//utoChips

AutoChips MCU 选型手册



AC7801x Series of 32-bit ARM® Cortex-M0+ MCUs Selection Guide

Part No.	Max Speed (MHz)	Flash (Kbytes)	SRAM (Kbytes)	I/O	Timer (32-bit)	WDG	RTC	UART	I2C	SPI	CAN	UART LIN	PWM	PWDT	COMP	ADC (12-bit)	Package	Operating Temp. Range(°C)
AC78010FCLI	48	64	16	42	4	1	1	2	2	2	0	2	16-ch	1	1	12-ch	LQFP48	-40 to +105
AC78012PBTA	48	32	8	16	4	1	1	2	1	1	0	2	8-ch	1	1	8-ch	TSSOP20	-40 to +125
AC78012PBTI	48	32	8	16	4	1	1	2	1	1	0	2	8-ch	1	1	8-ch	TSSOP20	-40 to +105
AC78012MBQI	48	32	8	27	4	1	1	3	1	1	0	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78012MCQI	48	64	16	27	4	1	1	3	1	1	0	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78012MDQI	48	128	20	27	4	1	1	3	1	1	0	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78012FBLI	48	32	8	42	4	1	1	3	2	2	0	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78012FCLI	48	64	16	42	4	1	1	3	2	2	0	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78012FDLI	48	128	20	42	4	1	1	3	2	2	0	2	16-ch	2	1	12-ch	LQFP48	-40 to +105

AC7801x Series of 32-bit ARM® Cortex-M0+ MCUs Selection Guide

Part No.	Max Speed (MHz)	Flash (Kbytes)	SRAM (Kbytes)	I/O	Timer (32-bit)	WDG	RTC	UART	I2C	SPI	CAN	UART LIN	PWM	PWDT	COMP	ADC (12-bit)	Package	Operating Temp. Range(°C)
AC78013MBQA	48	32	8	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +125
AC78013MCQA	48	64	16	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +125
AC78013MDQA	48	128	20	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +125
AC78013FCLA	48	64	16	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +125
AC78013FDLA	48	128	20	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +125
AC78013MBQI	48	32	8	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78013MCQI	48	64	16	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78013MDQI	48	128	20	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78013FCLI	48	64	16	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78013FDLI	48	128	20	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78016MCQI	72	64	16	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78016MDQI	72	128	20	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +105
AC78016FCLI	72	64	16	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78016FDLI	72	128	20	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +105
AC78016MDQA	72	128	20	27	4	1	1	3	1	1	1	2	16-ch	1	1	9-ch	QFN32	-40 to +125
AC78016FDLA	72	128	20	42	4	1	1	3	2	2	1	2	16-ch	2	1	12-ch	LQFP48	-40 to +125

// utoChips AC7801x 命名规则

字段	说明	值								
AC	AutoChips	• AC								
7	AutoChips MCU 系列	• 7								
8	汽车通用型	• 8								
0	Core Platform	• 0= Cortex-M0+								
1		1:区分性能/版本3:产品子系列								
3	特定功能位	6= CPU 72MHz 3=支持CAN-FD/CAN 2=不支持CAN-FD/CAN 0= ESD 2KV								
F	引脚数目	 P = 20 M = 32 F = 48 								
D	Flash存储器大小	 A = 16KB B = 32KB C = 64KB D= 128KB 								
L	封装类型	 L = LQFP Q = QFN T = TSSOP 								
А	温度范围(°C)	 A= AEC-Q100 Grade 1(-40~125°C) I= -40~105°C C= -40~85°C 								



Part No.	Max Speed (MHz)	Flash (Kbytes)	SRAM (Kbytes)	I/O	Timer (32-bit)	WDG	RTC	UART	I2C	SPI	CAN	LIN	PWM'	COMP	DAC [*] (6-bit)	ADC (12-bit)	Package [*]	Operating Temp. Range(°C)
AC7811QBGE	100	256	64	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +125
AC78110BGE	100	128	32	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +125
AC7811MBGE	100	64	16	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +125
AC7811QBFE	100	256	32	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +125
AC7811OBFE	100	128	32	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +125
AC7811MBFE	100	64	16	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +125
AC7815QBGE	100	256	64	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +85
AC7815OBGE	100	128	32	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +85
AC7815MBGE	100	64	16	68	8	1	1	6	2	2	2	1	12-ch	2	2	16-ch	LQFP80	-40 to +85
AC7815QBFE	100	256	32	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +85
AC7815OBFE	100	128	32	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +85
AC7815MBFE	100	64	16	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +85
AC7815JBFE	100	32	8	52	8	1	1	6	2	2	2	1	9-ch	2	2	12-ch	LQFP64	-40 to +85

^{*}Package Identifier:80(10mm*10mm),64(7mm*7mm)

AEC-Q100:AC7811,AEC-Q100 Grade 1; AC7813,AEC-Q100 Grade 3; AC7815,Not Guaranteed AC7811xJxx:Add additional Test Pattern to eFlash;

^{*}PWM:12-ch (one 6-channel and three 2-channel) ,9-ch(one 6-channel,one 2-channel and one 1- channel)

^{*}DAC:internal

// utoChips AC781x 命名规则

字段	说明	值								
AC	AutoChips	• AC								
7	AutoChips mcu 系列	• 7								
8	汽车通用型	• 8								
1	代	● 1= 第一代								
1	温度范围(°C)	 1= AEC-Q100 Grade 1 3= AEC-Q100 Grade 3 5= 85°C 								
Q	Flash存储器大小	 Q = 256 KB O = 128 KB M = 64 KB J = 32 KB 								
В	标准	B = 常规标准J = BCM标准								
G	引脚数目	 F = 64 (7 mm x 7 mm) G = 80 (10 mm x 10 mm) 								
E	封装类型	• E = LQFP								

//utoChips

