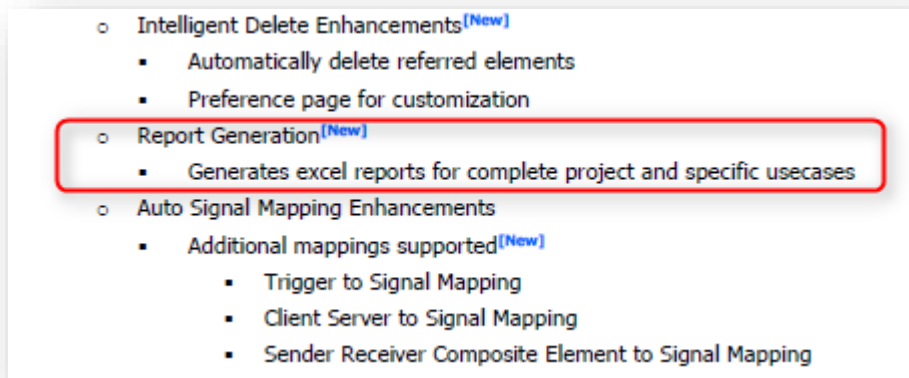# How to create MS Excel report of AUTOSAR use cases in ISOLAR-A

? Question:

- How to create MS Excel report of AUTOSAR use cases?
- I read in the **What's New** section of the **Release Notes** for **ISOLAR-A V9.4** that there is a new feature called Report Generation:

- How can I use this new feature?
- Is it possible to generate excel reports for complete project and specific use cases of an AUTOSAR project?
- How can I create a tabular overview of my AUTOSAR project?

💡 Answer:

- This feature is available since **ISOLAR-A V9.4** respectively **ISOLAR-AB V3.0**
- The report generation feature helps users to generate Microsoft Excel reports of different ISOLAR use cases as listed below:

Component Report	Generates detailed report of Component behaviors and Ports
Composition Report	Generates detailed report of Component Prototypes & Ports
EcuExtract Report	Generates detailed report of Datamapping, Flatview & FlatMap
Datatypes Report	Generates detailed report of Basetypes, PlatformTypes, Implementation Types & Application Datatypes in a project
Project Report	Generates detailed report of all the above use cases

1. In **ISOLAR-A** in **AR Explorer**:
   1. On a project > Click the right mouse button
   2. Hover over **ISOLAR-A**
   3. On **Generate Report** > Click the left mouse button
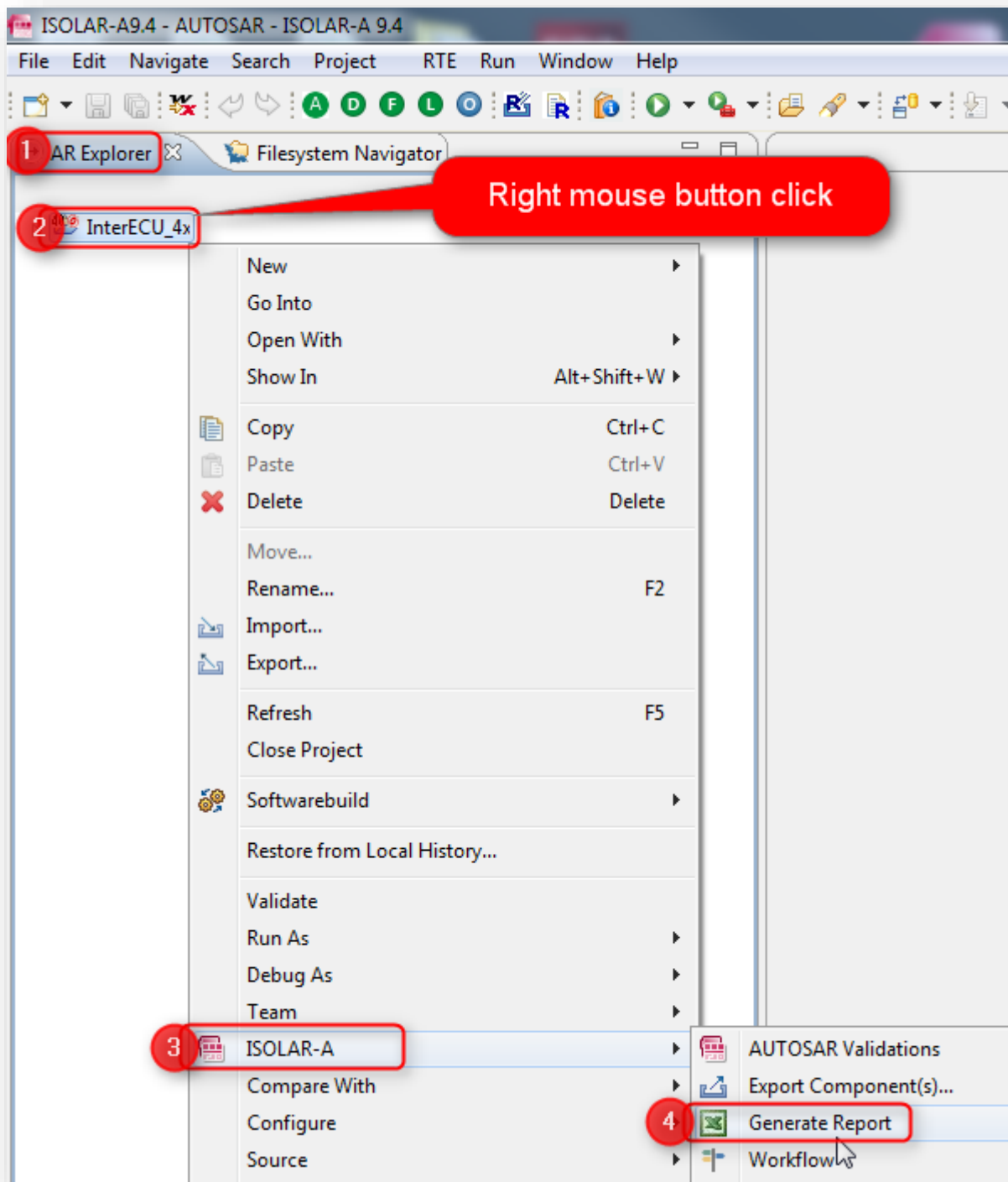
2. In dialog **Report Generation**
3. In panel **Scope**: Select scope of the report

- **Complete Report** (default setting for scope): just click **Finish** button
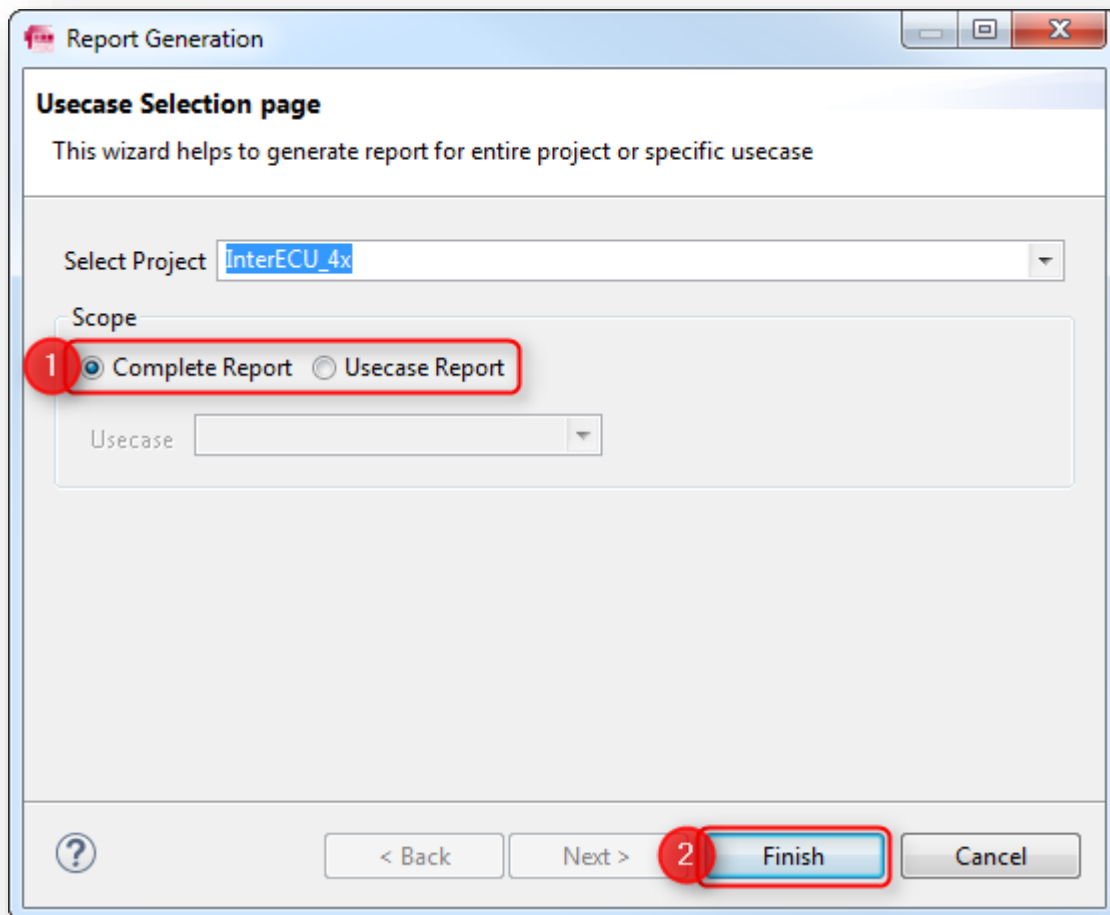
- The **Complete Report** consists of following single **Usecase Reports**
  - **Composition**: Component Prototypes & Ports
  - **Component**: Component behaviors and Ports
  - **EcuExtract**: Datamapping , Flatview & FlatMap
  - **Datatypes**: Basetypes, PlatformTypes, Implementation Types & Application Datatypes

- **Usecase Report**: In case you want to generate a single use case report:
  - In dialog **Report Generation** in panel **Scope**:
  - On option **Usecase Report**: click left mouse button
  - At field **Usecase** > on black triangle: click left mouse button
  - On use case of the report: click left mouse button
  - In order to customize the report click on **Next >** button
  - Click **Finish** button
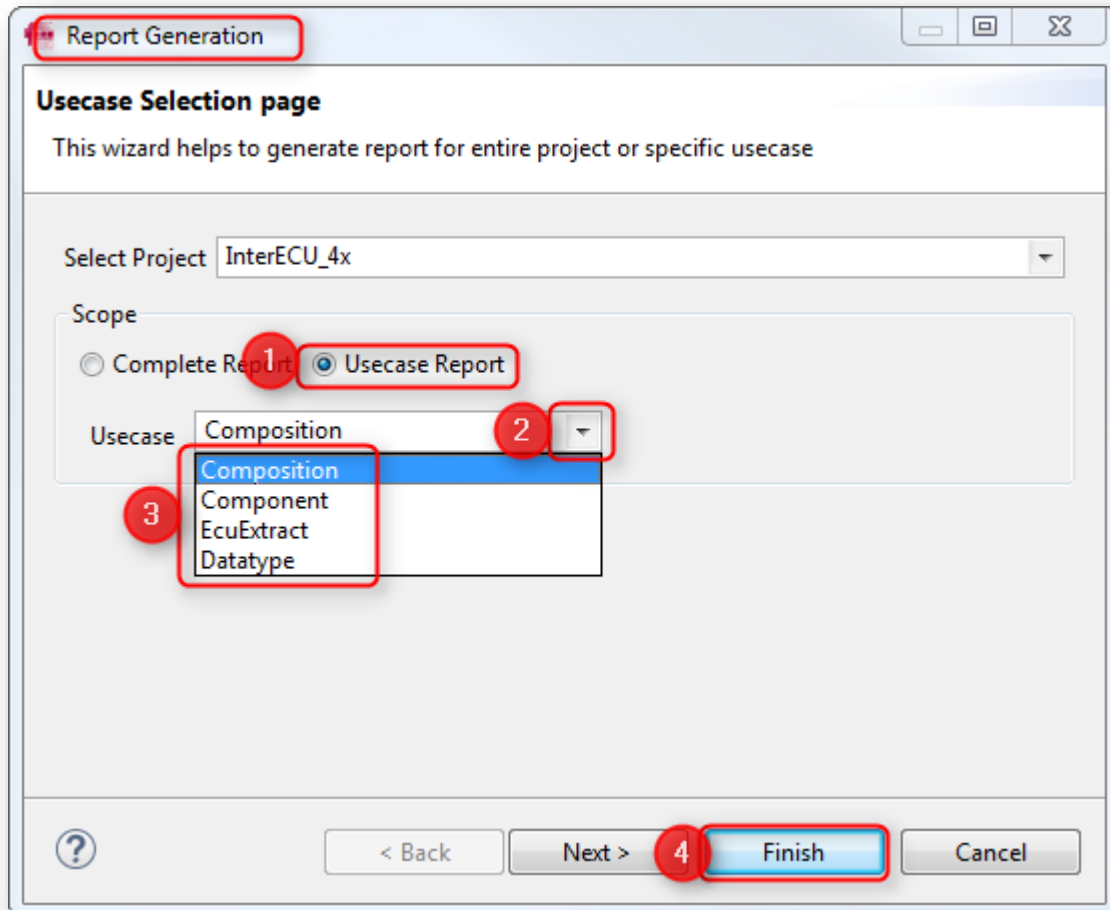
- The report will be saved under your Windows temp directory, for example as **C:\temp\GenReport.xls**
- In dialog Report Generation Successful: Click Yes button
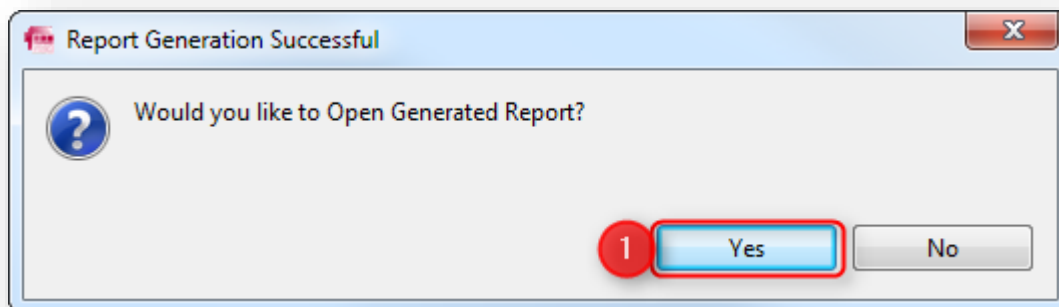
Additional information:

- The **Complete Report** consists of following tabs:
- **Components Summary**

	A	B	C	D	E	F	G	H	I	J
1										
2	Project	InterECU_4x								
3	Date	02/11/17 03:22:03 PM								
4										
5										
6										
7	Component	Internal Behaviours	P Ports	R Ports	PR Ports					
8	Debug	1	1	1	0					
9	WiperControl_100us	1	0	1	0					
10	WiperControl_2ms	1	2	1	0					
11										
12										
13										
14										

Components Summary | Component Overview | ... ⊕

- **Component Overview**

	A	B	C	D	E	F	G
1	Component	Port	PortType	Interface	Client Server Operation	DataElement/Trigger	Datatype
2	Debug	P_Torque	P Port	Torque_SRI		DEP_Torque	Appl_UINT16
3						DEP_Debug_SINT8	Appl_SINT8
4						DEP_Debug_SINT16	Appl_SINT16
5	Debug	R_Debug	R Port	Debug_SRI		DEP_Debug_SINT32	Appl_SINT32
6	WiperControl_100us	R_Current	R Port	Current_SRI		DEP_Current	Appl_SINT8
7	WiperControl_2ms	P_Current	P Port	Current_SRI		DEP_Current	Appl_SINT8
8						DEP_Debug_SINT8	Appl_SINT8
9						DEP_Debug_SINT16	Appl_SINT16
10	WiperControl_2ms	P_Debug	P Port	Debug_SRI		DEP_Debug_SINT32	Appl_SINT32
11	WiperControl_2ms	R_Torque	R Port	Torque_SRI		DEP_Torque	Appl_UINT16
12							
13							

Components Summary | Component Overview | ... ⊕

- **Component IB**

	A	B	C	D	E
1	Component	Internal Behaviour	Runnable Entity	TriggeredBy	Data Access Point
2					DataReceivePointByValues_0
3					DataReceivePointByValues_1
4					DataReceivePointByValues_2
5	Debug	Debug_IB	Debug_Run		DataSendPoints_0
6	WiperControl_100us	IB_WiperControl_100us	RE_WiperControl_100us	TimingEvent_100us	DataReadAccess_0
7	WiperControl_2ms	IB_WiperControl_2ms	RE_WiperControl_2ms	TimingEvent_0	DataReceivePointByArguments_(
8	WiperControl_2ms	IB_WiperControl_2ms	RE_WiperControl_2ms	TimingEvent_0	DataSendPoints_0
9	WiperControl_2ms	IB_WiperControl_2ms	RE_WiperControl_2ms	TimingEvent_0	DataSendPoints_1
10	WiperControl_2ms	IB_WiperControl_2ms	RE_WiperControl_2ms	TimingEvent_0	DataSendPoints_2
11	WiperControl_2ms	IB_WiperControl_2ms	RE_WiperControl_2ms	TimingEvent_0	DataWriteAccess_0
12					
13					

◄ ► ... | Component Overview | **Component IB** | Compo ... ⊕

- **Component Ports**

	A	B	C	D	E	F	G	H	I	J	K
1	Component	Port	PortType	Connected							
2	Debug	P_Torque	P Port	true							
3	Debug	R_Debug	R Port	true							
4	WiperControl_100us	R_Current	R Port	true							
5	WiperControl_2ms	P_Current	P Port	true							
6	WiperControl_2ms	P_Debug	P Port	true							
7	WiperControl_2ms	R_Torque	R Port	true							
8											

◄ ► ... | Component IB | **Component Ports** | Compositi ... ⊕

- **Composition Summary**

	A	B	C	D	No
1					
2	Project	InterECU_4x			
3	Date	02/11/17 03:22:03 PM			
4					
5					
6					
7	Composition	NoOfCpt	NoOfAssemblyConnections	NoOfDelegationConnections	No
8	WiperControl_FlatView	2	1	2	0
9	WiperControl_SystemComposition	3	3	0	0
10					

◄ ► ... | Component Ports | **Composition Summary** | C ... ⊕

- **Component Prototypes**

	A	B	C	D	E	F	G
1	Composition	ComponentProtype	Type	Proxy			
2	WiperControl_FlatView	CPT_WiperControl_100us	WiperControl_100us	false			
3		CPT_WiperControl_2ms	WiperControl_2ms	false			
4	WiperControl_SystemComposition	CPT_Debug	Debug	false			
5		CPT_WiperControl_100us	WiperControl_100us	false			
6		CPT_WiperControl_2ms	WiperControl_2ms	false			
7							
8							
9							
10							
11							
12							
13							
14							

... **Component Prototypes** | Ports | Connectors | ... ⊕

- **Ports**

	A	B	C	D	E	F	G
1	Composition	ComponentProtype	Port	PortType	Interface	Connected	Proxy(Interfa
2	WiperControl_FlatView		P_Debug	P Port	Debug_SRI	true	false
3			R_Torque	R Port	Torque_SRI	true	false
4		CPT_WiperControl_100us	R_Current	R Port	Current_SRI	true	false
5		CPT_WiperControl_2ms	P_Current	P Port	Current_SRI	true	false
6			P_Debug	P Port	Debug_SRI	true	false
7			R_Torque	R Port	Torque_SRI	true	false
8	WiperControl_SystemComposition	CPT_Debug	P_Torque	P Port	Torque_SRI	true	false
9			R_Debug	R Port	Debug_SRI	true	false
10		CPT_WiperControl_100us	R_Current	R Port	Current_SRI	true	false
11		CPT_WiperControl_2ms	P_Current	P Port	Current_SRI	true	false
12			P_Debug	P Port	Debug_SRI	true	false

... Component Prototypes | **Ports** | Connectors | ... ⊕

- **Connectors**

	A	B	C	D	E	I
1	Composition	Component	Connector	ConnectorType	Port	Ir
2	WiperControl_FlatView	CPT_WiperControl_2ms	DelegationSwConnector_0	Delegation Connector	P_Debug	D
3		CPT_WiperControl_2ms	DelegationSwConnector_1	Delegation Connector	R_Torque	T
4		CPT_WiperControl_2ms	AssemblySwConnector_0	Assembly Connector	P_Current	C
5	WiperControl_SystemComposition	CPT_WiperControl_2ms	AssemblySwConnector_0	Assembly Connector	P_Debug	D
6		CPT_Debug	AssemblySwConnector_1	Assembly Connector	P_Torque	T
7		CPT_WiperControl_2ms	AssemblySwConnector_2	Assembly Connector	P_Current	C
8						
9						
10						
11						
12						
13						
14						

... Component Prototypes | Ports | **Connectors** | ... ⊕

- **Datatype Summary**

	A	B	C	D	E	F	G	H	I
1									
2	Project	InterECU_4x							
3	Date	02/11/17 03:22:03 PM							
4	Application DataTypes	4							
5	Implementation DataTypes	14							
6	Base Types	9							

Ports | Connectors | **Datatype Summary** | Da ...

- **Datatype Overview**

	A	B	C	D	E	F
1	ApplicationDataType	ImplementationDataType	BaseType	DatatypeMappingSet	Component	
2	Appl_SINT16	Impl_SINT16	sint16	DTMS_Debug	Debug	
3	Appl_SINT32	Impl_SINT32	sint32	DTMS_Debug	Debug	
4	Appl_SINT8	Impl_SINT8	sint8	DTMS_Debug	Debug	
5	Appl_UINT16	Impl_UINT16	uint16	DTMS_Debug	Debug	
6	Appl_SINT8	Impl_SINT8	sint8	DTMS_WiperControl_100us	WiperControl_100us	
7	Appl_UINT16	Impl_UINT16	uint16	DTMS_WiperControl_2ms	WiperControl_2ms	
8	Appl_SINT32	Impl_SINT32	sint32	DTMS_WiperControl_2ms	WiperControl_2ms	
9	Appl_SINT16	Impl_SINT16	sint16	DTMS_WiperControl_2ms	WiperControl_2ms	
10	Appl_SINT8	Impl_SINT8	sint8	DTMS_WiperControl_2ms	WiperControl_2ms	

Datatype Summary | **Datatype Overview** | App ...

- **Application Types**

	A	B	C	D	E	F	G
1	ApplicationDataType	Category	CompuMethod	DataConstr	SwImplPolicy	SwCalibrationAccess	Component
2	Appl_SINT16	VALUE				NOT-ACCESSIBLE	WiperControl_2ms
3	Appl_SINT32	VALUE				NOT-ACCESSIBLE	WiperControl_2ms
4	Appl_SINT8	VALUE				NOT-ACCESSIBLE	WiperControl_2ms
5	Appl_UINT16	VALUE				NOT-ACCESSIBLE	WiperControl_2ms

Datatype Overview | **Application Types** | Imple ...

- **Implementation Types**

	A	B	C	D	E	F
1	ImplementationDataType	Category	CompuMethod	DataConstr	SwImplPolicy	SwCalibrationAcces
2	Impl_SINT16	TYPE_REFERENCE				
3	Impl_SINT32	TYPE_REFERENCE				
4	Impl_SINT8	TYPE_REFERENCE				
5	Impl_UINT16	TYPE_REFERENCE				
6	Impl_UINT32	TYPE_REFERENCE				
7	boolean	VALUE		DataConstr_boolean		
8	float32	VALUE				
9	float64	VALUE				
10	sint16	VALUE		DataConstr_sint16		
11	sint32	VALUE		DataConstr_sint32		
12	sint8	VALUE		DataConstr_sint8		

Application Types | **Implementation Types** | Pl ...

- **Platform Types**

	A	B	C	D	E	F	G	H	I	J
1	PlatformType	Type								
2	boolean	ImplementationDataType								
3	float32	ImplementationDataType								
4	float64	ImplementationDataType								
5	sint16	ImplementationDataType								
6	sint32	ImplementationDataType								
7	sint8	ImplementationDataType								
8	uint16	ImplementationDataType								
9	uint32	ImplementationDataType								
10	uint8	ImplementationDataType								
11	boolean	SwBaseType								
12	float32	SwBaseType								

Implementation Types | **Platform Types** | Base ...

- **Base Types**

	A	B	C	D	E	F	G	H	I
1	BaseType	BaseTypeSize	BaseTypeEncoding	ByteOrder	MemAlignment	NativeDeclaration			
2	boolean	2C	2C		0				
3	float32	IEEE754	IEEE754		0				
4	float64	IEEE754	IEEE754		0				
5	sint16	2C	2C		0				
6	sint32	2C	2C		0				
7	sint8	2C	2C		0				
8	uint16	NONE	NONE		0				
9	uint32	NONE	NONE		0				
10	uint8	NONE	NONE		0				
11									
12									
13									

Platform Types | **Base Types** | Ecu Extract Sumr ...

- **Ecu Extract Summary**

	A	B	C	D	E	F	G
1							
2	Project	InterECU_4x					
3	Date	02/11/17 03:22:03 PM					
4							
5							
6							
7	EcuInstance	Componentprototypes in Flatview	FlatInstanceDescriptors	DataMappings			
8	WiperControl	2	7	4			

Tabs: … | Base Types | **Ecu Extract Summary** | Datamappi … | (+)

- **Datamappings**

	A	B	C	D	E	F
1	DataMapping	SystemSignal	DataElement	Port	ComponentPrototype	
2	SenderReceiverToSignalMapping	Sig_Debug_SINT8	DEP_Debug_SINT8	P_Debug	CPT_WiperControl_FlatView	
3	SenderReceiverToSignalMapping	Sig_Debug_SINT16	DEP_Debug_SINT16	P_Debug	CPT_WiperControl_FlatView	
4	SenderReceiverToSignalMapping	Sig_Torque	DEP_Torque	R_Torque	CPT_WiperControl_FlatView	
5	SenderReceiverToSignalMapping	Sig_Debug_SINT32	DEP_Debug_SINT32	P_Debug	CPT_WiperControl_FlatView	

Tabs: … | Ecu Extract Summary | **Datamappings** | FlatMap … | (+)

- **FlatMap**

	A	B	C	D	E
1	EcuInstance	FlatInstanceDecriptor	Ecu Extract Target	Upstream Target	Target Type
2	WiperControl	CPT_WiperControl_100us	CPT_WiperControl_100us	CPT_WiperControl_100us	SwComponentPrototype
3	WiperControl	CPT_WiperControl_2ms	CPT_WiperControl_2ms	CPT_WiperControl_2ms	SwComponentPrototype
4	WiperControl	DEP_Current	DEP_Current	DEP_Current	VariableDataPrototype
5	WiperControl	DEP_Debug_SINT8	DEP_Debug_SINT8	DEP_Debug_SINT8	VariableDataPrototype
6	WiperControl	DEP_Debug_SINT16	DEP_Debug_SINT16	DEP_Debug_SINT16	VariableDataPrototype
7	WiperControl	DEP_Debug_SINT32	DEP_Debug_SINT32	DEP_Debug_SINT32	VariableDataPrototype
8	WiperControl	DEP_Torque	DEP_Torque	DEP_Torque	VariableDataPrototype

Tabs: … | Datamappings | **FlatMap** | FlatView | (+)

- **FlatView**

	Composition	ComponentPrototype	Port	PortInterface	PortType
1	Composition	ComponentPrototype	Port	PortInterface	PortType
2	WiperControl_FlatView		P_Debug		P Port
3	WiperControl_FlatView		R_Torque		R Port
4	WiperControl_FlatView	CPT_WiperControl_100us	R_Current		R Port
5	WiperControl_FlatView	CPT_WiperControl_2ms	P_Current		P Port
6	WiperControl_FlatView	CPT_WiperControl_2ms	P_Debug		P Port
7	WiperControl_FlatView	CPT_WiperControl_2ms	R_Torque		R Port

Datamappings | FlatMap | **FlatView**

Do you still have questions?

- You will find further FAQ here: www.etas.com/en/faq
- Please feel free to contact our Support Center, if you have further questions.
- Here you can find all information: http://www.etas.com/en/hotlines.php