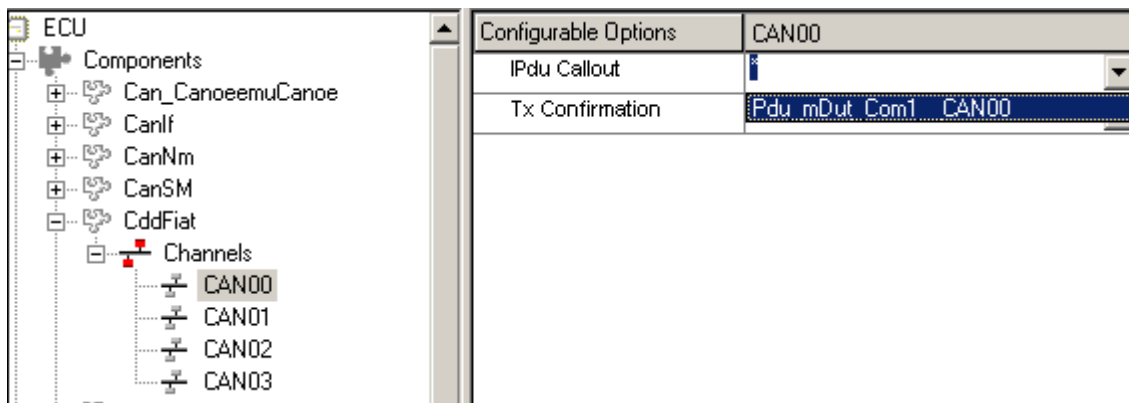
☒ Component Selection
 ☒ Generated Files

7.1.2 General Configuration

	-	-	-	
	-			
	-			



7.1.3.1 Configuration of the IPdu Callout



7.1.3.2 Configuration of the Tx Transmit Callback

The screenshot displays the Vector CANoe configuration interface. On the left, a tree view shows the 'ECU' configuration. Under 'Components', there are several sub-components: 'Can_CanoeemuCanoe', 'CanIf', 'CanNm', 'CanSM', and 'CddFiat'. Under 'Channels', there are four channels: 'CAN00', 'CAN01', 'CAN02', and 'CAN03'. The 'CAN00' channel is selected. On the right, a table titled 'Configurable Options' shows the configuration for 'CAN00'. The table has two columns: 'Option' and 'Value'. The 'Option' column lists 'IPdu Callout' and 'Tx Confirmation'. The 'Value' column shows 'Pdu_mDut_Com1__CAN00' and a dropdown menu. The 'Tx Confirmation' dropdown is open, showing a list of options: 'Com_sCom_StateReport1', 'mDut_Com1', and 'CAN00'. The 'CAN00' option is selected.

Option	Value
IPdu Callout	Pdu_mDut_Com1__CAN00
Tx Confirmation	Com_sCom_StateReport1 mDut_Com1 CAN00

8

8.1 Abbreviations

9
