

<b>Document Title</b>	List of Basic Software Modules
<b>Document Owner</b>	AUTOSAR
<b>Document Responsibility</b>	AUTOSAR
<b>Document Id No</b>	150
<b>Document Classification</b>	Auxiliary
<b>Document Status</b>	Final
<b>Part of AUTOSAR Release</b>	4.2.2

Document Change History		
Revision	Changed by	Change Description
4.2.2	AUTOSAR Release Management	<ul style="list-style-type: none"> <li>Adopted name for "DefaultErrorTracer"</li> </ul>
4.2.1	AUTOSAR Release Management	<ul style="list-style-type: none"> <li>Added COMBased-Transformer</li> <li>Added E2E-Transformer</li> <li>Added SOME/IP-Transformer</li> <li>Added Ethernet Switch Driver</li> <li>Added Large Data COM</li> <li>Added Secure Onboard Communication</li> <li>Added Global Time Synch Modules</li> </ul>
4.1.1	AUTOSAR Administration	<ul style="list-style-type: none"> <li>Corrected prefix for module "Dlt" and "CorTst"</li> <li>Layer assignment of module "Flash EEPROM Emulation" (Fee) corrected</li> <li>List of abbreviations removed (please refer to AUTOSAR_TR_Glossary instead)</li> <li>Added J1939Dcm, J1939Nm, J1939Rm</li> <li>Added new Output Compare Unit Driver "Ocu"</li> <li>Added new Eth. Modules "Tcplp", "Sd", "DoIP"</li> <li>Added new Timer Services "Tm"</li> <li>Prepared new HW-Test Interface/Manager</li> <li>Added MemMap as special file</li> </ul>
4.0.3	AUTOSAR Administration	<ul style="list-style-type: none"> <li>Changed "FlexRay Transport Layer" into "FlexRay ISO Transport Layer"</li> <li>Added FlexRay AUTOSAR Transport Layer</li> <li>Layer assignment of module "Flash Test" (FlsTst) corrected</li> <li>Added page "Special Files"</li> </ul>
4.0.2	AUTOSAR Administration	<ul style="list-style-type: none"> <li>Abbreviations list completely redone</li> <li>Added comment about the OS prefix</li> <li>Added second specification document to the EcuM entry</li> <li>Beautification of file names</li> </ul>

Revision	Changed by	Change Description
4.0.1	AUTOSAR Administration	<ul style="list-style-type: none"> <li>• Added new R4.0 modules like “Diagnostic Log and Trace” or “Ethernet Driver”</li> <li>• The BSW Scheduler Module (SchM) became part of the RTE</li> <li>• Removed Cluster and Cluster Variants</li> <li>• Simplified the Module List</li> <li>• Added new list for libraries</li> <li>• <u>Legal disclaimer revised</u></li> </ul>
3.0.4	AUTOSAR Administration	Correction of LinNM classification
3.0.3	AUTOSAR Administration	Legal Disclaimer revised
3.0.1	AUTOSAR Administration	<ul style="list-style-type: none"> <li>• FlexRay, CAN and LIN State manager short name Camelcase adjusted</li> <li>• Complex Device Driver module ID set to 255</li> <li>• ICC2 clustering updated</li> <li>• Release assignment column updated for R3.0 release</li> <li>• <u>Autosar Service column updated for consistency</u></li> </ul>
2.1.15	AUTOSAR Administration	<ul style="list-style-type: none"> <li>• ICC2 cluster overview and cluster variant added</li> <li>• Add modules: Generic NM and Lin Transceiver Driver</li> <li>• Change name: Generic NM to CAN Generic NM</li> <li>• Add columns</li> <li>• Mapping to other releases</li> <li>• Legal disclaimer revised</li> <li>• “Advice for users” revised</li> </ul>
2.0.1	AUTOSAR	Initial release

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## List of Basic Software Modules

Module short name	Module abbreviation (API service prefix)	Module ID (uint16)	Specification document	AUTOSAR SW Layer
ADC Driver	Adc	123	AUTOSAR_SWS_ADCDriver.pdf	I/O Drivers
BSW Mode Manager	BswM	042	AUTOSAR_SWS_BSWModeManager.pdf	System Services
BSW Scheduler Module	SchM	130	"since Rel. 4.0 part of RTE"	System Services
CAN Driver	Can	080	AUTOSAR_SWS_CANDriver.pdf	Communication Drivers
CAN Interface	CanIf	060	AUTOSAR_SWS_CANInterface.pdf	Communication HW Abstraction
CAN Network Management	CanNm	031	AUTOSAR_SWS_CANNetworkManagement.pdf	Communication Services
CAN State Manager	CanSM	140	AUTOSAR_SWS_CANStateManager.pdf	Communication Services
CAN Transceiver Driver	CanTrcv	070	AUTOSAR_SWS_CANTransceiverDriver.pdf	Communication HW Abstraction
CAN Transport Layer	CanTp	035	AUTOSAR_SWS_CANTransportLayer.pdf	Communication Services
COM	Com	050	AUTOSAR_SWS_COM.pdf	Communication Services
COM Based Transformer	ComXf	175	AUTOSAR_SWS_COMBasedTransformer.pdf	Communication Services
COM Manager	ComM	012	AUTOSAR_SWS_COMManager.pdf	System Services
Complex Drivers	no prefix (AUTOSAR interface)	255	not applicable	Complex Drivers
Core Test	CorTst	103	AUTOSAR_SWS_CoreTest.pdf	Microcontroller Drivers
Crypto Service Manager	Csm	110	AUTOSAR_SWS_CryptoServiceManager.pdf	System Services
Debugging	Dbg	057	AUTOSAR_SWS_Debugging.pdf	Communication Services
Default Error Tracer	Det	015	AUTOSAR_SWS_DefaultErrorTracer.pdf	System Services
Diagnostic Communication Manager	Dcm	053	AUTOSAR_SWS_DiagnosticCommunicationManager.pdf	Communication Services
Diagnostic Event Manager	Dem	054	AUTOSAR_SWS_DiagnosticEventManager.pdf	System Services
Diagnostic Log and Trace	Dlt	055	AUTOSAR_SWS_DiagnosticLogAndTrace.pdf	System Services
Diagnostic over IP	DoIP	173	AUTOSAR_SWS_DiagnosticOverIP.pdf	Communication Services
DIO Driver	Dio	120	AUTOSAR_SWS_DIODriver.pdf	I/O Drivers
E2E Transformer	E2EXf	176	AUTOSAR_SWS_E2ETransformer.pdf	Communication Services
ECU State Manager	EcuM	010	AUTOSAR_SWS_ECUSTateManager.pdf / AUTOSAR_SWS_ECUSTateManagerFixed.pdf	System Services
EEPROM Abstraction	Ea	040	AUTOSAR_SWS_EEPROMAbstraction.pdf	Memory HW Abstraction
EEPROM Driver	Eep	090	AUTOSAR_SWS_EEPROMDriver.pdf	Memory Drivers

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Module short name	Module abbreviation (API service prefix)	Module ID (uint16)	Specification document	AUTOSAR SW Layer
Ethernet Driver	Eth	088	AUTOSAR_SWS_EthernetDriver.pdf	Communication Drivers
Ethernet Interface	EthIf	065	AUTOSAR_SWS_EthernetInterface.pdf	Communication HW Abstraction
Ethernet State Manager	EthSM	143	AUTOSAR_SWS_EthernetStateManager.pdf	Communication Services
Ethernet Switch Driver	EthSwt	089	AUTOSAR_SWS_EthernetSwitchDriver.pdf	Communication HW Abstraction
Ethernet Transceiver Driver	EthTrcv	073	AUTOSAR_SWS_EthernetTransceiverDriver.pdf	Communication HW Abstraction
Flash Driver	Fls	092	AUTOSAR_SWS_FlashDriver.pdf	Memory Drivers
Flash EEPROM Emulation	Fee	021	AUTOSAR_SWS_FlashEEPROMEmulation.pdf	Memory HW Abstraction
Flash Test	FlsTst	104	AUTOSAR_SWS_FlashTest.pdf	Memory Drivers
FlexRay AUTOSAR Transport Layer	FrArTp	038	AUTOSAR_SWS_FlexRayARTransportLayer.pdf	Communication Services
FlexRay Driver	Fr	081	AUTOSAR_SWS_FlexRayDriver.pdf	Communication Drivers
FlexRay Interface	FrIf	061	AUTOSAR_SWS_FlexRayInterface.pdf	Communication HW Abstraction
FlexRay ISO Transport Layer	FrTp	036	AUTOSAR_SWS_FlexRayISOTransportLayer.pdf	Communication Services
FlexRay Network Management	FrNm	032	AUTOSAR_SWS_FlexRayNetworkManagement.pdf	Communication Services
FlexRay State Manager	FrSM	142	AUTOSAR_SWS_FlexRayStateManager.pdf	Communication Services
FlexRay Transceiver Driver	FrTrcv	071	AUTOSAR_SWS_FlexRayTransceiverDriver.pdf	Communication HW Abstraction
Function Inhibition Manager	FiM	011	AUTOSAR_SWS_FunctionInhibitionManager.pdf	System Services
GPT Driver	Gpt	100	AUTOSAR_SWS_GPTDriver.pdf	Microcontroller Drivers
ICU Driver	Icu	122	AUTOSAR_SWS_ICUDriver.pdf	I/O Drivers
IO HW Abstraction	no prefix (AUTOSAR interface)	254	AUTOSAR_SWS_IOHardwareAbstraction.pdf	I/O HW Abstraction
IPDU Multiplexer	IpduM	052	AUTOSAR_SWS_IPDUMultiplexer.pdf	Communication Services
Large Data COM	LdCom	049	AUTOSAR_SWS_LargeDataCOM.pdf	Communication Services
LIN Driver	Lin	082	AUTOSAR_SWS_LINDriver.pdf	Communication Drivers
LIN Interface	LinIf	062	AUTOSAR_SWS_LINInterface.pdf	Communication HW Abstraction
LIN Network Management	LinNm	063	AUTOSAR_SWS_LINNetworkManagement.pdf	Communication Services
LIN State Manager	LinSM	141	AUTOSAR_SWS_LINStateManager.pdf	Communication Services
LIN Transceiver Driver	LinTrcv	064	AUTOSAR_SWS_LINTransceiverDriver.pdf	Communication HW Abstraction

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Module short name	Module abbreviation (API service prefix)	Module ID (uint16)	Specification document	AUTOSAR SW Layer
MCU Driver	Mcu	101	AUTOSAR_SWS_MCUDriver.pdf	Microcontroller Drivers
Memory Abstraction Interface	MemIf	022	AUTOSAR_SWS_MemoryAbstractionInterface.pdf	Memory Services
Network Management Interface	Nm	029	AUTOSAR_SWS_NetworkManagementInterface.pdf	Communication Services
NVRAM Manager	NvM	020	AUTOSAR_SWS_NVRAMManager.pdf	Memory Services
OCU Driver	Ocu	125	AUTOSAR_SWS_OCUDriver.pdf	I/O Drivers
OS	Os (not used as API prefix)	001	AUTOSAR_SWS_OS.pdf	System Services - OS
PDU Router	PduR	051	AUTOSAR_SWS_PDURouter.pdf	Communication Services
Port Driver	Port	124	AUTOSAR_SWS_PortDriver.pdf	I/O Drivers
PWM Driver	Pwm	121	AUTOSAR_SWS_PWMDriver.pdf	I/O Drivers
RAM Test	RamTst	093	AUTOSAR_SWS_RAMTest.pdf	Memory Drivers
RTE	Rte	002	AUTOSAR_SWS_RTE.pdf	RTE
SAE J1939 Diagnostic Communication Manager	J1939Dcm	058	AUTOSAR_SWS_SAEJ1939DiagnosticCommunicationManager.pdf	Communication Services
SAE J1939 Network Management	J1939Nm	034	AUTOSAR_SWS_SAEJ1939NetworkManagement.pdf	Communication Services
SAE J1939 Request Manager	J1939Rm	059	AUTOSAR_SWS_SAEJ1939RequestManager.pdf	Communication Services
SAE J1939 Transport Layer	J1939Tp	037	AUTOSAR_SWS_SAEJ1939TransportLayer.pdf	Communication Services
Secure Onboard Communication	SecOC	150	AUTOSAR_SWS_SecureOnboardCommunication.pdf	Communication Services
Service Discovery	Sd	171	AUTOSAR_SWS_ServiceDiscovery.pdf	Communication Services
Socket Adaptor	SoAd	056	AUTOSAR_SWS_SocketAdaptor.pdf	Communication Services
SOME/IP Transformer	SomelpXf	174	AUTOSAR_SWS_SOMEIPTransformer.pdf	Communication Services
SPI Handler Driver	Spi	083	AUTOSAR_SWS_SPIHandlerDriver.pdf	Communication Drivers
Synchronized Time-Base Manager	StbM	160	AUTOSAR_SWS_SynchronizedTimeBaseManager.pdf	System Services
TCP/IP Stack	Tcplp	170	AUTOSAR_SWS_Tcplp.pdf	Communication Services
Time Service	Tm	014	AUTOSAR_SWS_TimeService.pdf	System Services
Time Sync Over CAN	CanTSyn	161	AUTOSAR_SWS_TimeSyncOverCAN.pdf	Communication Services
Time Sync Over Ethernet	EthTSyn	164	AUTOSAR_SWS_TimeSyncOverEthernet.pdf	Communication Services
Time Sync Over FlexRay	FrTSyn	163	AUTOSAR_SWS_TimeSyncOverFlexRay.pdf	Communication Services

## List of Basic Software Modules

Module short name	Module abbreviation (API service prefix)	Module ID (uint16)	Specification document	AUTOSAR SW Layer
TTCAN Driver	Ttcan	084	AUTOSAR_SWS_TTCANDriver.pdf	Communication Drivers
TTCAN Interface	TtcanIf	066	AUTOSAR_SWS_TTCANInterface.pdf	Communication HW Abstraction
UDP Network Management	UdpNm	033	AUTOSAR_SWS_UDPNetworkManagement.pdf	Communication Services
Watchdog Driver	Wdg	102	AUTOSAR_SWS_WatchdogDriver.pdf	Microcontroller Drivers
Watchdog Interface	WdgIf	043	AUTOSAR_SWS_WatchdogInterface.pdf	Onboard Device Abstraction
Watchdog Manager	WdgM	013	AUTOSAR_SWS_WatchdogManager.pdf	System Services
XCP	Xcp	212	AUTOSAR_SWS_XCP.pdf	Communication Services

## List of libraries

Libraries short name	Libraries abbreviation (API service prefix)	Libraries (Module) ID (uint16)	Specification document
CRC Library	Crc	201	AUTOSAR_SWS_CRCLibrary.pdf
BFx Library	Bfx	205	AUTOSAR_SWS_BFXLibrary.pdf
Crypto Abstraction Library	Cal	206	AUTOSAR_SWS_CryptoAbstractionLibrary.pdf
E2E Library	E2E	207	AUTOSAR_SWS_E2ELibrary.pdf
EFx Library	Efx	208	AUTOSAR_SWS_EFXLibrary.pdf
IFl Library	Ifi	209	AUTOSAR_SWS_IFLLibrary.pdf
MFl Library	Mfi	210	AUTOSAR_SWS_MFLLibrary.pdf
MFx Library	Mfx	211	AUTOSAR_SWS_MFXLibrary.pdf
IFx Library	Ifx	213	AUTOSAR_SWS_IFXLibrary.pdf



## List of special files

AUTOSAR name	Short name (API service prefix)	File name	Module ID	Specification document
Platform Types	Platform	Platform_Types.h	199	AUTOSAR_SWS_PlatformTypes.pdf
Compiler Abstraction	Compiler	Compiler.h	198	AUTOSAR_SWS_CompilerAbstraction.pdf
Standard Types	Std	Std_Types.h	197	AUTOSAR_SWS_StandardTypes.pdf
Communication Stack Types	Comtype	ComStack_Types.h	196	AUTOSAR_SWS_CommunicationStackTypes.pdf
Memory Mapping	MemMap	(Prefix_)MemMap.h	195	AUTOSAR_SWS_MemoryMapping.pdf