



Product Type	Max. Clock Frequency (MHz)	Program Memory (KByte)	SRAM (incl. Cache) (KByte)	Co-Processor ¹⁾	Digital I/O Lines	Number of ADC Channels	Timer / O Channels	External Bus Interfaces (PWM, CAP, COM, GPTA)	CAN Nodes	Communication Interfaces ²⁾	Temperature Ranges ³⁾	Packages	Additional Features/Remarks ⁴⁾
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XC2000 Family - 16/32-bit Microcontrollers for Automotive Applications

XC2200 for Body Applications

0-Series	U-Series	L-Series	N-Series	M-Series	I-Series	H-Series
XC226x	XC228x	XC2210U	XC2220U	XC222xL	XC222xL	XC223xL
66	66	40	40	40	40	40
448-768	448-768	32-64	32-64	96-160	96-160	96-160
34-82	34-82	8	8	12	12	12
MAC	MAC	MAC	MAC	MAC	MAC	MAC
75-118	75-118	28	33	33	33	33
8-16	24	7	10	10	10	10
32-44	44	yes	yes	yes	yes	yes
2-5	5	-	-	-	-	-
up to 6xUSIC / 2xSPI, 2xLIN	up to 6xUSIC	1xUSIC	1xUSIC	2xUSIC	2xUSIC	2xUSIC
F,K	F,K	F,K	F,K	F,K	F,K	F,K
PG-LQFP-100	PG-LQFP-144	PG-TSSOP-38	PG-VQFN-48	PG-VQFN-48	PG-VQFN-48	PG-LQFP-64

XC2300 for Safety Applications

0-Series	A-Series	B-Series	C-Series	D-Series	E-Series	S-Series
XC2365	XC2387	XC2336A	XC2363A	XC2364A	XC2365A	XC2387A
66	66	40	80	80	80	80
576	576	448-576	448-832	448-832	448-832	448-832
50	50	50	50	50	50	50
MAC	MAC	MAC	MAC	MAC	MAC	MAC
75	118	38	76	76	76	119
16	24	9	16	16	16	24
24	32	24	20	24	24	32
yes	yes	yes	yes	yes	yes	yes
3	3	2	2	2	3	3
6xUSIC	6xUSIC	4xUSIC	2xUSIC	4xUSIC	6xUSIC	6xUSIC
F,K	F,K	F,K	F,K	F,K	F,K	F,K
PG-LQFP-100	PG-LQFP-144	PG-LQFP-64	PG-LQFP-100	PG-LQFP-100	PG-LQFP-100	PG-LQFP-144

XC2700 for Powertrain Applications

2-Series	3-Series	4-Series	5-Series	6-Series	7-Series	8-Series
XC2712X	XC2722X	XC2723X	XC2733X	XC2734X	XC2764X	XC2765X
40	40	66	66	80	80	80
64	64	160	160	320	320	576-832
8	8	12	12	34	34	50
MAC	MAC	MAC	MAC	MAC	MAC	MAC
28	33	33	49	38	76	76
7	10	10	19	9	16	16
17	17	23	24	20	24	37
yes	yes	yes	yes	yes	yes	yes
-	-	2	2	2	2	2
2xUSIC	2xUSIC	2xUSIC	2xUSIC	4xUSIC	4xUSIC	4xUSIC
K	K	K	K	K	K	K
PG-TSSOP-38	PG-VQFN-48	PG-VQFN-48	PG-LQFP-64	PG-LQFP-64	PG-LQFP-100	PG-LQFP-144

XMC4000 for Industrial and Multi-Markets

XMC4500 Series	Product Type	Max. Clock Frequency (MHz)	Program Memory (KByte)	SRAM (incl. Cache) (KByte)	Co-Processor ¹⁾	Digital I/O Lines	Number of ADC Channels	Timer / O Channels	External Bus Interfaces (PWM, CAP, COM, GPTA)	CAN Nodes	Communication Interfaces ²⁾	Temperature Ranges ³⁾	Packages	Additional Features/Remarks ⁴⁾
XMC4500-F100x1024 AA	XMC4500-F100x768 AA	XMC4502-F100x768 AA	XMC4504-F100x512 AA	XMC4500-F144x1024 AA	XMC4500-F144x768 AA	XMC4500-E144F1024 AA								
120	120	120	120	120	120	120								
1024	768	768	512	1024	768	1024								
160	160	160	128	160	160	160								
FPU	FPU	FPU	FPU	FPU	FPU	FPU								
55	55	55	55	91	91	91								
18	18	18	18	26	26	26								
50	50	50	50	83	83	83								
yes	yes	yes	yes	yes	yes	yes								
3	3	3	-	3	3	3								
6xUSIC, Ethernet 10/100 Mbits/s, USB	6xUSIC, Ethernet 10/100 Mbits/s, USB	6xUSIC, USB	6xUSIC	6xUSIC, Ethernet 10/100 Mbits/s, USB	6xUSIC, Ethernet 10/100 Mbits/s, USB	6xUSIC, Ethernet 10/100 Mbits/s, USB								
F,K	F,K	F,K	F,K	F,K	F,K	F								
PG-LQFP-100	PG-LQFP-100	PG-LQFP-100	PG-LQFP-100	PG-LQFP-144	PG-LQFP-144	PG-LFBGA-144								

TriCore™ for Industrial and Multi-Markets

TC11xx Family	AUDO-MAX – Family
TC1167-126F133HL	TC1724N-192F80HR
133	80
1000	1500
128	152
FPU, PCP	FPU, PCP
88	95
36	28
80	77
no	no
2	3
2xASC, 2xSSC, 1xMSC, 1xMLI	2xASC, 4xSSC, 1xMSC, 1xMLI
F	K
PG-LQFP-176	PG-LQFP-144

TriCore™ for Automotive Applications

AUDO – Next Generation Family	AUDO – Future Family	AUDO-MAX – Family
TC1762-128F66HL	TC1736-128F80HL	TC1724N-192F80HR
66	80	80
1000	1000	1500
52	48	152
FPU	FPU	FPU, PCP
81	70	95
32	36	28
48	53	77
no	no	no
2	2	3
2xASC, 1xSSC, 1xMSC, 1xMLI	2xASC, 2xSSC, 1xMSC, 1xMLI	2xASC, 4xSSC, 1xMSC, 1xMLI
K	K	K
PG-LQFP-176	PG-LQFP-176	PG-LQFP-144

Product Type	Max. Clock Frequency (MHz)	Program Memory (KByte)	SRAM (incl. Cache) (KByte)	Co-Processor ¹⁾	Digital I/O Lines	Number of ADC Channels	Timer / O Channels	External Bus Interfaces (PWM, CAP, COM, GPTA)	CAN Nodes	Communication Interfaces ²⁾	Temperature Ranges ³⁾	Packages	Additional Features/Remarks ⁴⁾
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Microcontroller Family	Microcontroller Input Voltage [V]	Microcontroller Input Current (max.) [mA]	Voltage Regulator
XC800	5.0 ... 3.3	20	IFX20001/IFX24401/IFX2931/IFX21401/IFX4949/IFX544xx
XE166/XC2000	1.5 and 3.3 or 5V	100	IFX25401/IFX24401/IFX2931/IFX4949
TriCore™	1.5 ... 3.3	> 400	IFX27001/IFX8117/IFX91041/IFX80471/IFX25001/IFX1117
XMC4000	3.3	150/300/500	IFX54201/IFX544x1/IFX1763X



¹⁾ VC = Vector Computer (MDU + CORDIC), MDU = Sampling Divide Unit, MAC = Multiply-Accumulate-Unit (DSP), FPU = Floating Point Unit, PCP = Peripheral Control Processor
²⁾ I2C = Inter-Integrated Circuit, USART = Universal Synchronous Asynchronous Receiver Transmitter, BSL = Universal Asynchronous Receiver Transmitter, SSC = Synchronous Serial Channel, ASC = Asynchronous Serial Channel, MLI = Micro Link Interface, MSC = Micro Second Channel, LIN = Local Interconnect Network, BSL = Boot Strap Loader, SDLM = Serial Data Link Module, USIC = Universal Serial Interface (ASC, SSC, LIN, I2C, I2S)
³⁾ Ambient Temperature Range: B = 0 ... 70°C, F = -40 ... 85°C, X = -40 ... 105°C, K = -40 ... 125°C, A = -40 ... 140°C, L = -40 ... 150°C, H = -40 ... 110°C
⁴⁾ ROM = Read Only Memory, OTP = One Time Programmable, TP = Touchpad Library in ROM, HCP = High Current Pads, MMU = Memory Management Unit, EVR = Embedded Voltage Regulator

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Product Type	Max Clock Frequency (MHz)	Program Memory (Kbyte)	SRAM (incl. Cache) (Kbyte)	Co-Processor ¹⁾	Digital I/O Lines	Number of ADC Channels	Timed I/O Channels (PWM, CAP/COM, EPT)	External Bus Interface CAN Nodes	Communication Interfaces ²⁾	Temperature Ranges ³⁾	Packages	Additional Features/Remarks ⁴⁾	
C500 Family													
C505CA-4EM	20	0	1.25	-	34	8	4	no	1	1xUSART	F,B,K	PG-MQFP-44	OTP
C505CA-2/-4RM	20	16/32	1.25	-	34	8	4	no	1	1xUSART	F,B,K	PG-MQFP-44	ROM
C505CA-LM	20	0	1.25	-	34	8	4	no	1	1xUSART	F,B,K	PG-MQFP-44	ROM less
C515C-8EM	10	64	2.25	-	49	8	4	no	1	1xUSART, 1xSSC	F,B,K	PG-MQFP-80	OTP
XC800 A-Family (Automotive)													
XC82x-Series													
XC822MT-1FRA	24	4	0.5	-	17	4	4	no	-	1xUART, 1xSCC, LIN	F,K	PG-TSSOP-16	
XC83x-Series													
XC836MT-1FRA	24	4	0.5	VC	25	8	4	no	-	1xUART, 1xSCC, LIN	F,K	PG-TSSOP-28	
XC836MT-2FRA	24	8	0.5	VC	25	8	4	no	-	1xUART, 1xSCC, LIN	F,K	PG-TSSOP-28	
XC86x-Series													
XC866-1FRA	26.67	4	0.75	-	27	8	4	no	-	1xUART, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC866L-1FRA	26.67	4	0.75	-	27	8	4	no	-	1xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC866-2FRA/RRA	26.67	8	0.75	-	27	8	4	no	-	1xUART, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC866L-2FRA/RRA	26.67	8	0.75	-	27	8	4	no	-	1xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC866-4FRA/RRA	26.67	16	0.75	-	27	8	4	no	-	1xUART, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC866L-4FRA/RRA	26.67	16	0.75	-	27	8	4	no	-	1xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TSSOP-38	
XC87x-Series													
XC874-13FVA	27	52	3	-	48	8	10	yes	-	2xUART, 1xSCC	F,K	PG-VQFN-48	
XC874CM-13FVA	27	52	3	VC	48	8	10	yes	2	2xUART, 1xSCC	F,K	PG-VQFN-48	
XC874LM-13FVA	27	52	3	VC	48	8	10	yes	-	2xUART, 1xSCC, LIN	F,K	PG-VQFN-48	
XC874CLM-13FVA	27	52	3	VC	48	8	10	yes	2	2xUART, 1xSCC, LIN	F,K	PG-VQFN-48	
XC874-16FVA	27	64	3	-	48	8	10	yes	-	2xUART, 1xSCC	F,K	PG-VQFN-48	
XC874CM-16FVA	27	64	3	VC	48	8	10	yes	2	2xUART, 1xSCC	F,K	PG-VQFN-48	
XC874LM-16FVA	27	64	3	VC	48	8	10	yes	-	2xUART, 1xSCC, LIN	F,K	PG-VQFN-48	
XC874CLM-16FVA	27	64	3	VC	48	8	10	yes	2	2xUART, 1xSCC, LIN	F,K	PG-VQFN-48	
XC878-13FFA	27	52	3	-	48	8	10	yes	-	2xUART, 1xSCC	F,K,X	PG-LQFP-64	
XC878CM-13FFA	27	52	3	VC	48	8	10	yes	2	2xUART, 1xSCC	F,K,X	PG-LQFP-64	
XC878LM-13FFA	27	52	3	VC	48	8	10	yes	2	2xUART, 1xSCC, LIN	F,K,X	PG-LQFP-64	
XC878CLM-13FFA	27	52	3	VC	48	8	10	yes	2	2xUART, 1xSCC, LIN	F,K,X	PG-LQFP-64	
XC878-16FFA	27	64	3	-	48	8	10	yes	-	2xUART, 1xSCC	F,K,X	PG-LQFP-64	
XC878CM-16FFA	27	64	3	VC	48	8	10	yes	2	2xUART, 1xSCC	F,K,X	PG-LQFP-64	
XC878LM-16FFA	27	64	3	VC	48	8	10	yes	-	2xUART, 1xSCC, LIN	F,K,X	PG-LQFP-64	
XC878CLM-16FFA	27	64	3	VC	48	8	10	yes	2	2xUART, 1xSCC, LIN	F,K,X	PG-LQFP-64	
XC88x-Series													
XC886-6FFA/RRA	24	24	1.75	-	34	8	4	no	-	2xUART, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886-8FFA/RRA	24	32	1.75	-	34	8	4	no	-	2xUART, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886LM-6FFA/RRA	24	24	1.75	VC	34	8	4	no	-	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886LM-8FFA/RRA	24	32	1.75	VC	34	8	4	no	-	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886CM-6FFA/RRA	24	24	1.75	VC	34	8	4	no	2	2xUART, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886CM-8FFA/RRA	24	32	1.75	VC	34	8	4	no	2	2xUART, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886CLM-6FFA/RRA	24	24	1.75	VC	34	8	4	no	2	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-48	
XC886CLM-8FFA/RRA	24	32	1.75	VC	34	8	4	no	2	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-48	
XC888-6FFA/RRA	24	24	1.75	-	48	8	4	no	-	2xUART, 1xSCC	F,K,A,L	PG-TQFP-64	
XC888-8FFA/RRA	24	32	1.75	-	48	8	4	no	-	2xUART, 1xSCC	F,K,A,L	PG-TQFP-64	
XC888LM-6FFA/RRA	24	24	1.75	VC	48	8	4	no	-	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-64	
XC888LM-8FFA/RRA	24	32	1.75	VC	48	8	4	no	-	2xUART, LIN BSL, 1xSCC	F,K,A,L	PG-TQFP-64	
XC888CM-6FFA/RRA	24	24	1.75	VC	48	8	4	no	2	2xUART, 1xSCC	F,K	PG-TQFP-64	
XC888CM-8FFA/RRA	24	32	1.75	VC	48	8	4	no	2	2xUART, 1xSCC	F,K	PG-TQFP-64	
XC888CLM-6FFA/RRA	24	24	1.74	VC	48	8	4	no	2	2xUART, LIN BSL, 1xSCC	F,K	PG-TQFP-64	
XC888CLM-8FFA/RRA	24	32	1.75	VC	48	8	4	no	2	2xUART, LIN BSL, 1xSCC	F,K	PG-TQFP-64	
XC800 I-Family (Industrial and Multi-Markets)													
XC82x-Series													
XC822-0FRI	24	4	0.5	-	13	4	4	no	-	1xUART, 1SSC, I2C	X	PG-TSSOP-16	
XC822-1FRI	24	4	0.5	-	13	4	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-16	
XC822T-0FRI	24	2	0.5	-	13	4	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-16	TP
XC822T-1FRI	24	4	0.5	-	13	4	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-16	TP
XC822M-1FRI	24	4	0.5	MDU	13	4	4	no	-	1xUART, 1SSC, I2C	F,K,X	PG-TSSOP-16	
XC822MT-1FRI	24	4	0.5	MDU	13	4	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-16	TP
XC824M-1FGI	24	4	0.5	MDU	17	4	4	no	-	1xUART, 1SSC, I2C	F,K,X	PG-DSO-20	
XC824MT-1FGI	24	4	0.5	MDU	17	4	4	no	-	1xUART, 1SSC, I2C	F	PG-DSO-20	TP
XC83x-Series													
XC835MT-2FGI	24	8	0.5	VC	21	4	4	no	-	1xUART, 1SSC, I2C	F	PG-DSO-24	TP, HCP
XC836T-2FRI	24	8	0.5	VC	25	8	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-28	TP, HCP
XC836M-1FRI	24	4	0.5	VC	25	8	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-28	HCP
XC836M-2FRI	24	8	0.5	VC	25	8	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-28	HCP
XC836-2FRI	24	8	0.5	-	25	8	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-28	HCP
XC836MT-2FRI	24	8	0.5	VC	25	8	4	no	-	1xUART, 1SSC, I2C	F	PG-TSSOP-28	TP, HCP
XC85x-Series													
XC858CA-9FFI	27	36	3	-	48	8	10	yes	2	2xUART, 1SSC	F	PG-TQFP-64	
XC858CA-13FFI	27	52	3	-	48	8	10	yes	2	2xUART, 1SSC	F	PG-TQFP-64	
XC858CA-16FFI	27	64	3	-	48	8	10	yes	2	2xUART, 1SSC	F	PG-TQFP-64	
XC86x-Series													
XC864-1FRI	-	-	-	-	13	4	4	no	-	1xUART, 1xSSC	F,K	PG-TSSOP-20	
XC866-2FRI	26.67	8	0.75	-	27	8	4	no	-	1xUART, 1xSSC	F,K	PG-TSSOP-38	
XC866-1FRI	26.67	4	0.75	-	27	8	4	no	-	1xUART, 1xSSC	F,K	PG-TSSOP-38	
XC866-4FRI	26.67	16	0.75	-	27	8	4	no	-	1xUART, 1xSSC	F,K	PG-TSSOP-38	
XC87x-Series													
XC878-13FFI	27	52	3	-	48	8	10	yes	-	2xUART, 1SSC	F	PG-TQFP-64	
XC878-16FFI	27	64	3	-	48	8	10	yes	-	2xUART, 1SSC	F	PG-TQFP-64	
XC878M-13FFI	27	52	3	VC	48	8	10	yes	-	2xUART, 1SSC	F	PG-TQFP-64	
XC878M-16FFI	27	64	3	VC	48	8	10	yes	-	2xUART, 1SSC	F	PG-TQFP-64	
XC878CM-13FFI	27	52	3	VC	48	8	10	yes	2	2xUART, 1SSC	F,K	PG-TQFP-64	
XC878CM-16FFI	27	64	3	VC	48	8	10	yes	2	2xUART, 1SSC	F,K	PG-TQFP-64	
XC88x-Series													
XC886-6FFI	24	24	1.75	-	34	8	4	no	-	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC886-8FFI	24	32	1.75	-	34	8	4	no	-	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC886C-8FFI	24	24	1.75	-	34	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC886C-6FFI	24	32	1.75	-	34	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC886CM-6FFI	24	24	1.75	VC	34	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC886CM-8FFI	24	32	1.75	VC	34	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-48	
XC888-6FFI	24	24	1.75	-	48	8	4	no	-	2xUART, 1SSC	F,K	PG-TSSOP-64	
XC888-8FFI	24	32	1.75	-	48	8	4	no	-	2xUART, 1SSC	F,K	PG-TSSOP-64	
XC888C-6FFI	24	24	1.75	-	48	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-64	
XC888C-8FFI	24	32	1.75	-	48	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-64	
XC888CM-6FFI	24	24	1.75	VC	48	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-64	
XC888CM-8FFI	24	32	1.75	VC	48	8	4	no	2	2xUART, 1SSC	F,K	PG-TSSOP-64	
CIC-Family (Companion IC)													
CIC61508	26.67		0.25							Safety signature watchdog	K	PG-TSSOP-38	ROM
CIC61508	26.67		0.25							Safety signature watchdog	K	PG-TSSOP-38	Flash
C166 Family													
C161													
C161CS-32RF	25	256	10	-	93	12	32	yes	2	2xASC, 1xSSC, 1xI2C, 1I850	B,F,K	PG-TQFP-128	ROM
C1610-LM/-L25M	20/25	-	2	-	63	-	-	yes	-	1xASC, 1xSSC	B,F	PG-MQFP-80	ROM less
C1610-LM 3V	20	-	2	-	63	-	-	yes	-	1xASC, 1xSSC	B,F	PG-MQFP-80	ROM less
C161K-LM	20	-	1	-	63	-	-						