Product Name	DAVEApps_Library_001
Release Version	V1.0.66
Type Of Release*	Beta
Name of the Supplier	Infineon Technologies AG
Mode of Release	Infineon Security Server, Update Sites and IShare
Date of Release	18.09.2014
Previous Version	V1.0.64

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* All types of releases named as Alpha, Beta, Release Candidate and Patch are not intended to be used for production code.

1 Released Items

1.1 DAVEApps_Library_001

This DAVE Apps library contains different service Apps and a variety of DAVE Apps that cover different use cases like I/O, communication time processing and some middle ware solutions. The DAVEApps_Library_001 Library contains the following 138 DAVE Apps which supports XMC4000 and XMC1000 family microcontrollers.

No	DAVE App	Version	XMC45	XMC44	XMC42	XMC41	XMC13	XMC12	XMC11
1	ADC001	1.0.20; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	
2	ADC002	1.0.26; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	
3	ADC003	1.0.20; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	
4	ADC004	1.0.2; 1.0.8							Yes
5	ADCCH001	1.0.18; 1.0.30	Yes	Yes	Yes	Yes	Yes	Yes	
6	ADCCMP001	1.0.12; 1.0.18	Yes	Yes	Yes	Yes	Yes	Yes	
7	ADCGLOB001	1.0.26; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	
8	ADCGROUP001	1.0.26; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	
9	ADCSYNC001	1.0.22; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	
10	AES001	1.0.14; 1.0.18	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	ANACMP01	1.0.8; 1.0.12					Yes	Yes	
12	ANACMP GLOBAL01	1.0.8; 1.0.12					Yes	Yes	
13	BMI01	1.0.6; 1.0.8					Yes	Yes	Yes
14	CAN001	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
15	CAN002	1.0.6; 1.0.10	Yes	Yes	Yes	Yes			
16	CANGLOBAL	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
17	CAP001	1.0.16; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	CCU4Global	1.0.20; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	CCU4ST01	1.0.4; 1.0.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	CCU8Global	1.0.18; 1.0.20	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	CCU8ST01	1.0.4; 1.0.6	Yes	Yes	Yes	Yes	Yes		
22	CCU8PWMLib	1.0.22; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	CCUST01	1.0.4; 1.0.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	CLK001	1.0.42; 1.0.44	Yes	Yes	Yes	Yes			
25	CLK002	1.0.6; 1.0.8					Yes	Yes	Yes
26	CNT001	1.0.20; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	CRC001	1.0.12; 1.0.16	Yes	Yes	Yes	Yes	Yes	Yes	Yes
28	CRC002	1.0.6; 1.0.10	Yes	Yes	Yes	Yes			
29	CRC003	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
30	CRC004	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
31	CRC005	1.0.6; 1.0.10	Yes	Yes	Yes	Yes			
32	CRC006	1.0.6; 1.0.10	Yes	Yes	Yes	Yes			
33	CRC007	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
34	CSG001	1.0.0		Yes	Yes	Yes			
35	DACWG001	1.0.12; 1.0.16	Yes	Yes	Yes	Yes			
36	DACWG002	1.0.10; 1.0.14	Yes	Yes	Yes	Yes			

37	DACWG003	1.0.12; 1.0.16	Yes	Yes	Yes	Yes			
38	DACWG005	1.0.8; 1.0.12	Yes	Yes	Yes	Yes			
39	DAVESupport	1.0.42; 1.0.44	Yes	Yes	Yes	Yes	Yes	Yes	Yes
40	DBG002	1.0.16; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	Yes
41	DMA002	1.0.20; 1.0.22	Yes	Yes	Yes				
42	DMA003	1.0.14; 1.0.18	Yes	Yes	Yes				
43	DMA004	1.0.4; 1.0.6	Yes	Yes	Yes				
44	DSDGlobal	1.0.4; 1.0.8	Yes	Yes					
45	DSDIF003	1.0.4; 1.0.6	Yes	Yes					
46	EBU001	1.0.0; 1.0.2	Yes						
47	EBUGlobal	1.0.0; 1.0.2	Yes						
48	ERU001	1.0.14; 1.0.16	Yes	Yes	Yes	Yes	Yes	Yes	Yes
49	ERU002	1.0.8; 1.0.14	Yes	Yes	Yes	Yes	Yes	Yes	Yes
50	ETH001	1.0.20; 1.0.22	Yes	Yes					
51	ETH002	1.0.16; 1.0.18	Yes	Yes					
52	ETH003	1.0.2	Yes						
53	ETH004	1.0.16; 1.0.18	Yes						
54	EXCP001	1.0.16; 1.0.18	Yes	Yes	Yes	Yes			
55	FATFS002	1.0.22; 1.0.26	Yes	Yes	Yes	Yes	Yes	Yes	Yes
56	FATFS003	1.0.0; 1.0.8	Yes						
57	FATFS004	1.0.30; 1.0.34	Yes	Yes	Yes	Yes	Yes	Yes	Yes
58	FATFS005	1.0.0; 1.0.8	Yes						
59	FEE001	1.0.0; 1.0.2					Yes	Yes	Yes
60	FLASH001	1.0.4; 1.0.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes
61	FLASH002	1.0.6; 1.0.8	Yes	Yes	Yes	Yes			
62	FLASH003	1.0.6; 1.0.10					Yes	Yes	Yes
63	FTP001	1.0.2	Yes						
64	GEN002	1.0.8; 1.0.12	Yes	Yes	Yes	Yes	Yes	Yes	Yes
65	GMM001	1.0.12; 1.0.16	Yes						
66	HRC001	1.0.0		Yes	Yes	Yes			
67	HRPWMGLOBAL	1.0.0		Yes	Yes	Yes			
68	I2C001	1.0.26; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	Yes
69	I2C002	1.0.8; 1.0.12	Yes	Yes	Yes	Yes	Yes	Yes	Yes
70	I2C003	1.0.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71	I2S002	1.0.0	Yes						
72	IO001	1.0.12; 1.0.16	Yes	Yes	Yes	Yes	Yes	Yes	Yes
73	IO002	1.0.28; 1.0.30	Yes	Yes	Yes	Yes	Yes	Yes	Yes
74	IO003	1.0.8; 1.0.12	Yes	Yes	Yes	Yes	Yes	Yes	Yes
75	IO004	1.0.18; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	Yes
76	IODBG001	1.0.2	Yes						
77	LMM001	1.0.4; 1.0.8	Yes						
78	LVAL001	1.0.6; 1.0.10	Yes	Yes	Yes	Yes	Yes	Yes	Yes
79	LVAL002	1.0.4; 1.0.6	Yes	Yes	Yes	Yes	Yes		

80	MANC01	1.0.4; 1.0.18	Yes	Yes	Yes	Yes	Yes	Yes	Yes
81	MATH01	1.0.0; 1.0.4					Yes	Yes	Yes
82	MATHLibs	1.0.4; 1.0.6					Yes	Yes	Yes
83	MODBUS001	1.0.2	Yes						
84	NVIC_DMA001	1.0.18; 1.0.20	Yes	Yes	Yes	Yes			
85	NVIC_SCU001	1.0.14; 1.0.18	Yes	Yes	Yes	Yes			
86	NVIC_SR001	1.0.4; 1.0.8					Yes	Yes	Yes
87	NVIC_SR101	1.0.2; 1.0.6					Yes	Yes	Yes
88	NVIC_SR201	1.0.2; 1.0.6					Yes	Yes	Yes
89	NVIC001	1.0.10; 1.0.14	Yes	Yes	Yes	Yes	Yes	Yes	Yes
90	NVIC002	1.0.26; 1.0.28	Yes	Yes	Yes	Yes	Yes	Yes	Yes
91	PLATRESET01	1.0.2; 1.0.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes
92	POW001	1.0.10; 1.0.14	Yes	Yes	Yes	Yes			
93	PRNG01	1.0.2; 1.0.4					Yes	Yes	Yes
94	PWMMP001	1.0.14; 1.0.18	Yes						
95	PWMSP001	1.0.30; 1.0.34	Yes	Yes	Yes	Yes	Yes	Yes	Yes
96	PWMSP002	1.0.30; 1.0.34	Yes	Yes	Yes	Yes	Yes		
97	PWMSP003	1.0.6; 1.0.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes
98	RESET001	1.0.10; 1.0.14	Yes	Yes	Yes	Yes			
99	RTC001	1.0.30; 1.0.32	Yes	Yes	Yes	Yes	Yes	Yes	Yes
100	RTOS001	1.0.24; 1.0.26	Yes	Yes	Yes	Yes	Yes	Yes	Yes
101	SDMMC001	1.0.22; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	Yes
102	SDMMC002	1.0.2; 1.0.6	Yes	Yes	Yes	Yes			
103	SDMMC003	1.0.20; 1.0.24	Yes						
104	SDMMC004	1.0.6; 1.0.10	Yes						
105	SDMMC005	1.0.12; 1.0.14		Yes	Yes		Yes	Yes	Yes
106	SDMMC006	1.0.6		Yes	Yes		Yes	Yes	Yes
107	SLTHA001	1.0.20; 1.0.22	Yes	Yes	Yes	Yes	Yes	Yes	Yes
108	SLTHA002	1.0.0; 1.0.6	Yes						
109	SLTHA003	1.0.10; 1.0.14	Yes	Yes	Yes	Yes			
110	SNMP001	1.0.0	Yes						
111	SPI001	1.0.20; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	Yes
112	SPI002	1.0.12; 1.0.16	Yes	Yes	Yes	Yes	Yes	Yes	Yes
113	SPI003	1.0.6; 1.0.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes
114	SUSCFG01	1.0.2; 1.0.6					Yes	Yes	Yes
115	SYSTM001	1.0.14; 1.0.18	Yes	Yes	Yes	Yes	Yes	Yes	Yes
116	SYSTM002	1.0.0; 1.0.12	Yes	Yes	Yes	Yes	Yes	Yes	Yes
117	TMPS001	1.0.4; 1.0.8	Yes						
118	UART001	1.0.22; 1.0.24	Yes	Yes	Yes	Yes	Yes	Yes	Yes
119	UART002	1.0.10; 1.0.14	Yes	Yes	Yes	Yes	Yes	Yes	Yes
120	USBBL001	1.0.8; 1.0.12	Yes	Yes					
121	USBCDC001	1.0.10; 1.0.14	Yes	Yes	Yes				
122	USBCDCH001	1.0.4; 1.0.8	Yes	Yes					

123	USBCORE001	1.0.14; 1.0.18	Yes	Yes	Yes				
124	USBD	1.0.0	Yes	Yes	Yes				
125	USBD_LLD	1.0.0	Yes	Yes	Yes				
126	USBD_VCOM	1.0.0	Yes	Yes	Yes				
127	USBD_MS	1.0.0	Yes	Yes	Yes				
128	USBD_WINUSB	1.0.0	Yes	Yes	Yes				
129	USBFU001	1.0.0	Yes						
130	USBHID001	1.0.4; 1.0.8	Yes	Yes					
131	USBJS001	1.0.0	Yes						
132	USBLD001	1.0.14; 1.0.18	Yes	Yes	Yes				
133	USBMS001	1.0.6; 1.0.10	Yes	Yes					
134	USBMSD001	1.0.4; 1.0.6	Yes	Yes	Yes				
135	USBVC001	1.0.16; 1.0.18	Yes	Yes	Yes				
136	USBVCH001	1.0.4; 1.0.8	Yes	Yes					
137	WDT001	1.0.16; 1.0.18	Yes	Yes	Yes	Yes	Yes	Yes	Yes
138	WEBSERVER001	1.0.10; 1.0.14	Yes						

1.2 DAVESupport App

The DAVESupport App provides the Initialization function and a function for Solver configured multiplexer register values. The DAVESupport App is added to DAVE CE Project by default and is not visible in the App Graph view.

1.3 DAVE Apps Test conditions

- DAVE Apps for the XMC4500 series are verified on all supported derivatives, fully functional test is applied with XMC4500-F144x1024.
- DAVE Apps for the XMC4400 series are verified on all supported derivatives, fully functional test is applied with XMC4400-F100x512.
- DAVE Apps for the XMC4200 series are verified on all supported derivatives, fully functional test is applied with XMC4200-Q48x256.
- DAVE Apps for the XMC1100 series are verified on all supported derivatives, fully functional test is applied with XMC1100-T038F0064.
- DAVE Apps for the XMC1200 series are verified on all supported derivatives, fully functional test is applied with XMC1200-T038F0200.
- DAVE Apps for the XMC1300 series are verified on all supported derivatives, fully functional test is applied with XMC1302-T038F0200.
- On XMC4000 controllers, only 12 MHz external oscillator is selected.

2 Support Packages

None

3 Tool Information

DAVE	DAVE v3.1.8 or higher version
JAVA	jre6 & product version 1.6.0_24

Important Note:

The DAVE Apps Library Update site v1.0.66 works only with DAVE v3.1.8 or higher version. This update site should not be used with older versions of the DAVE.

4 Changes from Previous Version

4.1 Changes from previous version v1.0.64

Sl.no	Description of change
1	18 Apps are updated – ADC001, ADC002, ADC003, ADCGLOB001, ADCGROUP001, ADCSYNC001, BMI01, CCU4Global, CCU8Global, CLK001, EBU001, EBU_Global, MANC01, MATHLIBS, NVIC_DMA001, NVIC002, RTOS001, SPI003

4.2 Changes from previous version v1.0.62

Sl.no	Description of change
1	8 New apps are added – CSG001, HRC001, HRPWMGLOBAL, USBD, USBD_LLD, USBD_VCOM, USBD_MS, USBD_WINUSB
2	13 Apps are updated – DAVESupport, DMA002, ETH001, ETH002, ETH004, ERU001, NVIC_DMA001, PWMSP001, PWMSP002, RTOS001, SYSTM002, UART001 and WDT001.
3	2 Apps are deprecated – USBMSD001 and USBVC001. These deprecated Apps' functionality can be achieved by using the new Apps USBD_MS and USBD_VCOM.

4.3 Changes from previous version v1.0.60

Sl.no	Description of change
1	2 Apps are updated – NVIC002 and PWMSP003.

4.4 Changes from previous version v1.0.58

Sl.no	Description of change
1	2 Apps are updated – IO002 and NVIC002.

4.5 Changes from previous version v1.0.56

Sl.no	Description of change
1	4 New Apps are added – I2C003, PWMSP003, SDMMC006 and SPI003.
2	24 Apps updated for functional changes and device support extension – ADC002, ADC003, ADC004, ADCCH001, ADCGLOB001, ADCGROUP001, ADCSYNC001, CAN001, CAN002, CCU8PWMLib, CLK001, FATFS002, FATFS003, FATFS004, FATFS005, FLASH003, IO002, MATH01, MATHLIBS, PWMMP001, PWMSP001, SPI001, TMPS001 and UART001.
3	89 Apps are updated for device support extension – ADC001, AES001, ANACMP001, ANACMPGLOB001, BMI01, CANGLOBAL, CAP001, CCU4GLOBAL, CCU4ST01, CCU8GLOBAL, CCU8ST01, CCUST01, CLK002, CNT001, CRC001, CRC002, CRC003, CRC004, CRC005, CRC006, CRC007, DACWG001, DACWG002, DACWG003, DACWG005, DAVESupport, DBG002, DMA002, DMA003, DMA004, DSDGLOBAL, DSDIF003, ERU001, ERU002, ETH001, ETH002, ETH004, EXCP001, FEE001, FLASH001, FLASH002, GEN002, GMM001, I2C001, I2C002, IO001, IO002, IO003, IO004, LMM001, LVAL001, LVAL002, NVIC_DMA001, NVIC_SCU001, NVIC_SR001, NVIC_SR101, NVIC_SR201, NVIC001, NVIC002, PLATRESET01, POW001, PRNG01, PWMSP002, RESET001, RTC001, RTOS001, SDMMC001, SDMMC002, SDMMC003, SDMMC004, SDMMC005, SLTHA001, SLTHA002, SLTHA003, SPI002, SUSCFG01, SYSTM001, UART002, USBBL001, USBCDC001, USBCDCH001, USBCORE001, USBHID001, USBLD001, USBMS001, USBMSD001, USBVC001, USBVCH001 and WDT001
4	Device support extended for XMC4500-AC step, XMC4400-AB step, XMC4200-AB step and XMC1000 VQFN devices.

4.6 Changes from previous version v1.0.54

Sl.no	Description of change

1	1 New App is added – FEE001.
2	16 Apps are updated – CCU8PWMLib, CLK002, DSDIF003, EXCP001, FATFS002, FATFS004, FLASH003, GEN002, NVIC_SR001, PLATRESET01, RTC001, SDMMC001, SDMMC005, SLTHA001, USBCDC001, WDT001

4.7 Changes from previous version v1.0.52

Sl.no	Description of change
1	1 New App is added – PLATRESET01.
2	31 Apps are updated – ADC001, ADCGLOB001, ADCGROUP001, AES001, ANACMP001, ANACMPGLOB001, BMI01, CCU4ST01, CCU8ST01, CCUST01, CNT001, CRC001, CRC002, CRC003, CRC004, CRC005, CRC006, CRC007, FLASH001, I2C001, I2C002, PRNG01, PWMMP001, PWMSP002, RTOS001, SPI001, SPI002, SUSCFG01, SYSTM001, UART001 and UART002.

4.8 Changes from previous version v1.0.50

Sl.no	Description of change
1	3 New Apps are added – SDMMC005, SYSTM002 and USBMSD001.
2	27 Apps are updated – CCU4Global, CCU8Global, CCU8PWMLib, CLK002, DAVESupport, FATFS002, FATFS004, FLASH002, IO001, IO002, IO003, IO004, MANC01, NVIC_SR001, NVIC_SR101, NVIC_SR201, NVIC001, NVIC002, POW001, PWMSP001, RTC001, SDMMC001, SLTHA001, USBBL001, USBMS001, USBLD001 and USBCORE001.
3	7 Apps are transferred to the newly created HMI library, DAVEApps_HMI_Library_001: GUIKB001, GUILC001, GUIMS001, GUISL001, GUITS001 and LEDTS001.

4.9 Changes from previous version v1.0.48

Sl.no	Description of change
1	3 New Apps are added – ANACMP01, ANACMPGLOBAL01 and SPI002.
2	20 Apps are updated – ADCCH001, ADCCMP001, ADCSYNC001, AES001, CAN001, CAN002, CANGlobal, DAVESupport, DBG002, DSDGlobal, FLASH003, I2C001, I2C002, NVIC_SCU001, RTOS001, SDMMC003, SDMMC004, USBCORE001, USBLD001, USBVC001

4.10 Changes from previous version v1.0.46

Sl.no	Description of change
1	1 New App is added – BMI01.
2	19 Apps are updated – ADCCMP001, ADCGROUP001, ADCSYNC001, CAN001, CAN002, CANGlobal, CCU8PWMLib, CRC001, CRC005, CRC006, DBG002, IO002, LVAL002, RTOS001, SDMMC002, SDMMC004, SPI001, UART001 and UART002.

4.11 Changes from previous version v1.0.44

Sl.no	Description of change
1	1 App is updated – CCU8PWMLib.

4.12 Changes from previous version v1.0.42

Sl.no	Description of change
1	4 New App is added – ADC004, FLASH003, PRNG01, and SUSCFG01.
2	15 Apps are updated – ADC001, ADC002, ADC003, ADCCH001, ADCCMP001, ADCGLOB001, ADCGROUP001, ADCSYNC001, CCU8PWMLib, CNT001, CRC002, DAVESupport, IO002, LVAL002 and PWMSP002.

4.13 Changes from previous version v1.0.40

Sl.no	Description of change
1	1 New App is added – MANC01.
2	5 Apps are updated - CRC004, DAVESupport, DBG002, GEN002, LVAL001.

4.14 Changes from previous version v1.0.38

Sl.no	Description of change
1	2 New Apps are added – DBG002 and LVAL002.
2	77 Apps are updated - ADC001, ADC002, ADC003, ADCCH001, ADCCMP001, ADCGLOB001, ADCGROUP001, ADCSYNC001, AES001, CAP001, CLK001, CCU4Global, CCU8Global, CCU8PWMLib, CCUST01, CCU4ST01, CCU8ST01, CRC001, CRC003, CRC007, DAVESupport, DBG002, DACWG001, DACWG002, DACWG003, DACWG005, DMA002, DMA003, ERU001, ERU002, ETH001, ETH002, ETH004, FATFS002, FATFS004, FLASH001, GMM001, GUIKB001, GUIMS001, GUISL001, GUILC001, I2C001, IO001, IO002, IO003, IO004, LMM001, NVIC_DMA001, NVIC001, NVIC002, NVIC_SCU001, POSHL001, PWMMP001, PWMSP001, PWMSP002, RESET001, RTC001, RTOS001, SDMMC001, SDMMC003, SLTHA001, SLTHA003, SPI001, SYSTM001, TMPS001, UART001, USBCORE001, USBLD001, USBVC001, USBVCH001, USBCDC001, USBCDCH001, USBHID001, USBBL001, USBMS001, WDT001, WEBSERVER001.

4.15 Changes from previous version v1.0.36

Sl.no	Description of change
1	4 New Apps are added – CCU4ST01, CCU8ST01, CCUST01 and NVIC_SR201.
2	30 apps are updated -ADC001, ADC002, ADC003, ADCCH001, ADCCMP001, ADCGLOB001, ADCGROUP001, ADCSYNC001, CCU4Global, CCU8Global, CLK001, CLK002, DACWG001,DACWG002, DACWG003, DACWG005, EXCP001, ERU001, ERU002, FATFS002, FATFS004, GUISL001, IO001, IO002, IO004, NVIC002, PWMSP001, RTC001, UART001, WDT001.

4.16 Changes from previous version v1.0.34

Sl.no	Description of change
1	5 New Apps are added – CLK002, MATH01, MATHLibs, NVIC_SR001 and NVIC_SR101.
2	44 Apps are updated – AES001, CAP001, CCU4Global, CCU8Global,CCU8PWMLib, CLK001, CNT001, CRC001, CRC003, CRC007, DAVESupport, DMA002, DMA003, ETH001, ETH002, ETH004, GUIKB001, GUILC001, GUIMS001, GUISL001, IO001, IO002, IO003, IO004, NVIC_DMA001, NVIC_SCU001, NVIC001, NVIC002, PWMSP001, PWMSP002, RESET001, RTC001, RTOS001, SLTHA004, SPI001, SYSTM001, USBCDC001, USBCDCH001, USBCORE001, USBHID001, USBLD001, USBVC001, USBVCH001, WDT001.

4.17 Changes from previous version v1.0.32

Sl.no	Description of change
1	9 New Apps are added – USBCDCH001, USBVCH001, USBFU001, I2S002, CAN002, FLASH002, POW001, GUISL002 and EXCP001.
2	20 Apps are updated – AES001, CCU4Global, CCU8PWMLib, CLK001, CNT001, DSDIF003, DSDGlobal, DACWG001, IO001, IO002, IO004, NVIC002, PWMSP001, RESET001, RTC001, UART001, USBCDC001, USBVC001, USBCORE001, USBLD001.

4.18 Changes from previous version v1.0.30

Sl.no	Description of change
1	5 New Apps are added – ADCSYNC001, ETH003, FLASH001, FTP001, MODBUS001
2	14 Apps are updated – ADCGROUP001, ADCCH001, ADCCMP001, ADC001, ADC002, ADC003, CCU4Global, CLK001, IO002, IO004, NVIC002, PWMSP001, RESET001 and DAVESupport.

4.19 Changes from previous version v1.0.28

Sl.no	Description of change
1	5 New Apps are added – SLTHA002, EBU001, EBUGlobal, WDT001, GEN002
2	3 Apps are updated – SLTHA003, CLK001, GUILC001

4.20 Changes from previous version v1.0.26

Sl.no	Description of change
1	4 New App are added – UART002, ADC001, ADC003, ADCCMP001
2	10 Apps are updated – SDMMC003, SDMMC004, FATFS002, IO002, IODBG001, GMM001, ADC002, ADCGROUP001, ADCCH001, ADCGLOB001

4.21 Changes from previous version v1.0.24

Sl.no	Description of change
1	1 New App is added – I2C002
2	4 Apps are updated – ETH001, ETH002, ETH004, WEBSERVER001

4.22 Changes from previous version v1.0.22

Sl.no	Description of change
1	12 New App are added – ADC002, ADCCH001, ADCGLOB001, ADCGROUP001, DSDGlobal, DSDIF003, FATFS003, FATFS005, IO003, SDMMC002, SDMMC004 and SNMP001
2	1 App is updated RTOS001

4.23 Changes from previous version v1.0.20

Sl.no	Description of change
1	1 New App is added – GUITS001
2	4 Apps are updated – GUISL001, I2C001, RESET001 and SYSTM001.

4.24 Changes from previous version v1.0.18

Sl.no	Description of change
1	3 Apps are updated – FATFS004, I2C001 and SPI001.

4.25 Changes from previous version v1.0.16

Sl.no	Description of change
1	4 new Apps are added – NVIC001, IODBG001, USBBL001 and USBMS001.
2	3 Apps are updated – FATFS004, GMM001 and LMM001.

4.26 Changes from previous version v1.0.14

Sl.no	Description of change
1	8 new Apps are added – POSHL001, USBCDC001, USBVC001, CRC001, CRC002, CRC004, CRC006 and DMA004.
2	10 Apps are updated – SLTHA001, FATFS002, FATFS004, SDMMC001, SDMMC003, ETH001, ETH002, ETH004, USBLD001 and USBCORE001.

4.27 Changes from previous version v1.0.12

Sl.no	Description of change
1	8 new Apps are added – LEDTS001, USBJS001, USBLD001, USBCORE001, USBHID001, GUIKB001, GUIMS001 and SLTHA003.
2	4 Apps are updated – AES001, DACWG003, GUISL001 and RTC001.

4.28 Changes from previous version v1.0.10

Sl.no	Description of change
1	6 new Apps are added – RTOS001, CRC003, CRC005, CRC007, PWMMP001 and LVAL001.
2	3 Apps are updated – CLK001, PWMSP001, PWMSP002.

4.29 Changes from previous version v1.0.8

Sl.no	Description of change
1	4 new Apps are added – DACWG005, GUILC001, GUISL001 and RTC001.
2	7 Apps are updated – CAP001, CCU4Global, CCU8Global, CCU8PWMLib, CNT001, PWMSP001, and PWMSP002. Please refer section 8 for details.

4.30 Changes from previous version v1.0.6

Sl.no	Description of change
1	4 new Apps are added – SPI001, ERU001, ERU002 and DACWG003.
2	2 Apps are updated – NVIC002 and DACWG002. Please refer section 8 for details.
3	The Device Description Libraries are updated to support the free signals constraints.

4.31 Changes from previous version v1.0.4

Sl.no	Description of change
1	5 new Apps are added – CAN001, CANGLOBAL, DACWG001, DACWG002 and IO001.

4.32 Changes from previous version v1.0.2

Sl.no	Description of change
1	The Apps are updated to fix the reported issues. Please refer section 8 for details.
2	4 new Apps are added – UART001, I2C001, TMPS001 and NVIC_SCU001.
3	4 Apps are updated – CLK001, IO004, DMA002 and NVIC_DMA001.
4	Includes the Libraries for 5 devices of the XMC4500 series microcontrollers.

5 Installation Requirements

- DAVE v3.1.8 or higher version should be available.

Important Note:

The DAVE Apps Library Update site v1.0.62 works only with DAVE v3.1.8 or higher version. This update site should not be used with older versions of the DAVE.

6 List of known Issues

Please refer section 7.

7 List of Limitations and Deviations

Module	Limitation / Deviation
ADCCH001	For XMC4500, even if the Emux is enabled in more than one channels, solver will assign randomly to any one of them
CLK001	• Only pre-defined values are available for selection of desired frequency. • The Init sequence of the RTC may generate a problem because of a wrong polling loop for HDCR register is used which end up in a Bus Fault • Dependent Apps are referring Desired Frequency rather than Actual Frequency • Error message pop up when immediate switch from External OSC to External Digital clock input • In some cases CLK001 App could propagate wrong clock information to other DAVE Apps that depend on the CLK001 App (e.g. SYSTM001, UART001, SPI001, CAN001, PWMx,). In such a case, clock related UI such as baud rate configurations may show errors (red highlighted fields) or wrong initializations might happen. Workaround to correct the problem if it occurs: Change the “Desired System Frequency” in the UI of the CLK001 App and change it back again.
CLK002	SystemCoreClockUpdate() is called before a new setting of the clock frequency
CCU8PWMLib	In Centre-Aligned Mode Timer Period Register value is allowed to update 0x7FFF,which is possible to update till 0xFFFE
DACWG001	Single Value generation setting in UI is disabled for the App. Changing the Single value is allowed only through dynamic API function call.
FATFS004	SDMMC selection as a block device is not possible for XMC4400 series and XMC4200 series.
FEE001	Due to the device flash configuration dependency, FEE001 cannot be migrated to different devices using “Migration Feature” of DAVE.
IO001	The pin cannot be configured as digital output, since there is no output stage.
IO002	HW Control mode can be set by top level Apps by changing the value of provided resource parameter "IO002_irwHWControl"(hardware control) in case App needs HW control to be enabled (default value is 0).
UART001	Read/Write functions are non-reentrant. No support for DMA mode. FIFO buffer is always enabled.
POW001	Hibernate mode UI controls “OE status” and “OE Required” settings are not linked
New USB Apps: USBD, USBD_LLD, USBD_MS, USBD_VCOM, USBD_WINUSB	The new USB Apps works only in DAVE-3.1.10 with CMSIS (linker script and startup files) patch update. Please make sure to use correct version of the linker scripts (v1.2 for XMC4500 series and v1.4 for XMC4200 series.
ETH Apps: ETH001, ETH002, ETH004	The updated ETH Apps works only in DAVE-3.1.10 with CMSIS (linker script and startup files) patch update. Please make sure to use correct version of the linker scripts (v1.2 for XMC4500 series and v1.4 for XMC4200 series.

Important Note:

The DAVE Apps Library Update site v1.0.66 works only with DAVE v3.1.8 or higher version. This update site should not be used with older versions of the DAVE.

8 DAVE Apps Revision History

8.1 ADC001

8.1.1 ADC001_v1_0_22

List of changes to previous version

Reference number	Description of change
TP #44670	When more than one channel share the common Global result register with WAIT FOR READ mode enabled, the background request source interrupt never occurs. Hence the fix is done with removing the Source interrupt GUI option from the ADC001 App. Impact: No request source interrupt support for ADC001 app

8.1.2 ADC001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Typos in API Documentation & .h file comments are corrected. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed.

8.1.3 ADC001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Source Result register selection feature removed to simplify the app.

8.1.4 ADC001_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.1.5 ADC001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.

8.1.6 ADC001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Get Result API has been modified.

8.2 ADC002

8.2.1 ADC002_v1_0_28

List of changes to previous version

Reference number	Description of change
TP: 46571	Wrong active channels generated in ADC002_Conf.c for multiple instances is fixed. Impact: No Impact to the customer. Benefit: Configuration file for ADC002 Multiple instances is generated with proper active channels.
	Sample time calculation updated for XMC1x devices Impact: Sample time calculations displayed in the GUI will be according to the accelerated mode in the reference manual. Benefit: The misalignment of the timing calculation with actual hardware and the app is now rectified.

8.2.2 ADC002_v1_0_26

List of changes to previous version

Reference number	Description of change
	1. Error codes are added in various functions that can be logged with DBG002 App. 2. 10 bit Fast Compare mode added in Standard Conversion Mode

8.2.3 ADC002_v1_0_16

List of changes to previous version

Reference number	Description of change
	Source Result register selection feature removed to simplify the app
	In the Header comment section device name changed to XMC1000 Source Result register selection feature disabled due to header file update not available.
	Source Result registers selection feature disabled due to header file update not available.

8.2.4 ADC002_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.2.5 ADC002_v1_0_10

List of changes to previous version

Reference number	Description of change
	ADC Sync, Fast compare mode enabled..

8.2.6 ADC002_v1_0_4

List of changes to previous version

Reference number	Description of change
	Channel handle has been added. Modified to support Synchronous ADC conversion.

8.2.7 ADC002_v1_0_2

List of changes to previous version

Reference number	Description of change
	Improved UI configuration of queue entry options ADC002_EnableQueueArbitrationSlot & ADC002_DisableQueueArbitrationSlot APIs are added ADC mode selection: Fast Compare Mode option is enabled in UI

8.3 ADC003

8.3.1 ADC003_v1_0_22

List of changes to previous version

Reference number	Description of change
	Sample time calculation updated for XMC1x devices Impact: Sample time calculations displayed in the GUI will be according to the accelerated mode in the reference manual. Benefit: The misalignment of the timing calculation with actual hardware and the app is now rectified.

8.3.2 ADC003_v1_0_20

List of changes to previous version

Reference number	Description of change
	1. Error codes are added in various functions, that can be logged with DBG002 App. 2. 10 bit Fast Compare mode added in Standard Conversion Mode

8.3.3 ADC003_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.3.4 ADC003_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.

8.3.5 ADC003_v1_0_2

List of changes to previous version

Reference number	Description of change
	Channel handle has been added. Modified to support Synchronous ADC conversion.

8.4 ADC004

8.4.1 ADC004_v1_0_8

List of changes to previous version

Reference number	Description of change
	1. Error codes are added in various functions that can be logged with DBG002 App. 2. New api ADC004_GetFastResult() implemented.

8.5 ADCCH001

8.5.1 ADCCH001_v1_0_30

List of changes to previous version

Reference number	Description of change
	1. Error codes are added in various functions that can be logged with DBG002 App. 2. Removal of Gain configuration from UI

8.5.2 ADCCH001_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. Workaround for the boundaryflag registers is removed since the registers are available in the header file.

8.5.3 ADCCH001_v1_0_16

List of changes to previous version

Reference number	Description of change
	1. Boundary flag feature supported. 2. In the Header comment section device name changed to XMC1000. 3. Help doc ref manual name added 4. Copy right year changed to 2013

8.5.4 ADCCH001_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.5.5 ADCCH001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Boundary Flag Feature disabled

8.5.6 ADCCH001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Get Result API has been modified.

8.5.7 ADCCH001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Added APIs: Enable/Disable Priority Channel

8.6 ADCCMP001

8.6.1 ADCCMP001_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. Workaround for the boundary flag registers is removed since the registers are available in the header file.

8.6.2 ADCCMP001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Boundary flag register BFLC memory accessing variable names modified.

8.6.3 ADCCMP001_v1_0_8

List of changes to previous version

Reference number	Description of change
	1. Boundary flag feature supported. 2. In the Header comment section device name changed to XMC1000. 3. Help doc ref manual name added 4. Copy right year changed to 2013

8.6.4 ADCCMP001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.6.5 ADCCMP001_v1_0_4

List of changes to previous version

Reference number	Description of change

	Support for XMC1000 family - added.

8.6.6 ADCCMP001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Get Result API has been modified.

8.7 ADCGLOB001

8.7.1 ADCGLOB001_v1_0_28

List of changes to previous version

Reference number	Description of change
	Double clock for MSB conversion option removed. Sample time calculation updated for XMC1x devices Impact: Sample time calculations displayed in the GUI will be according to the accelerated mode in the reference manual. Benefit: The misalignment of the timing calculation with actual hardware and the app is now rectified.

8.7.2 ADCGLOB001_v1_0_26

List of changes to previous version

Reference number	Description of change
	Error codes are added in various functions, that can be logged with DBG002 App.

8.7.3 ADCGLOB001_v1_0_18

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.7.4 ADCGLOB001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Global Limits made available for ADC004 app

8.7.5 ADCGLOB001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.7.6 ADCGLOB001_v1_0_10

List of changes to previous version

Reference number	Description of change
MCSW300000613	ADCGLOB001_SetStartUpCalibration,

	ADCGLOB001_StartUpCalibrationInit functions modified.

8.7.7 ADCGLOB001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Documentation Update

8.8 ADCGROUP001

8.8.1 ADCGROUP_v1_0_28

List of changes to previous version

Reference number	Description of change
TP #44194	ADCSYNC App configured with four kernel channels with one master and 3 slaves. The fourth channel conversion issue is fixed. Additional macro is generated in the configuration header file to check whether the groups are used by SYNC app. If any groups uses sync feature, the ANONC enable setting will not be done as a part of Group Initialization. For non-synchronized groups the ANONC enable setting will be done as part of the group initialization itself. Impact: No Impact for normal groups. For Synchronized groups Additional API shall be called in the application to Start the arbitration.
	Sample time calculation updated for XMC1x devices Impact: Sample time calculations displayed in the GUI will be according to the accelerated mode in the reference manual. Benefit: The misalignment of the timing calculation with actual hardware and the app is now rectified.

8.8.2 ADCGROUP_v1_0_26

List of changes to previous version

Reference number	Description of change
	Error codes are added in various functions, that can be logged with DBG002 App.

8.8.3 ADCGROUP_v1_0_20

List of changes to previous version

Reference number	Description of change
	1. ADC Code sequence corrected. 2. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.8.4 ADCGROUP_v1_0_18

List of changes to previous version

Reference number	Description of change
	Comment added for Slave ADCGROUP001_Init() and

	Master ADCGROUP001_Init() functions

8.8.5 ADCGROUP_v1_0_16

List of changes to previous version

Reference number	Description of change
	help doc ref manual name added copy right year changed to 2013 Variable name in manifest is corrected. In the Header comment section device name changed to XMC1000.

8.8.6 ADCGROUP_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.8.7 ADCGROUP_v1_0_12

List of changes to previous version

Reference number	Description of change
	Channel selection style is removed and made EMXCSS=1 always.

8.8.8 ADCGROUP_v1_0_4

List of changes to previous version

Reference number	Description of change
	Init function has been modified to support synchronous ADC conversion.

8.8.9 ADCGROUP_v1_0_2

List of changes to previous version

Reference number	Description of change
	Added virtual signal (Select) for connectivity between group and channel

8.9 ADCSYNC001

8.9.1 ADCSYNC001_v1_0_24

List of changes to previous version

Reference number	Description of change
TP #44194	App configured with four kernel channels with one master and 3 slaves. The fourth channel conversion issue is fixed. An Additional API ADCSYNC001_EnableMasterConverter() added in ADCSYNC app to enable the arbiter for the mater group hence all slaves also gets enabled. Impact: User needs to call this API in the application after Dave_Init () for Completing the ADC SYNC initialization. Benefit: User can use all groups for Sync operations.

8.9.2 ADCSYNC001_v1_0_22

List of changes to previous version

Reference number	Description of change
	Error codes are added in various functions, that can be logged with DBG002 App.

8.9.3 ADCSYNC001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Workaround for the boundary flag registers is removed since the registers are available in the header file.

8.9.4 ADCSYNC001_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. ADCSYNC001.hdt file is renamed to ADCSYNC001h.jet

8.9.5 ADCSYNC001_v1_0_8

List of changes to previous version

Reference number	Description of change
	1. Boundary Flag issue fixed. 2. Two Registers are mapping to each channel is corrected now. 3. Reset operation of the "Use same result configuration for all Master Sync channels" is corrected now. 4. Help doc ref manual name added 5. Copy right year changed to 2013

8.9.6 ADCSYNC001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.9.7 ADCSYNC001_v1_0_4

List of changes to previous version

Reference number	Description of change

	Support for XMC1000 family - added.

8.10 ANACMP01

8.10.1 ANACMP01_v1_0_8

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.11 ANACMPGLOB01

8.11.1 ANACMPGLOB01_v1_0_8

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.12 AES001

8.12.1 AES001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.12.2 AES001_v1_0_12

List of changes to previous version

Reference number	Description of change
	App help document and file header are updated

8.12.3 AES001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.12.4 AES001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.

8.12.5 AES001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Ported to XMC4200 series and Debug log macros are included.

8.12.6 AES001_v1_0_2

List of changes to previous version

Reference number	Description of change
MCSW300000297	Tool tip correction

8.13 BMI01

8.13.1 BMI01_v1_0_8

List of changes to previous version

Reference number	Description of change
TP 44842	Wrong value of Macro **BMI01_DAPIS_Pos** has corrected. This change will access a correct bit field (DAPIS) in BMI register.

8.13.2 BMI01_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC1000 VQFN package support added

8.13.3 BMI01_v1_0_4

List of changes to previous version

Reference number	Description of change
	Device support added for XMC1300 series

8.14 CAN001

8.14.1 CAN001_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. C++ Support added 2. Delay in CAN001 App Instantiation is resolved. 3. Error codes are added in various functions, that can be logged with DBG002 App.

8.14.2 CAN001_v1_0_8

List of changes to previous version

Reference number	Description of change
	1). Added macros which makes CAN nodes exit from the INIT state to NORMAL state. 2). Fixes w.r.t incorrect code generation of the CAN NodeId due to multiple reference created by the data model to a proxy register. 3). Pre-fix of the global enum definitions & macros changed from generic name to respective app name

8.14.3 CAN001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported XMC4400 series and XMC4200 series support added

8.15 CAN002

8.15.1 CAN002_v1_0_10

List of changes to previous version

Reference number	Description of change
	1. C++ Support added 2. Delay in CAN001 App Instantiation is resolved. 3. Error codes are added in various functions, that can be logged with DBG002 App.

8.15.2 CAN002_v1_0_6

List of changes to previous version

Reference number	Description of change
	1). Added macros which makes CAN nodes exit from the INIT state to NORMAL state. 2). Fixes w.r.t incorrect code generation of the CAN NodeId due to multiple reference created by the data model to a proxy register. 3). Pre-fix of the global enum definitions & macros changed from generic name to respective app name.

8.15.3 CAN002_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported XMC4400 series and XMC4200 series support added

8.16 CANGlobal

8.16.1 CANGlobal_v1_0_8

List of changes to previous version

Reference number	Description of change
	The issue w.r.t the Step Value not being updated even after changing the CAN peripheral clock frequency In Normal divider mode has been fixed.

8.16.2 CANGlobal_v1_0_6

List of changes to previous version

Reference number	Description of change

	XMC4500 series AB step supported XMC4400 series and XMC4200 series support added

8.17 CAP001

8.17.1 CAP001_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.17.2 CAP001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family - added.
	Debug log macros are included. Coding guidelines compliance.
	Dynamic Min Max range. Max Frequency parameter made read only to display possible max value according to configured actual resolution.

8.17.3 CAP001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000208	Change in the Algorithm to select Floating or Timer Concatenation. Now in floating prescaler mode the Prescaler goes from 0 to X, instead of X to 15. Where X is prescaler as per Desired Resolution. UI now allows the user to select between Floating and Timer Concatenation.

8.18 CCU4Global

8.18.1 CCU4Global_v1_0_18

List of changes to previous version

Reference number	Description of change
	Redundant call to CLK001_Init(); CLK002_Init(); in CCU4GLOBAL.c file is removed.

8.18.2 CCU4Global_v1_0_16

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.18.3 CCU4Global_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.18.4 CCU4Global_v1_0_12

List of changes to previous version

Reference number	Description of change
	Backward compatibility issue w.r.t Clk uri is fixed.

8.18.5 CCU4Global_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family - added.

8.18.6 CCU4Global_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added. Updated code for MISRA checks.

8.18.7 CCU4Global_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

8.18.8 CCU4Global_v1_0_2

List of changes to previous version

Reference number	Description of change
MCSW300000332	Multiple Instance Issue Fixed. If two instances of this App are created and first one is deleted then there was issue in code generation.

8.19 CCU8Global

8.19.1 CCU8Global_v1_0_16

List of changes to previous version

Reference number	Description of change
	Redundant call to CLK001_Init(); CLK002_Init(); in CCU8GLOBAL.c file is removed.

8.19.2 CCU8Global_v1_0_14

List of changes to previous version

Reference number	Description of change
	Device support for XMC1300 series has been completed.

8.19.3 CCU8Global_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.19.4 CCU8Global_v1_0_10

List of changes to previous version

Reference number	Description of change
	Backward compatibility issue w.r.t Clk uri is fixed

8.19.5 CCU8Global_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family - added.

8.19.6 CCU8Global_v1_0_2

List of changes to previous version

Reference number	Description of change
MCSW300000332	Multiple Instance Issue Fixed. If two instances of this App are created and first one is deleted then there was issue in code generation.

8.20 CCU8PWMLib

8.20.1 CCU8PWMLib_v1_0_28

List of changes to previous version

Reference number	Description of change
	1. C++ support added 2. Trap enabling is changed to CCU8PWMLIB_Init() api from CCU8PWMLIB_Start() API.

8.20.2 CCU8PWMLib_v1_0_22

List of changes to previous version

Reference number	Description of change
	Added FOC related functions for the devices of XMC4500 & XMC4200 series.

8.20.3 CCU8PWMLib_v1_0_20

List of changes to previous version

Reference number	Description of change

	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.20.4 CCU8PWMLib_v1_0_18

List of changes to previous version

Reference number	Description of change
	Added FOC support for XMC44 device.

8.20.5 CCU8PWMLib_v1_0_16

List of changes to previous version

Reference number	Description of change
	The MOTORLIB files are renamed to MOTORLIB.c & MOTORLIB.h from MOTORLIBS.c & MOTORLIBS.h

8.20.6 CCU8PWMLib_v1_0_14

List of changes to previous version

Reference number	Description of change
	Added MOTORLIBS for XMC45, XMC44, XMC42 and XMC1302.

8.20.7 CCU8PWMLib_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000623	setting of higher period values is allowed
MCSW300000639	Wrong calculation for TimerReg in CCU8PWMLIB.c is fixed

8.20.8 CCU8PWMLib_v1_0_10

List of changes to previous version

Reference number	Description of change
	In types.h file, #define __STDBOOL_H__ is changed to _STDBOOL_H.
	XMC4500 series AB step supported.

8.20.9 CCU8PWMLib_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4000 family and XMC1000 family - added.
	Libs.hdt file is converted as a jet file to make it compatible with all the devices.

8.20.10 CCU8PWMLib_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

	Updated code for MISRA checks.

8.20.11 CCU8PWMLib_v1_0_2

List of changes to previous version

Reference number	Description of change
	Added an API to change Frequency and Duty Cycle

8.21 CCUST01

8.21.1 CCUST01_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed 2.Added c++ support in the header files. 3. Updated the Help Documentation

8.21.2 CCUST01_v1_0_2

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.22 CCU4ST01

8.22.1 CCU4ST01_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed 2.Updated the Help Documentation

8.22.2 CCU4ST01_v1_0_2

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.23 CCU8ST01

8.23.1 CCU8ST01_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1300 series has been completed 2.Updated the Help Documentation

8.23.2 CCU8ST01_v1_0_2

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.24 CLK001

8.24.1 CLK001_v1_0_44

List of changes to previous version

Reference number	Description of change
	Changing the external clock source which leads to the wrong USB Clock issue has been fixed

8.24.2 CLK001_v1_0_42

List of changes to previous version

Reference number	Description of change
	The GUI Parameter clk001_erwcpuclkdivider issue is fixed

8.24.3 CLK001_v1_0_32

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.24.4 CLK001_v1_0_30

List of changes to previous version

Reference number	Description of change
	Max Frequency of XMC4200 series set to 80MHz.

8.24.5 CLK001_v1_0_28

List of changes to previous version

Reference number	Description of change
	Support for XMC4100 series - added.

8.24.6 CLK001_v1_0_26

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.

8.24.7 CLK001_v1_0_24

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

8.24.8 CLK001_v1_0_22

List of changes to previous version

Reference number	Description of change
MCSW300000438	Tool tip correction in RTC clock source selection
	Change in logic to avoid Clock initialization by startup if CLK001 app is present
	Fix for missing Peripheral clock divider logic.

8.24.9 CLK001_v1_0_8

List of changes to previous version

Reference number	Description of change
	The following changes are made in system clock configuration page: a. Removed External Digital Clock and External Oscillator from System Clock Source selection. Equivalent functionality now available in Prescaler Mode under PLL Mode. b. Added Back Up Clock as PLL Input source. c. Added selection of PLL Mode (Normal/Prescaler). This functionality was previously under External Digital Clock and External Oscillator from System Clock Source selection. d. Added two additional options for Back Up Clock trimming. The default trimming option is now 'Automatic Trimming using Internal Slow Clock Source' e. K1 divider is now editable in PrescalerMode
	The following changes are made in the System Clock Initialization sequence: a. Backup Clock Trimming is done before Configuring the PLL. The trimming code contains code for additional trimming options newly added. b. Clock enable for different peripherals are now split in to separate functions. c. USB Clock initialization is now in a different function.
	The following changes are made in USB clock configuration page: a. Added UI for displaying calculated NDIV and PDIV values. b. The target VCO frequency for USB PLL is now changed to 384 MHz Based on this PDIV and NDIV calculations are now different. c. The default value of USBDIV is now 4. This means 48 MHz is generated from 384 MHz VCO frequency.
	In the EBU clock configuration page the Actual EBU frequency is now not editable.
	In the WDT clock UI element added to show the actual WDT clock frequency and for selecting standby clock source.
	The code for configuring Ultra Low Power oscillator has been changed.

8.24.10 CLK001_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000341	clock out pin feature needs to be added
MCSW300000383	Clock Tree initialization sequence change.

8.25 CLK002

8.25.1 CLK002_v1_0_6

List of changes to previous version

Reference number	Description of change
	1. New UI Parameter Standby Clock is added. 2. SystemCoreClockUpdate API called at end of CLK002_Init API

8.25.2 CLK002_v1_0_4

List of changes to previous version

Reference number	Description of change
	Added support for XMC1201, XMC1202, XMC1301 devices

8.25.3 CLK002_v1_0_2

List of changes to previous version

Reference number	Description of change
	While clk002 app instantiated in page" clock configuration data for boot up firmware" parameter configured MCLK during bootROM firmware execution is corrected now. It is 8 MHz

8.26 CNT001

8.26.1 CNT001_v1_0_20

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed 2.Added c++ support in header files

8.26.2 CNT001_v1_0_18

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.26.3 CNT001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.

8.26.4 CNT001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
	Debug log macros are added. Updated code for MISRA checks

8.26.5 CNT001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Fixed the return status in CNT001_ResetCounter function. Fixed Compilation warning in IAR compiler. Minor UI changes. UI: Start after Initialization changed to Start During Initialization

8.27 CRC001

8.27.1 CRC001_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed 2. Error codes added in the various functions, that can be logged with DBG002 App

8.27.2 CRC001_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC1000 series support added

8.27.3 CRC001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported Support for XMC4400 series and XMC4200 series – added.

8.27.4 CRC001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.28 CRC002

8.28.1 CRC002_v1_0_6

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.28.2 CRC002_v1_0_4

List of changes to previous version

Reference number	Description of change

	XMC4500 series AB step supported Support for XMC4400 series and XMC4200 series - added.

8.29 CRC003

8.29.1 CRC003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.29.2 CRC003_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.29.3 CRC003_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.30 CRC004

8.30.1 CRC004_v1_0_8

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.30.2 CRC004_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.31 CRC005

8.31.1 CRC005_v1_0_6

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.31.2 CRC005_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4400 and XMC4200 support added

8.32 CRC006

8.32.1 CRC006_v1_0_6

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.32.2 CRC006_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4400 and XMC4200 support added

8.33 CRC007

8.33.1 CRC007_v1_0_8

List of changes to previous version

Reference number	Description of change
	Error codes added in the various functions, that can be logged with DBG002 App

8.33.2 CRC007_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.33.3 CRC007_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.34 DACWG001

8.34.1 DACWG001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.34.2 DACWG001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.

	Single Value Voltage Generation UI changed.

8.34.3 DACWG001_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000474	Updated Documentation which explains how to generate reference voltage using Ramp Mode.
	Code Compliance changes
	Added API to change the ramp start and ramp end voltage at run time.
	Added single value mode to generate the Reference voltage.

8.35 DACWG002

8.35.1 DACWG002_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.35.2 DACWG002_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.35.3 DACWG002_v1_0_2

List of changes to previous version

Reference number	Description of change
	Fixed issue with the tooltip description alignment.

8.36 DACWG003

8.36.1 DACWG003_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.36.2 DACWG003_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.

8.36.3 DACWG003_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000443	Fix for – “Phase Difference is ignored if DMA is used for data transfer”
MCSW300000450	Tooltip Typo corrected.

8.37 DACWG005

8.37.1 DACWG005_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.37.2 DACWG005_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added. Bug fix done for UI Actual Start and End frequencies

8.38 DAVESupport

8.38.1 DAVESupport_v1_0_44

List of changes to previous version

Reference number	Description of change
	Multiplexer bit field generation support for HRPWM module.

8.38.2 DAVESupport_v1_0_38

List of changes to previous version

Reference number	Description of change
	Added support for XMC1201, XMC1202, XMC1301 devices

8.38.3 DAVESupport_v1_0_36

List of changes to previous version

Reference number	Description of change
	WR_REGHIB Macro definition has been changed. Mux: One instruction for output pins initialization. CAN001 & CAN002 : Avoid twice reset of the INIT bit in Can001_lNodeInit & DAVE_MUX_Init Mirror Register Status check statements are updated.

8.38.4 DAVESupport_v1_0_32

List of changes to previous version

Reference number	Description of change
	MOTORLIBs header inclusion avoided

8.38.5 DAVESupport_v1_0_30

List of changes to previous version

Reference number	Description of change
MCSW300000608	CAN RX selection. Write protection activated after setting up the RXSEL
	ADC: Result register configuration for the channels allocated in ADCSYNC001 App are now generated in MULTIPLEXER. C (in earlier version it was not generated by MULTIPLEXER. C)

8.38.6 DAVESupport_v1_0_28

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.38.7 DAVESupport_v1_0_26

List of changes to previous version

Reference number	Description of change
	HW_Support file removed Device_data.h added

8.38.8 DAVESupport_v1_0_22

List of changes to previous version

Reference number	Description of change
	NVIC Set Group Priority macro added. HW_Support file added

8.38.9 DAVESupport_v1_0_18

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

8.39 DBG002

8.39.1 DBG002_v1_0_16

List of changes to previous version

Reference number	Description of change
	Fix UI index issue with selection of compile time filter and the severity of PBC messages.

8.39.2 DBG002_v1_0_14

List of changes to previous version

Reference number	Description of change
	Fix resource handling issue with respect to Clock App parameters in the DBG002 manifest. This fixes the DBG002 communication problems with XMC1000 controllers

8.39.3 DBG002_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. Fix order in compile time filter drop down option (target process defect ID: 28685). 2. Fix limit (0-3) for interrupt priority in the UART configuration tab (GUI) for XMC1000 (target process defect ID: 28433). 3. Updated the code for the DBG002 UART interface to use the new Baud rate calculation logic.

8.39.4 DBG002_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC1000 family supported.

8.39.5 DBG002_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.40 DMA002

8.40.1 DMA002_v1_0_22

List of changes to previous version

Reference number	Description of change
	1. Option "Single Block Transfer/Last Multiblock" removed from the "Transfer Type" combo box in the GUI. 2. New API DMA002_EndMultiBlockTransfer() added to set last transfer. 3. DMA002_SetSourceAddress() and DMA002_SetDestinationAddress() declared static. 4. If the Gather feature is not enabled, the Gather Count and Interval are disabled in the UI. 5. If the Scatter feature is not enabled, the scatter count and Interval are disabled in the UI. 6. The Linked List Pointer Symbol in the UI is disabled for all non-Linked-List based Transfer types.

8.40.2 DMA002_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.40.3 DMA002_v1_0_14

List of changes to previous version

Reference number	Description of change
	Channel priority bug fix for XMC4000 family

8.40.4 DMA002_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000249	Documentation & App Sharability keyword Fix.

8.41 DMA003

8.41.1 DMA003_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.41.2 DMA003_v1_0_12

List of changes to previous version

Reference number	Description of change
	Channel priority bug fix for XMC4000 family

8.42 DMA004

8.42.1 DMA004_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4400 series, XMC4200 series supported.
	XMC4500 series AB step supported.

8.43 DSDGlobal

8.43.1 DSDGlobal_v1_0_4

List of changes to previous version

Reference number	Description of change
	Release compatible with DSDRV001

8.43.2 DSDGlobal_v1_0_2

List of changes to previous version

Reference number	Description of change
	Code fixes as per static code analysis

8.44 DSDIF003

8.44.1 DSDIF003_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Ported to XMC4400 controller family. 2. Errors in GUI configuration Fixed. 3. DSDIF003_Stop API Event Flag clear update errors fixed. 4. Default Values changed to KHz for GUI error fixes 5. Errors in manifest file regarding Min Max Values fixed. 6. Negate fields added to Fast Filter Upper and Lower limits in GUI to support negative value inputs. 7. Addition of informational UI elements for better user understanding.

8.44.2 DSDIF003_v1_0_2

List of changes to previous version

Reference number	Description of change
	Code fixes as per static code analysis
	Fixed compilation issue occurring while compiling with version 1.5.1 of XMC4500.h

8.45 EBU001

8.45.1 EBU001_v1_0_2

List of changes to previous version

Reference number	Description of change
	1. XMC4500 Device support extended for XMC4500 AB and AC step 2. C++ Support provided 3. Bug Fix: The "Number of Refresh Commands" parameter is hardcoded and doesn't generate the user configured value. 4. GUI SDRAM Characteristics mouse-over is corrected. 5. In refresh period, the REFRESHC bit field calculation is corrected 6. In the generated code, overwriting of BUSRCON0 and BUSWCON0 registers is avoided 7. Removed XMC450x-F100 device SWIDs, since SDRAM support is not available for these devices

8.46 EBU_Global

8.46.1 EBU_Global_v1_0_2

List of changes to previous version

Reference number	Description of change
	1. XMC4500 Device support extended for XMC4500 AB and AC step 2. C++ Support provided 3. Removed XMC450x-F100 device SWIDs, since SDRAM support is not available for these devices

8.47 ERU001

8.47.1 ERU001_v1_0_16

List of changes to previous version

Reference number	Description of change
	DBG002 macros are removed.

8.47.2 ERU001_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.47.3 ERU001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.48 ERU002

8.48.1 ERU002_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.48.2 ERU002_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added. ERU002_SetPeripheralTrigInputSrc API is added to support dynamic input Trigger selection.

8.49 ETH001

8.49.1 ETH001_v1_0_22

List of changes to previous version

Reference number	Description of change
	1. Code has been modified for new implementation of ISR 2. Code clean has been done 3. C++ Support

8.49.2 ETH001_v1_0_18

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported _

8.49.3 ETH001_v1_0_16

List of changes to previous version

Reference number	Description of change
	1. Support for XMC4400 series - added. 2. All DBG001_ macros have been replaced by DBG002_

8.49.4 ETH001_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000519	Sharable attribute removed.
MCSW300000506, MCSW300000523, MCSW300000507	Corrections in documentation and API
MCSW300000126	Added UI to Enable/Disable multicast traffic, Added UI to enable Promiscuous mode
MCSW300000525	Bug Fix: No MII pad/signal
None	Reverted configuring Port14, Port15 pins as digital pins during App init, since this is now addressed by DAVE Support App

8.49.5 ETH001_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000241	Typo corrections
MCSW300000242	Bug fix: Preemption priority invalid value indication doesn't disappear
MCSW300000243	MAC address format is added to the tool tip
MCSW300000465	Bug fix: Wrong configuration of P2.5 Pad driver mode
MCSW300000475	Bug fix: Wrong init flow for GMAC in function Eth_InitNetworkInterface
MCSW300000483	If pins from Port 14 or Port 15 are used, they are configured as digital pins during App init
MCSW300000553	PHY_IsLinkUP() is corrected to read Link status correctly

8.50 ETH002

8.50.1 ETH002_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. PHY_InitializeDevice API is modified to allow disable auto-negotiation. 2. C++ Support Provided.

8.50.2 ETH002_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.50.3 ETH002_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. App is ported to XMC4400 series 2. All DBG001_ macros have been replaced by DBG002

8.50.4 ETH002_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000531	Bug Fix: In ETH002.h file, EthernetPHY.h file is included twice

8.50.5 ETH002_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000431	Added Support for the Micrel PHY KSZ8031RNL Fixed jet template for ETH002_conf.h for manual configuration Spiltted enum array in EthernetPHY_privat.h into the standard PHY and enhanced PHY specific arrays for different PHY types Fixed template for EthernetPHY.c to use manual configuration Removed LED configuration for national PHY, not needed because not configurable in UI. Default values are the correct ones. Added PHY ID1 check that the correct PHY is connected

8.51 ETH004

8.51.1 ETH004_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. Lower interrupt priority value 63 is set in SYSTM001 App 2. Error codes are added in various functions, that can be logged with DBG002 App 3. C++ Support provided

8.51.2 ETH004_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.51.3 ETH004_v1_0_12

List of changes to previous version

Reference number	Description of change
	1. Coding guidelines and MISRA fixes 2. Support for XMC4400 series - added.

8.51.4 ETH004_v1_0_10

List of changes to previous version

Reference number	Description of change
MCSW300000522	Added DNS support
MCSW300000520	Removed RTOS tab from UI

8.51.5 ETH004_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000232	Tool tip corrected for 'Heap memory size'
MCSW300000233	Corrected errors generated while configuring some of the GUI
	Enabled support for SNMP protocol

8.52 EXCP001

8.52.1 EXCP001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Included string.h header file to fix compiler warning

8.52.2 EXCP001_v1_0_14

List of changes to previous version

Reference number	Description of change
	PMU Prefetch Buffer Memory parity error is implemented

8.53 FATFS002

8.53.1 FATFS002_v1_0_26

List of changes to previous version

Reference number	Description of change
	Supported latest version of Fatfs module R0.09b.

8.53.2 FATFS002_v1_0_22

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. Provided C++ Support.

8.53.3 FATFS002_v1_0_22

List of changes to previous version

Reference number	Description of change

	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. Provided C++ Support.

8.53.4 FATFS002_v1_0_20

List of changes to previous version

Reference number	Description of change
	Maximum Sector Size UI issue is fixed and default value is set to 512 Bytes.
	Ported for XMC1000 Devices and related SW IDs are added.

8.53.5 FATFS002_v1_0_18

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.53.6 FATFS002_v1_0_16

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.

8.53.7 FATFS002_v1_0_12

List of changes to previous version

Reference number	Description of change
	Corrections in UI tool tips and other typo corrections.

8.53.8 FATFS002_v1_0_10

List of changes to previous version

Reference number	Description of change
MCSW300000224	FATFS code upgraded to v0.9 from v0.8a to support multi partition feature.
	Code Page UI configured to Latin1. App's UI model's uri name shortened. UI model's label name missing issue fixed for Max. Sector Size. Corrections in Documentation (RTOS/No-RTOS related). Added Software IDs. ffconf.h File inclusion resolved in FATFS002_Conf.c.

8.54 FATFS003

8.54.1 FATFS003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Supported latest version of Fatfs module R0.09b.

8.55 FATFS004

8.55.1 FATFS004_v1_0_34

List of changes to previous version

Reference number	Description of change
	Supported latest version of Fatfs module R0.09b.

8.55.2 FATFS004_v1_0_30

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. Provided C++ Support.

8.55.3 FATFS004_v1_0_28

List of changes to previous version

Reference number	Description of change
	Ported for XMC4400/4200 Devices (With SDMMC selection option). Ported for XMC1000 Series Devices.

8.55.4 FATFS004_v1_0_24

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.55.5 FATFS004_v1_0_22

List of changes to previous version

Reference number	Description of change
MCSW300000579	“It is not possible to deselect SDMMC" issue is fixed. Support for XMC4400 series and XMC4200 series. (Without SDMMC selection option). Corrected UI for USB selection for XMC4400/XMC4200 series.

8.55.6 FATFS004_v1_0_18

List of changes to previous version

Reference number	Description of change
	Fix in Support for USB

8.55.7 FATFS004_v1_0_16

List of changes to previous version

Reference number	Description of change
	Support for USB is added

8.55.8 FATFS004_v1_0_14

List of changes to previous version

Reference number	Description of change
	App's UI model's uri name shortened. Corrections in Documentation (RTOS/No-RTOS related).
	Support for all the devices of XMC4500 series

8.56 FATFS005

8.56.1 FATFS005_v1_0_8

List of changes to previous version

Reference number	Description of change
	Supported latest version of Fatfs module R0.09b.

8.57 FLASH001

8.57.1 FLASH001_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. 2.Added C++ support in header files

8.57.2 FLASH001_v1_0_2

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.58 FLASH002

8.58.1 FLASH001_v1_0_6

List of changes to previous version

Reference number	Description of change
	FLASH002.h is converted as a jet file to fetch the flash size of the device.
	App ported to XMC4500 AB Step, XMC4400, XMC4200 Devices.

8.59 FLASH003

8.59.1 FLASH003_v1_0_10

List of changes to previous version

Reference number	Description of change
	1. Added support for auto registration of callbacks during initialization. 2. Added support to register up to 5 callback for each event. 3. For FLASH003_RegisterCallbackEvent() API added one more input argument to pass the user callback name. 4. Defect fix(36939): Whenever interrupts are enabled, FLASH003_global_status is cleared if the wrong parameter is passed as

	input to the APIs..

8.59.2 FLASH003_v1_0_6

List of changes to previous version

Reference number	Description of change
	1. Added support for new device under XMC1201 series. 2.Bug fix(34904) : In FLASH003_WriteMultipleBlocks(),FLASH003_WriteBlock() APIs corrected the macros to read the Verification status from NVM_STATUS Register 3. Bug fix: In FLASH003_Read() APIs Changed the condition check to return FLash_Error for any one of the ECC error is set. 4. Manifest is updated. a) Updation of number of listeners per event is removed. b) Corrected the setting of Interrupt enabling functionality in NVIC_SR001 app. 5. Added c++ support in FLASH003_Conf.h file.

8.59.3 FLASH003_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Added a dummy variable in Manifest to disable the interrupts by top level apps. 2. Asynchronous mode of operation to support the interrupt is added. In FLASH003.h file: a. FLASH003_RegisterCallbackEvent,Extra Status Flags and FLASH003_InterruptId enum are added. b. Changed the Code example for FLASH003_RegisterCallbackEvent API c. Changed the naming convention of the FLASH003_NVMStatus variable. d. Each API is edited to support Asynchronous mode of operation with interrupts. e. Added C++ support In FLASH003.c file a. Changed the naming convention of the ROM APIs and return status. b. FLASH003_Read APIs are changed to read the data with ECC errors also.

8.60 GEN002

8.60.1 GEN002_v1_0_8

List of changes to previous version

Reference number	Description of change
	Added C++ support in header files Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed.

8.60.2 GEN002_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC1000 family & XMC4400, XMC4200 series supported.

8.61 GMM001

8.61.1 GMM001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.61.2 GMM001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000533	Fixed wrong implementation of realloc function
MCSW300000532	Bug fix: Not possible to request more than 32KB of heap in the GUI.

8.61.3 GMM001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixes in GMM001_realloc() function, Added Software IDs

8.62 I2C001

8.62.1 I2C001_v1_0_26

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. 2. In I2C001_Init(), SCL & SDA pin configuration modified from "Open-drain" to "Open-drain with General-purpose output" to avoid unintended spikes

8.62.2 I2C001_v1_0_24

List of changes to previous version

Reference number	Description of change
	1. XMC4500 series AB step supported. 2. UTP MCSW300000612 (I2C001 wrong FIFO handling in I2C001_WriteData function) Fix - Removed TDV bit polling from "I2C001_WriteData()" API. 3. The input parameter of I2C001_WriteData() function is modified to I2C001_DataType from I2C001_Type to maintain backward compatibility.

	4. Corrected SCTR.TRM configuration (changed from 01b to 11b) in "I2C001_lInit()". 5. Removed TBIF bit configuration from "I2C001_lInit()", as polling is not used in the I2C001 App. 6. Default "Trigger Limit" for Receive FIFO made "0".
UTP MCSW300000612	Fix FIFO handling issue in an API I2C001_WriteData(). When FIFO is used, not required to poll TDV bit.

8.62.3 I2C001_v1_0_22

List of changes to previous version

Reference number	Description of change
UTP MCSW300000618	The register names in USIC_FlushTxFIFO and USIC_FlushRxFIFO macros are updated in USIC.h file
	Updated for the maximum size of the Tx and Rx FIFO in UI.

8.62.4 I2C001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Correction in App documentation – overview section.

8.62.5 I2C001_v1_0_10

List of changes to previous version

Reference number	Description of change
MCSW300000413	Fix for hang on sending sending stop bit after repeated start
MCSW300000471	Fix for wrong SCL frequency
MCSW300000488	ModeEnable and ModeDisable APIs are removed
MCSW300000489	Correction in macro to check Tx FIFO empty condition
MCSW300000492	I2C001_ReadData() now reads only 8 bit from the FIFO OUTR register instead of 16 bit
MCSW300000496	Fix for FIFO trigger level setting (Tx – Rx settings were swapped in configuration)

8.63 I2C002

8.63.1 I2C002_v1_0_8

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.63.2 I2C002_v1_0_6

List of changes to previous version

Reference number	Description of change
	1. Coding guidelines compliance. 2. Added support for XMC4000 & XMC1000 devices. 3. PCTQ has been considered as zero hence the PCTQ value update in BRG register removed from "I2C002_lInit()". 4. The hard coded values replaced with macros in I2C002_lConfigureBitRate() function. 5. FIFO receive & transmit event flag clearing defect fix in the receive & transmit IRQ_Hdlr_X(). 6. In transmit IRQ_Hdlr_x() type of Local variable "Ackcount" modified from "uint8_t" to "uint32_t". 7. Removed TBIF bit configuration from "I2C002_lInit()" as polling is not used in the I2C002 App. 8. Corrected SCTR.TRM configuration (changed from 01b to 11b) in "I2C002_lInit()". 9. UTP MCSW300000618 - "Wrong Register usage for USIC_FlushRxFIFO & USIC_FlushTxFIFO" fix. 10. Added Constraint for FIFO size option "64". 11. In UI default "Trigger Limit" for Receive FIFO made "0". 12. UI option sequency modified. 13. Macro name modified from "ubyteFF" to "I2C002_ubyteFF" to remove redefinition warnings. 14. Fixes for MISRA conformance.
UTP MCSW300000618	Fix of wrong Register usage in macros USIC_FlushRxFIFO and USIC_FlushTxFIFO

8.64 I2C003

8.64.1 I2C003_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Conditional code added in the I2C003_Init() API to disable the clock gating for USIC1 module for XMC4400, XMC4200 & XMC1000 devices. 2. SCL & SDA pins have been set to ‘1’, before switch it to GPIO open-drain output. 3. The API names modified from I2C003_WriteDataFIFO to I2C003_WriteData & from I2C003_ReadDataFIFO to I2C003_ReadData to make generic Apis for fifo & standard buffer handling. 4. Added standard buffer functionality into the I2C003_WriteData & I2C003_ReadData Apis. 5. Since generic Apis are being used for fifo & standard buffer handling, the Api I2C003_WriteDataStdBuffer & I2C003_ReadDataStdBuffer definitions are removed.

8.65 IO001

8.65.1 IO001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series: XMC1201, XMC1202 & XMC1301.

8.65.2 IO001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.65.3 IO001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Removed repeated resource definition to fix bug in input characteristics parameter handling in Manifest.

8.65.4 IO001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family.
	Added Dummy Proxy resource to manipulate input characteristics.

8.65.5 IO001_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000575	Changed UI option “Enable Analog Input’ to ‘Enable Digital Input’

8.66 IO002

8.66.1 IO002_v1_0_30

List of changes to previous version

Reference number	Description of change
	The port register definition added for XMC1000 family devices.

8.66.2 IO002_v1_0_28

List of changes to previous version

Reference number	Description of change
	Bug fix for handle name error on IO002 instance removal.

8.66.3 IO002_v1_0_22

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series: XMC1201, XMC1202 & XMC1301.

8.66.4 IO002_v1_0_20

List of changes to previous version

Reference number	Description of change
	Pad Hysteresis control supported for XMC1000 family.
	Pad speed class UI cleanup for backward compatibility.

8.66.5 IO002_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. Added Port 14 in the resource group. 2. Made "Don't Care" pad class option default. 3. Disabled "Pad Driver Mode" for Input mode. 4. Removed IO002_DisableOutputDriver() & IO002_EnableOutputDriver() API definitions, as output port pin configuration shall be done by higher level App connections.

8.66.6 IO002_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.66.7 IO002_v1_0_14

List of changes to previous version

Reference number	Description of change
	Modified OMR register configuration (Direct assignment without reading) for performance upgrade.

8.66.8 IO002_v1_0_12

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.
MCSW300000594	Added Speed class constraint.

8.66.9 IO002_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
MCSW300000538	Output Signals cannot be connected to output pad issue fixed.

8.66.10 IO002_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.
	Coding Guidelines (MISRA errors) fixed.

8.66.11 IO002_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000349	Configuration for input functionality not correct Fix

8.67 IO003

8.67.1 IO003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series: XMC1201, XMC1202 & XMC1301

8.67.2 IO003_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.67.3 IO003_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family. Mouse Over tool tip is modified. Fixes for MISRA conformance.

8.68 IO004

8.68.1 IO004_v1_0_18

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series: XMC1201, XMC1202 & XMC1301

8.68.2 IO004_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.68.3 IO004_v1_0_14

List of changes to previous version

Reference number	Description of change
	Modified OMR register configuration (Direct assignment without reading) for performance upgrade.

8.68.4 IO004_v1_0_12

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.
MCSW300000594	Added Speed class constraint.

8.68.5 IO004_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.

8.68.6 IO004_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.
	Coding Guidelines (MISRA errors) fixed

8.68.7 IO004_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000538	Bug fix for issue “ERU Signal cannot be connected to output pad.”

8.69 IODBG001

8.69.1 IODBG001_v1_0_2

List of changes to previous version

Reference number	Description of change
MCSW300000559	Fixed code generation issue (wrong pin configured for pad drive strength)
MCSW300000555	Some of the pins used for debug/trace were not reserved. This is now corrected.

8.70 LMM001

8.70.1 LMM001_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.

8.70.2 LMM001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Compilation issues with Keil fixed.
	Support for all the devices of XMC4500 series

8.71 LVAL001

8.71.1 LVAL001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC1000 family & XMC4400, XMC4200 series supported.

8.72 LVAL002

8.72.1 LVAL002_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500, XMC4400, XMC4200 series supported.

8.73 MANC001

8.73.1 MANC001_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. C++ support added, 2. Support added for devices XMC1201, XMC1202, XMC1301. 3. Support added for XMC45 AB Step. 4. In UI, supported encode bit size is increased to 32 bit. 5. XMC1000 VQFN package support added; 6. XMC4000 Device support extended for XMC4500 AC step, 7. XMC4400 AB Step and XMC4200 AB Step 8. In UI Register Call Back Support Added. 2. 9. Manchester encode API modified and new logic implemented 10. Start Bit Include GUI selection is provided. 11. Request #44908:XMC45 AB and AC family missing steps support implemented 12. Missing URI details updated.

8.73.2 MANC001_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. For Backward frame, the MANC01 App consumes SYSTM002 instead SYSTM001 to support micro sec scale. 2. Static and Configuration code separated.

8.74 MATH01

8.74.1 MATH01_v1_0_4

List of changes to previous version

Reference number	Description of change

	1. C++ Support added. 2. Overview section in help documentation is updated.

8.75 MATHLIBS

8.75.1 MATHLIBS_v1_0_6

List of changes to previous version

Reference number	Description of change
	uc_id.h file is included in MATHLLD01.h to resolve the DAVE_CE symbol definition in KEIL

8.75.2 MATHLIBS_v1_0_4

List of changes to previous version

Reference number	Description of change
	1. Code is optimized. 2. The return value of __aeabi_uidivmod is corrected to contain the quotient also. 3. C++ support added. 4. Overview section in help documentation is updated.

8.76 NVIC_DMA001

8.76.1 NVIC_DMA001_v1_0_20

List of changes to previous version

Reference number	Description of change
TP #45279	NVIC_DMA001_Conf.h: Fix - "Compilation incompatibility with other Apps that consume NVIC_DMA001 (eg: CRC003).

8.76.2 NVIC_DMA001_v1_0_18

List of changes to previous version

Reference number	Description of change
	NVIC_DMA001.h: Include header file "uc_id.h" instead of "DAVE3.h". This fixes compilation compatibility between DMA002 and DMA003 (or other Apps consuming NVIC_DMA001).

8.76.3 NVIC_DMA001_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.76.4 NVIC_DMA001_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000542	Bug which prevented enabling of channel interrupt resolved.
	Fix for MISRA exceptions.

	Porting to XMC4400 Devices, SubPriority is down stretched to 0 (Presently not configurable) and Reserved for future use.
	Channel priority bug fix for XMC4000 series

8.76.5 NVIC_DMA001_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000263	Dependency between Priority and Sub-priority fix.
MCSW300000264	Wrong tooltip information for the Sub-priority field fix.

8.77 NVIC_SCU001

8.77.1 NVIC_SCU001_v1_0_14

List of changes to previous version

Reference number	Description of change
UTP MCSW300000642	Fix of wrong interrupt node usage in an API NVIC_SCU001_Init()

8.77.2 NVIC_SCU001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.77.3 NVIC_SCU001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series and XMC4200 series - added.
	Sub-priority parameter made read only in UI & down stretched to 0 (Presently not configurable) and Reserved for future use
	Corrections for coding rules.
	SCU SRxxx registers no more has the OSCSITRIM bit field.

8.78 NVIC_SR001

8.78.1 NVIC_SR001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixed the issue of FlashDoubleEvent interrupt and FlashComplete interrupt non-occurrence in NVIC_SR001_Init(), NVIC_SR001_EnableEvent(), NVIC_SR001_DisableEvent() .

8.78.2 NVIC_SR001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series

	has been completed

8.79 NVIC_SR101

8.79.1 NVIC_SR101_v1_0_2

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.80 NVIC_SR201

8.80.1 NVIC_SR201_v1_0_2

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.81 NVIC001

8.81.1 NVIC001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series: XMC1201, XMC1202 & XMC1301.

8.81.2 NVIC001_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.81.3 NVIC001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000367	Support for XMC1000 family - added.

8.82 NVIC002

8.82.1 NVIC002_v1_0_28

List of changes to previous version

Reference number	Description of change
TP #45449	Non-GCC Compilers compatibility is verified with no warnings

8.82.2 NVIC002_v1_0_26

List of changes to previous version

Reference number	Description of change
	Removed uc_regs.h inclusion in NVIC002.h file and reverted back to uc_id.h file inclusion to maintain backward compatibility of DAVE.

8.82.3 NVIC002_v1_0_24

List of changes to previous version

Reference number	Description of change
	EnableIRQ, DisableIRQ, SetPendingIRQ, GetPendingIRQ and ClearPendingIRQ macros are modified to static inline functions.

8.82.4 NVIC002_v1_0_18

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.82.5 NVIC002_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.82.6 NVIC002_v1_0_14

List of changes to previous version

Reference number	Description of change
	1. Interrupt mapping bug fixing. 2. Removed array of irq_numbers.

8.82.7 NVIC002_v1_0_12

List of changes to previous version

Reference number	Description of change
	Support for XMC1000 family - added.
	Sub Priority parameter made read only in UI model.
	Debug Macros are added

8.82.8 NVIC002_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
	Sub Priority is down stretched to 0 (Presently not configurable) and Reserved for future use.
	Coding Guidelines and Debug Macros are added.

8.82.9 NVIC002_v1_0_8

List of changes to previous version

Reference number	Description of change

MCSW300000367	Interrupt mapping issue is fixed.
	Support for XMC4400 series - added.

8.82.10 NVIC002_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixed issue with link to help content

8.83 PLATRESET01

8.83.1 PLATRESET01_v1_0_2

List of changes to previous version

Reference number	Description of change
	Updated overview section in help documentation

8.84 POW001

8.84.1 POW001_v1_0_10

List of changes to previous version

Reference number	Description of change
	1. Changed the naming convention of HIB PIN Functionality. 2. Added C++ support 3. Bug Fix: 29246(UI for Internal Hibernate Mode is not Working Fine) Bug Fix: 29245(Wake Up source for Internal Hibernate Mode not Configured) 4. Library files are converted as static files. 5. Changed the code for POW001_Init, POW001_SetHibernateModeSettings and POW001_EnterHibernate to Make clean code in POW001.c file 6. Added local function POW001_lEnterhibmode in POW001.c file. 7. Help Document Updated

8.85 PRNG01

8.85.1 PRNG01_v1_0_2

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.86 PWMSP001

8.86.1 PWMSP001_v1_0_34

List of changes to previous version

Reference number	Description of change
	1. During Timer Concatenation in UI, 32-bit Period and Compare values are displayed directly, instead of two concatenated 16-bit timer values. 2. New group is added in UI to display the actual register values of High and low timers which are going to be programmed during concatenation. 3. DBG002_FUNCTION_ENTRY() and DBG002_FUNCTION_EXIT() API calls

	are removed from the PWMSP001.c file to prevent the redundancy of information logging. 4. In PWMSP001.c file, PWMSP001_SetCompare()API period value calculations during timer concatenation are removed so that for condition checks direct concatenated timer value is used. 5. In PWMSP001.h file, example snippet for PWMSP001_SetCompare() API is updated to elaborate the functionality during timer concatenation. 6. Overview section of the documentation is updated.

8.86.2 PWMSP001_v1_0_30

List of changes to previous version

Reference number	Description of change
	1. C++ support added. 2.Trap enabling is shifted from PWMSP001_Start() to PWMSP001_Init() 3. In PWMSP001_Init() port initialization is shifted before calling PWMSP001_Start(). 4. In PWMSP001_lSetDutyEdgeAlignTimerConcat() compare value calculation is updated. 5. Naming convention of output passive level setting is changed in UI.

8.86.3 PWMSP001_v1_0_26

List of changes to previous version

Reference number	Description of change
Defect ID: 32385	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. 2. Duty cycle update issue when not using timer concatenation in PWMSP001_SetPwmFreqAndDutyCycle() API is fixed.

8.86.4 PWMSP001_v1_0_24

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.86.5 PWMSP001_v1_0_22

List of changes to previous version

Reference number	Description of change
	DAVE3.h inclusion is added in PWMSP001.c file to be uniform with all the apps

8.86.6 PWMSP001_v1_0_20

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family - added.

8.86.7 PWMSP001_v1_0_18

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
	Debug log Macros are added.

8.86.8 PWMSP001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.
	Updated TRAP Documentation. Coding Guidelines compliance.

8.86.9 PWMSP001_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000447	Modified the UI of Pin Configuration Tab.
MCSW300000446	Added the manual pin configuration option on right clicking the App in App dependency graph view
	If Output pin is not enabled in UI then Port Pin is not consumed

8.86.10 PWMSP001_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000369	Consumes IO pad instead of IO002 App for the direct output Pin
	UI: Start after Initialization changed to Start During Initialisation

8.87 PWMMP001

8.87.1 PWMMP001_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. Error codes are added in various functions that can be logged with DBG002 App. 2. Port initialization is done before PWMMP001_Start() in PWMMP001_Init() API

8.87.2 PWMMP001_v1_0_14

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1300 series has been completed.

	2.Added C++ support in header files

8.87.3 PWMMP001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.88 PWMSP002

8.88.1 PWMSP002_v1_0_34

List of changes to previous version

Reference number	Description of change
	1. During Timer Concatenation Mode in UI, Period and Compare values are displayed directly 32-bit values instead of two concatenated 16-bit timer values. 2. New group is added in UI to display the actual register values of High and low timers which are going to be programmed during concatenation. 3. DBG002_FUNCTION_ENTRY() and DBG002_FUNCTION_EXIT() API calls are removed from the PWMSP001.c file. 4. In PWMSP002.c file, PWMSP002_SetCompare() API condition checks are added for input compare value. 5. Overview section of the documentation is updated.

8.88.2 PWMSP002_v1_0_26

List of changes to previous version

Reference number	Description of change
	1. Device support for XMC1300 series has been completed 2.Added C++ support in header files

8.88.3 PWMSP002_v1_0_24

List of changes to previous version

Reference number	Description of change
	Removed the other header file inclusion except Dave3.h in PWMSP002.c file to be uniform with all apps

8.88.4 PWMSP002_v1_0_22

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.88.5 PWMSP002_v1_0_20

List of changes to previous version

Reference number	Description of change

	Support for XMC4400 series, XMC4200 series - added.
	Code generation for PDR registers in PWMSP002.c file is blocked for XMC1000 family
	Dynamic Range property is added for Timer Resolution and Frequency Parameters in Manifest file

8.88.6 PWMSP002_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000447	Modified the UI of Pin Configuration Tab.
MCSW300000446	Added the manual pin configuration option on right clicking the App in App dependency graph view
	If Output pin is not enabled in UI then Port Pin is not consumed

8.88.7 PWMSP002_v1_0_8

List of changes to previous version

Reference number	Description of change
MCSW300000369	Consumes IO pad instead of IO002 App for the direct output Pin
	UI: Start after Initialization changed to Start During Initialization

8.89 PWMSP003

8.89.1 PWMSP003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Removal of XMC41000 header file inclusion.

8.90 RESET001

8.90.1 RESET001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.90.2 RESET001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.

8.90.3 RESET001_v1_0_6

List of changes to previous version

Reference number	Description of change

	Support for XMC4400 series, XMC4200 series - added.
	Coding Guidelines (MISRA errors) fixed

8.90.4 RESET001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Support for all the devices in XMC4500 series - added.

8.91 RTC001

8.91.1 RTC001_v1_0_30

List of changes to previous version

Reference number	Description of change
	1. Configuration dependent and independent code has been separated. 2. Code has been updated for code complexity compliance. 3. RTC001_ltimevalid() function is added to check the time validity.

8.91.2 RTC001_v1_0_28

List of changes to previous version

Reference number	Description of change
ID: 31679	1. Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed. 2. RTC001 --> wrong handling of Hibernate register (ID31679) is fixed.

8.91.3 RTC001_v1_0_26

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.91.4 RTC001_v1_0_24

List of changes to previous version

Reference number	Description of change
	DBG002 related bugs (ID22796) are fixed.
	Mirror register status check statements under the functions RTC001_Disable(), RTC001_ConfigAlarm() and RTC001_Clock_SetTime() are maintained uniformly for both XMC4000 and XMC1000 devices.
	App Help Documentation is updated in order to make it common for both XMC4000 and XMC1000 devices.

8.91.5 RTC001_v1_0_22

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.
	Conditional consumption of NVIC_SCU,NVIC_SR101 apps based on the

	device

8.91.6 RTC001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Fixes for a few MISRA violations
MCSW300000567	Major change in UI layout as per reference manual correction. "Enable second comparison", "Enable Minute comparison" etc are now removed from Alarm configuration. The alarm configurations are moved to the first tab. The second tab is now "RTC Hibernate Configuration".
MCSW300000564	Tool tip for "Enable Time initialization once" UI element is improved.
MCSW300000580	Option introduced for RTC events to generate an SCU interrupt or an NMI). NVIC_SCU001 and/or EXCP001 are conditionally consumed
MCSW300000578	RTCTICK and RTCALARM register bits are now consumed

8.91.7 RTC001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000439	API to calculate the time in seconds since the Unix epoch time is now supported

8.92 RTOS001

8.92.1 RTOS001_v1_0_26

List of changes to previous version

Reference number	Description of change
	1. Files rt_timer.c and rt_timer.h removed (no longer required for CMSIS RTOSes). 2. Restore symbol 'os_tmr' (os_tmr = 0) in RTX_CM_LIB.h to fix issues in Keil system and thread viewer. 3. User now does not have to implement the function with signature void os_tmr_call (uint16_t info); 4. Inclusion of rt_timer.h has been removed from rt_System.h. 5. New option added in the UI to enable debug mode

8.92.2 RTOS001_v1_0_24

List of changes to previous version

Reference number	Description of change

	1. Update code base to CMSIS RTOS RTX version v4.74. 2. Refactor App UI: Include separate configuration tabs for threads, SysTick timer, system settings and hooks. 3. Fixed naming conflict between the 'software_init_hook' symbol defined in the RTX codebase and the startup files for XMC1000. 4. Make code compatible with Keil MDK and IAR tool chains. 5. The calculation for maximum number of RTOS tasks takes into account the idle task as well. 6. Include support for IAR tool chain 7. Update App documentation.

8.92.3 RTOS001_v1_0_20

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.92.4 RTOS001_v1_0_18

List of changes to previous version

Reference number	Description of change
	Added .type directive to existing boilerplate code in HAL_CM4.s (GCC 4.7 doesn't include interworking instructions unless .type is specified)

8.92.5 RTOS001_v1_0_16

List of changes to previous version

Reference number	Description of change
	1. Updated RTOS001 to Keil RTX update 4.70. 2. Changed the layout of the revision page. 3. Fixed defect in comment (Default stack size) in RTX_Conf_CM.c file. Target process defect: #27344

8.92.6 RTOS001_v1_0_14

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.
	XMC1000 family supported.
	Fixed issues concerning --fomit-frame-pointer.

8.92.7 RTOS001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.
	Updated RTOS001 to Keil RTX update 4.60.
	Made sure of fix for UTP issues concerning user defined functions executed

	by os_idle_demon() & os_error()

8.92.8 RTOS001_v1_0_4

List of changes to previous version

Reference number	Description of change
None	Updated CMSIS RTX RTOS version 4.51

8.93 SDMMC001

8.93.1 SDMMC001_v1_0_22

List of changes to previous version

Reference number	Description of change
	Added support for the following devices under XMC1200 and XMC1300 Series XMC1201, XMC1202, XMC1301 Provided C++ Support

8.93.2 SDMMC001_v1_0_20

List of changes to previous version

Reference number	Description of change
	Ported for XMC1000 Series Devices and Related SW IDs are added.

8.93.3 SDMMC001_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.93.4 SDMMC001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Fixed issue with Card Lock/Unlock. Corrections in Documentation.(RTOS/No-RTOS related).
	Support for all the devices in XMC4500 series - added.

8.94 SDMMC002

8.94.1 SDMMC002_v1_0_2

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported XMC4400 and XMC4200 device support added

8.95 SDMMC003

8.95.1 SDMMC003_v1_0_20

List of changes to previous version

Reference number	Description of change
	Local functions SDMMC003_lCheckSectorBound and SDMMC003_lCommandDelay are corrected.

8.95.2 SDMMC003_v1_0_18

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.95.3 SDMMC003_v1_0_14

List of changes to previous version

Reference number	Description of change
MCSW300000535	Removed unwanted delays. Removed RTOS specific code. Revision History added in source & header files
MCSW300000545	Write Protection Signal option removed from the GUI.

8.95.4 SDMMC003_v1_0_12

List of changes to previous version

Reference number	Description of change
	Make File System (MKFS) through software issue fixed.
MCSW300000203	Default Interrupt Priority changed to 40 .
	Erase optimizations introduced. Added Software IDs.
	Parameter types in the following APIs have been changed: SDMMC003_EraseBlock, SDMMC003_CardReadMultipleBlocks and SDMMC003_CardWriteMultipleBlocks

8.96 SDMMC004

8.96.1 SDMMC004_v1_0_6

List of changes to previous version

Reference number	Description of change
	Local function SDMMC004_lCheckSectorBound is corrected

8.96.2 SDMMC004_v1_0_4

List of changes to previous version

Reference number	Description of change
MCSW300000582	All DBG001_ macros have been replaced by DBG002_ WP Pin shall be not consumed in any case" is fixed XMC4500 Series AB Step Supported

8.96.3 SDMMC004_v1_0_2

List of changes to previous version

Reference number	Description of change
MCSW300000545	Write Protection Signal option removed from the GUI.

8.97 SDMMC005

8.97.1 SDMMC005_v1_0_12

List of changes to previous version

Reference number	Description of change
	DMA mode is supported for XMC4400 and XMC4200 controllers

8.98 SLTHA001

8.98.1 SLTHA001_v1_0_20

List of changes to previous version

Reference number	Description of change
	Added C++ support

8.98.2 SLTHA001_v1_0_18

List of changes to previous version

Reference number	Description of change
	SLTHA003 app consumption is done only for XMC4500 Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.98.3 SLTHA001_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.98.4 SLTHA001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Supported for XMC4400 and XMC4200 – added.

8.98.5 SLTHA001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Debug Log macros modified. Do. While loops removed to handle MISRA exceptions

8.98.6 SLTHA001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Timer & Memory Allocation functionalities are now moved to SLTHA003.
	Consumed lower level uri's updated. Multi-Partition Feature Supported.
	Compiler Macro names updated in header file. Code is now compatible with IAR, TASKING, KEIL compilers as well
	Support for all the devices in XMC4500 series - added.

8.99 SLTHA003

8.99.1 SLTHA003_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.99.2 SLTHA003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
	Target Macro definition added to private.h file

8.99.3 SLTHA003_v1_0_4

List of changes to previous version

Reference number	Description of change
	Timer system calls prototype modified to support reentrant & non-reentrant calls.

8.100 SPI001

8.100.1 SPI001_v1_0_24

List of changes to previous version

Reference number	Description of change
	1. DAVEApp_SUCCESS status return added in the SPI001_Configure() Api on successful configuration change. 2. UTP AI00212595 fixes - CCR.HPCEN configured as per the selected transmission mode in the SPI001_WriteData() Api to avoid the floating lines. 3. Error codes are added in various functions that can be logged with DBG002 App. 4. C++ support added.

8.100.2 SPI001_v1_0_20

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series

	has been completed

8.100.3 SPI001_v1_0_18

List of changes to previous version

Reference number	Description of change
UTP MCSW300000631	1. Added HWSEL configuration as HW1 control path in SPI001_lInit() & SPI001_Configure() for XMC1000 devices. 2. (MTSR1 pin is not configured in Quad SPI Mode) Fix - Added HWSEL configurations for XMC4000 in SPI001_lInit() for MRST & MTSR pins, if operation mode is Half Duplex/Dual/Quad. 3. Dual & Quad mode functionality supported for XMC1000 devices. 4. "No Of Data Line" option made as read only. 5. Added CCR.MODE configurations in SPI001_lInit() & SPI001_Configure() to disable the SPI mode before configuring USIC registers & to enable the SPI mode after configurations to avoid unintended edges. 6. USIC2 added in the resource group for XMC4500 series AB step devices.

8.100.4 SPI001_v1_0_16

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported.
MCSW300000618	The register names in USIC_FlushTxFIFO and USIC_FlushRxFIFO macros in USIC.h file are updated
	Updated for the Tx and Rx max FIFO size in FIFO configuration page of the UI.

8.100.5 SPI001_v1_0_12

List of changes to previous version

Reference number	Description of change
MCSW300000589	1.Coding guidelines and MISRA fixes 2. Modified as per coding guidelines and MISRA checks 3. Modified for baud calculation during initialization in SPI001.c. 4. Modified the macros FUNCTION_ENTRY, FUNCTION_EXIT and ERROR for debug log in SPI001.C 5. The hardcoded values are replaced with macros in SPI001_lConfigureBaudRate() function. 6. The PCTQ value updation in BRG register is removed as the value is taken as zero in SPI001_lInit() function. 7. Typecasting for the handle parameter in SPI001_Conf.c file 8. Generation of macros from numbers and the generation of chipselect array modified in SPI001_Conf.c file 9. Updated for syntax correction for the enum SPI001_ModeType, SPI001_HBModeType, SPI001_ClkPolType, SPI001_ClkPhType and SPI001_FlagStatusType in SPI001.h file. 10. Removed the inclusion of usic.h file in SPI001.h and added in SPI001.c file 11. Bug Fixes: MCSW300000589 - TX and RX limit correction in SPI001_Conf.c file. 12. Updated for baud calculation in SPI001_lInit() function. 13. Updated for alignment of the revision history in files. 14. Updated for baud calculation in SPI001_lInit() function

List of Known Issues

Reference number	Description of Issue
MCS00000463	Dual Mode and Quad mode functionalities are not supported for XMC4200.

8.100.6 SPI001_v1_0_4

List of changes to previous version

Reference number	Description of change
MCS00000463	Fixes for SPI multi IO configuration

8.101 SPI002

8.101.1 SPI002_v1_0_12

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.101.2 SPI002_v1_0_10

List of changes to previous version

Reference number	Description of change
	1. Ported to XMC4400, XMC4200 & XMC4500 series AB step devices. 2. Added support for XMC1000 devices. 3. UTP MCSW300000618(Wrong Register usage for USIC_FlushRxFIFO & USIC_FlushTxFIFO) fix. 4. Added Constraint for FIFO size option "64". 5. UTP MCSW300000615 (SW workaround for USIC2 FIFO silicon bug in all XMC4500 A13 devices) fix. 6. HW0 control path configuration added for XMC4000 in SPI002_lInit() for MRST & MTSR pins, if operation mode is Half Duplex/Dual/Quad mode. 7. Added CCR.MODE configurations in SPI002_lInit() & SPI002_lConfigure() to disable the SPI mode before configuring USIC registers & to enable the SPI mode after configurations to avoid unintended edges. 8. HW1 control path configuration added for XMC1000 devices in SPI002_lInit() & SPI002_lConfigure(). 9. FIFO receive & transmit event flag clearing defect fix in the Rx & Tx IRQ_Hdlr_x(). 10. Defect fix for "Standard Receive Interrupt" option in UI model to configure "Preemption Priority" & "Sub Priority".

8.102 SPI003

8.102.1 SPI003_v1_0_8

List of changes to previous version

Reference number	Description of change
	Dual Mode supported for XMC1X series and XMC44, XMC42, XMC41. App help document updated.

8.103 SUSCFG01

8.103.1 SUSCFG01_v1_0_2

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.104 SYSTM001

8.104.1 SYSTM001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.104.2 SYSTM001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.104.3 SYSTM001_v1_0_10

List of changes to previous version

Reference number	Description of Issue
MCSW300000600	Priority values are not generated as per configuration made.
MCSW300000601	Error reporting as a function return in Function SYSTM001_CreateTimer was not correct. In case of a systick interval of 2 ms and a creation of a timer period the SW timer gets created without an error.
MCSW300000605	SYSTM001 generated periodic timer are not running at selected frequency
MCSW300000606	Function SYSTM001_StartTimer delivers wrong status return value in case a ONE_SHOT timer is used and wants to be restarted with that function.

8.104.4 SYSTM001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for all the devices in XMC4500 series - added.

8.105 SYSTM002

8.105.1 SYSTM002_v1_0_12

List of changes to previous version

Reference number	Description of change
	Fixed floating operation issues in XMC4000 series.

8.106 TMPS001

8.106.1 TMPS001_v1_0_8

List of changes to previous version

Reference number	Description of change
	1. XMC 4500 AB step and C++ support added. 2. Help Documentation updated. 3. Coding guidelines adherence.

8.106.2 TMPS001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 and XMC4200 series – added.

8.107 UART001

8.107.1 UART001_v1_0_24

List of changes to previous version

Reference number	Description of change
	1. Fixes in "Loop Back Mode" handling for XMC1000 (VQFN) devices. 2. API (*UART001_ReadDataMultiple, UART001_ReadDataBytes, UART001_WriteDataMultiple & UART001_WriteDataBytes*) document & example corrections. 3. "Pin Configuration" tab provided with a text note to explain the automatic pin characteristics configurations.

8.107.2 UART001_v1_0_22

List of changes to previous version

Reference number	Description of change
	1. Added APIs *UART001_ReadDataBytes* & *UART001_WriteDataBytes*, to transmit & receive data byte by byte through FIFO buffers or standard buffers. 2. Added options in the UI model to enable/disable the transmit and receive FIFO configurations. 3. Removed the Pin Configuration tab from the UI model in order to reduce the complexity and avoid unintended pin reconfiguration. Now the App is configuring the ports itself depending on the user defined UART mode: In the full duplex mode the output pin is required to use push-pull mode, while in half-duplex mode it must be in open-drain mode (loop back mode: port pin is not used). 4. FIFO buffer related configurations moved to the new tab "FIFO Configurations" to simplify the UI model design. 5. Removed DAVE3.h inclusion from all the files to fix the MISR warning of multiple DAVE3.h inclusions. 6. Added new file UART001_Extern.h for extern declarations of UART001 app. 7. Added required global macro definitions in the UART001_Conf.h file.

	8. Created Array of handle pointers in the UART001_Conf.c file to store the handle base addresses. 9. Added Tx & Rx pin handle configurations in the UART001_HandleType, to configure the mapped port base address and the pin number. 10. Created "UART001_lConfigTXPin" Api to configure Tx pin as Open-drain General-purpose output, to allow wired anding connection in the Half Duplex mode. 11. Modified UART001_Init Api to handle the target device based initializations. 12. Added TBIF configuration in the UART001_lInit Api if Transmit FIFO buffer is disabled. 13. App has been modified as per coding guidelines and MISRA compliance. 14. Error codes are added in various functions, that can be logged with DBG002 App. 15. Modified "UART001_ReadDataMultiple" & "UART001_WriteDataMultiple" Apis for standard buffer handling. 16. XMC1000 VQFN package support added; XMC4000 Device support extended for XMC4500 AC step, XMC4400 AB Step and XMC4200 AB Step

8.107.3 UART001_v1_0_18

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.107.4 UART001_v1_0_16

List of changes to previous version

Reference number	Description of change
	1. Parity configuration defect fix. 2. Added DX0CR configuration in MULTIPLEXER.c for Half Duplex Operation Mode. 3. Added open-drain output configuration for Half duplex operation mode to allow the wired-AND connection in multi transmitter communication. 4. Removed TBIF bit configuration from UART001_lInit(), as polling mode has not been used in the UART001 App. 5. Added CCR.MODE configurations in UART001_lInit() & UART001_Configure() to disable the UART mode before configuring USIC registers & to enable the UART mode after configurations to avoid unintended edges. 6. Modified the input parameter of UART001_WriteDataMultiple() from "const uint16_t*" to "uint16_t*" to maintain backward compatibility. 7. TX pin set logic high (1) before configuring Open Drain mode for Half Duplex operation mode.

8.107.5 UART001_v1_0_12

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.107.6 UART001_v1_0_10

List of changes to previous version

Reference number	Description of change
	The UI parameter is changed for Baud Advanced Setting section as “Bit Oversampling Rate (Time Quanta)” From “Baud Rate – Time Quanta”.
	Modified the structure UART001_HandleType to add baud parameters for the configured baud rate.
	Removed the array UART001_Baud_Values in UART001.c file
	Updated function for UART001_lInit for the baud parameters register updation.
	Corrected maximum FIFO size for Tx and Rx.
MCSW300000618	The register names in USIC_FlushTxFIFO and USIC_FlushRxFIFO macros in USIC.h file are updated

8.107.7 UART001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.
	Updated code for - MISRA checks; Macros from numbers in UART001_Conf.c file; debug log macros with prefix DBG002_; the typecasting of UART001_HandleType generated structure members; the comment format to c comment format; Removed unused macros, UART001_NORMAL_DIV_STEPVALUE, UART001_BRG_PCTQ, UART001_REG_RESET
	The updation of the PCTQ value to the register UsicReg_BRG is removed in UART001_lInit() and UART001_Configure() functions as it is fixed to "zero" value.
	Local variables Brg_PDivValue and Fdr_StepValue are removed in UART001_lInit() function.
	The function call "UART001_lConfigureBaudRate()" is removed in function UART001_lInit() for calculating the step value and pdiv values. The calculated values are generated to the macros and macros are used to update the registers.
	Added macro, UART001_STEP_VALUE, UART001_PDIV_VALUE, UART001_MAX_VALUE, UART001_DCTQ_VALUE, UART001_MAX_STEPVALUE, and UART001_IM_STEPVALUE.
	The macros "UART001_PCR_SP" are modified to the typecasting with "U" and "UL"

8.108 UART002

8.108.1 UART002_v1_0_10

List of changes to previous version

Reference number	Description of change
	Device support for XMC1100 series, XMC1200 series and XMC1300 series has been completed

8.108.2 UART002_v1_0_8

List of changes to previous version

Reference number	Description of change
	1. Ported to XMC4400 & XMC4200 devices. 2. UTP MCSW300000618(Wrong Register usage for USIC_FlushRxFIFO & USIC_FlushTxFIFO) fix. 3. Added Constraint for FIFO size option "64". 4. UTP MCSW300000615 (SW workaround for USIC2 FIFO silicon bug in all XMC45 A13 devices) is fixed. 5. Code updated for updated MISRA rules list and Debug log update. 6. Defect fixing in desired baudrate range setting (changed type from uint16_t to uint32_t). 7. Added support for XMC1000 devices & XMC4500 series AB step devices. 8. Updated the UART002_lInit() function for the baud parameters register updation. 9. Updated UART002_Init() function disabling the clock gate signal for XMC1000. 10. The UI parameter added as Baud Advanced Setting section and “Bit Oversampling Rate (Time Quanta)” in UI to vary the DCTQ value, used to calculate the value of real baud rate. 11. Modified the structure UART002_HandleType to add baud parameters for the configured baud rate. 12. Modified interrupt event initialization in UART002_Init() for XMC1000. 13. Interrupt handler names replaced with "IRQ_Hdlr_X",where X will be the interrupt node ID. 14. PDR register configurations added in the UART002_Init() for Tx & Rx Pin Configurations. 15. The function UART002_lConfigureBaudRate removed, as the baud calculations have been done in ui model level and the values are generated in handle parameter of the config file. 16. Removed TBIF bit configuration from UART002_lInit as polling is not used in the UART002 App. 17. Added open-drain output configuration for Half duplex operation mode to allow the wired-AND connection in multiple transmitter communication. 18. TX pin set logic high (1) before configuring Open Drain mode for Half Duplex operation mode.

8.109 USBCDC001

8.109.1 USBCDC001_v1_0_10

List of changes to previous version

Reference number	Description of change
	Added API documentation in help

8.109.2 USBCDC001_v1_0_8

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.109.3 USBCDC001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.

8.109.4 USBCDC001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixed issues from USB standard compliance test

8.110 USBCDCH001

8.110.1 USBCDCH001_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.110.2 USBCDCH001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

8.111 USBCORE001

8.111.1 USBCORE001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Updated the USBLD001 to mask the rtos mode selection in USBMSD001 app.

8.111.2 USBCORE001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Added the USB soft disconnect support for removing delay between DAVE_Init() and USB_Initialize. Updated the Non EP0 OUT and IN transfers for supporting more than maximum packet size

8.111.3 USBCORE001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.111.4 USBCORE001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.

	USB Initialization changed for Set parameter OTG support. PCU_PWRSET register updated for device mode.

8.111.5 USBCORE001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Fixes to support device mode

8.111.6 USBCORE001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Support for VCOM host added
	Fixed issues from USB standard compliance test

8.112 USBLD001

8.112.1 USBLD001_v1_0_14

List of changes to previous version

Reference number	Description of change
	Vbus pin is consumed only in Host mode

8.112.2 USBLD001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Added support for USB soft disconnect

8.112.3 USBLD001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.112.4 USBLD001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4200 series - added.
	Added target specific macro defined Private.h file.

8.112.5 USBLD001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Fixed compilation issue when combined with Webserver App

8.112.6 USBLD001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixed issues from USB standard compliance test
	Support for VCOM host added

8.113 USBVC001

8.113.1 USBVC001_v1_0_18

List of changes to previous version

Reference number	Description of change
	USBVC001 App is deprecated. The Apps functionality can be achieved by using the new App USBD_VCOM.

8.113.2 USBVC001_v1_0_16

List of changes to previous version

Reference number	Description of change
	Added C++ header support. XMC4000 Device support extended for XMC4500 AC step, XMC4400 AB Step and XMC4200 AB Step

8.113.3 USBVC001_v1_0_12

List of changes to previous version

Reference number	Description of change
	Updated for the changes in the USBCORE001 which enables sending more than maximum packet size data on endpoint. The USBVC001_ReceiveData() modified for the API call Endpoint_Read_Stream_LE()

8.113.4 USBVC001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.113.5 USBVC001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series - added.

8.113.6 USBVC001_v1_0_4

List of changes to previous version

Reference number	Description of change
	Fixed issues from USB standard compliance test

8.114 USBVCH001

8.114.1 USBVCH001_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.114.2 USBVCH001_v1_0_2

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series - added.

8.115 USBBL001

8.115.1 USBBL001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Ported to XMC4200 devices

8.115.2 USBBL001_v1_0_6

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.116 USBMS001

8.116.1 USBMS001_v1_0_6

List of changes to previous version

Reference number	Description of change
	Ported to XMC4200 devices

8.116.2 USBMS001_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.117 USBMSD001

8.117.1 USBMSD001_v1_0_6

List of changes to previous version

Reference number	Description of change
	USBMSD001 App is deprecated. The Apps functionality can be achieved by using the new App USBD_MS.

8.117.2 USBMSD001_v1_0_4

List of changes to previous version

Reference number	Description of change
	The Error Log code added in various functions. It helps to log the errors to DBG002 App.

8.118 USBHID001

8.118.1 USBHID001_v1_0_4

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.119 WDT001

8.119.1 WDT001_v1_0_18

List of changes to previous version

Reference number	Description of change
	1. Defect fix(41833): Wrong value displayed for Actual Lower Bound time. 2."Actual Lower Bound time" and "Actual Upper Bound time" in UI are modified to display up to five decimal places only.

8.119.2 WDT001_v1_0_14

List of changes to previous version

Reference number	Description of change
Defect fix(34879)	For XMC1000 devices changed the clock source to standby clock

8.119.3 WDT001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.119.4 WDT001_v1_0_8

List of changes to previous version

Reference number	Description of change
	Support for XMC4400 series, XMC4200 series and XMC1000 family - added.
	In UI "Interrupt Behavior on Pre warning Event" group changed from Radio button to Dropdown List
	In UI whenever Interrupt is configured as a NMI Enable Pre-Warning Event will be disabled

8.119.5 WDT001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000577	1. Debug log macros are added.

	2. Pre-warning event can now be optionally promoted to NMI.

8.120 WEBSERVER001

8.120.1 WEBSERVER001_v1_0_10

List of changes to previous version

Reference number	Description of change
	XMC4500 series AB step supported

8.120.2 WEBSERVER001_v1_0_6

List of changes to previous version

Reference number	Description of change
MCSW300000227	Support for Incremental File reading (Transfer of files of any size from SD card. No limitation related to SRAM size)
MCSW300000229	Const data of old read only file system removed in order to reduce code size