

ATTiny

Device	Flash (kB)	SRAM (B)	EEPROM (kB)	Max I/O Pins	F.max (MHz)	Vcc (V)	16 bit Timers	8 bit Timers	PWM Chan	RTC	SPI	UART	I2C	ISP	10 bit A/D Chan	Brown Out Det.?	Watchdog	On-Chip Osc.?	H/W Multiplier	# Interrupts	# Ext. Interrupts	Self-Program Mem	DIP Package	Digital-Key \$	Mouser \$ (@10)	Futurlec \$
ATTiny11	1	--	--	6	6	2.7-5.5	--	1	--	--	--	--	--	--	--	--	Yes	Yes	--	4	1	--	8	0.54		
ATTiny12	1	--	0.06	6	8	1.8-5.5	--	1	--	--	--	--	--	Yes	--	Yes	Yes	Yes	--	5	1	--	8	1.63	1.57	1.60
ATTiny15L	1	--	0.06	6	1.6	2.7-5.5	--	2	1	--	--	--	Yes	01/03/00	Yes	Yes	Yes	--	8	1(+5)	--	8	2.24			
ATTiny13	1	64+32reg	0.06	6	20	1.8-5.5	--	1	2	--	--	--	Yes	01/03/00	Yes	Yes	Yes	No	9	6	Yes	8	1.40	1.20	1.20	
ATTiny28L	2	32	--	11	4	1.8-5.5	--	1	--	--	--	--	--	--	--	Yes	Yes	--	5	2(+8)	--	28	1.61	1.39	1.70	
ATTiny2313	2	128	0.13	18	20	1.8-5.5	1	1	4	--	USI	1	USI	Yes	--	Yes	Yes	Yes	--	8	2	Yes	20	2.26	1.94	1.45
ATTiny24	2	128	0.13	12	20	1.8-5.5	1	1	4	--	USI	--	USI	Yes	01/07/00	Yes	Yes	Yes	--	17	12	Yes	14	1.91	1.65	
ATTiny25	2	128	0.13	6	20	1.8-5.5	--	2	4	--	USI	--	USI	Yes	01/03/00	Yes	Yes	Yes	--	15	7	Yes	8	1.76	1.52	
ATTiny26	2	128	0.13	16	16	2.7-5.5	--	2	2	--	USI	--	USI	Yes	01/10/00	Yes	Yes	Yes	--	11	1	--	20	2.47	2.13	
ATTiny261	2	128	0.13	16	20	1.8 - 5.5	1	2	2	--	Yes	--	USI	Yes	01/10/00	Yes	Yes	Yes	--	19	2	Yes	20	2.13	1.83	
ATTiny44	4	256	0.25	12	20	1.8-5.5	1	1	4	--	USI	--	USI	Yes	01/07/00	Yes	Yes	Yes	--	17	12	Yes	14	2.15	1.85	
ATTiny45	4	256	0.25	6	20	1.8-5.5	--	2	4	--	USI	--	USI	Yes	01/03/00	Yes	Yes	Yes	--	15	7	Yes	8	1.32	1.83	
ATTiny461	4	256	0.25	16	20	1.8 - 5.5	1	2	2	--	Yes	--	USI	Yes	01/10/00	Yes	Yes	Yes	--	19	2	Yes	20	2.45	2.11	
ATTiny84	8	512	0.5	12	20	1.8-5.5	1	1	4	--	USI	--	USI	Yes	01/07/00	Yes	Yes	Yes	--	17	12	Yes	14	2.90	2.50	
ATTiny85	8	512	0.5	6	20	1.8-5.5	--	2	4	--	USI	--	USI	Yes	01/03/00	Yes	Yes	Yes	--	15	7	Yes	8	2.73	2.44	
ATTiny861	8	512	0.5	16	20	1.8 - 5.5	1	2	2	--	Yes	--	USI	Yes	01/10/00	Yes	Yes	Yes	--	19	2	Yes	20	3.03	2.61	

ATmega

Device	Flash (kB)	SRAM (B)	EEPROM (kB)	Max I/O Pins	F. max (MHz)	Vcc (V)	16 bit Timers	8 bit Timers	PWM Chan	RTC	SPI	UART	TWI	ISP	10 bit A/D Chan	Brown Out Det?	Watchdog	On Chip Osc.?	H/W Multiplier	# Interrupts	# Ext. Interrupts	Self Prog Mem	DIP Package	Digi-Key \$	Mouser \$ (@10)
ATmega48	4	512	0.25	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	06/08/08	Yes	Yes	Yes	Yes	26	26	Yes	28	2.69	2.31
ATmega48P	4	512	0.25	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	26	26	Yes	28		
ATmega8515	8	512	0.5	35	16	2.7-5.5	1	1	3	--	1	1	--	Yes	--	Yes	Yes	Yes	Yes	16	3	Yes	40	5.27	4.53
ATmega8535	8	512	0.5	32	16	2.7-5.5	1	2	4	--	1	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	20	3	Yes	40	5.70	4.90
ATmega8	8	1024	0.5	23	16	2.7-5.5	1	2	3	Yes	1	1	Yes	Yes	06/08/08	Yes	Yes	Yes	Yes	18	2	Yes	28	3.66	3.15
ATmega88	8	1024	0.5	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	06/08/08	Yes	Yes	Yes	Yes	26	26	Yes	28	3.87	3.33
ATmega88P	8	1024	0.5	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	26	26	Yes	28		
ATmega16	16	1024	0.5	32	16	2.7-5.5	1	2	4	Yes	1	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	20	3	Yes	40	6.56	5.64
ATmega162	16	1024	0.5	35	16	1.8-5.5	2	2	6	Yes	1	2	--	Yes	--	Yes	Yes	Yes	Yes	28	3	Yes	40	6.77	5.83
ATmega164P	16	1024	0.5	32	20	1.8-5.5	1	2	6	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40	4.82	4.14
ATmega165	16	1024	0.5	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega165P	16	1024	0.5	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega168	16	1024	0.5	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	06/08/08	Yes	Yes	Yes	Yes	26	26	Yes	28	4.11	3.53
ATmega168P	16	1024	0.5	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	26	26	Yes	28		
ATmega169	16	1024	0.5	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega169P	16	1024	0.5	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega32	32	2048	1	32	16	2.7-5.5	1	2	4	Yes	1	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	19	3	Yes	40	8.28	7.12
ATmega324P	32	2048	1	32	20	1.8-5.5	1	2	6	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40	6.02	5.18
ATmega325	32	2048	1	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega3250	32	2048	1	69	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	32	17	Yes			
ATmega3250P	32	2048	1	69	20	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	32	17	Yes			
ATmega325P	32	2048	1	54	20	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega328P	32	2048	1	23	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	26	26	Yes	28		
ATmega329	32	2048	1	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	17	Yes			
ATmega3290	32	2048	1	69	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	32	Yes			
ATmega3290P	32	2048	1	69	20	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	32	Yes			
ATmega329P	32	2048	1	54	20	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	17	Yes			
ATmega406	40	2048	0.5	18	1	39563	1	1	1	Yes	--	--	Yes	Yes	--	Yes	Yes	Yes	Yes	23	4	Yes			
ATmega64	64	4096	2	54	16	2.7-5.5	2	2	8	Yes	1	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	34	8	Yes			
ATmega644	64	4096	2	32	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40	7.87	6.77
ATmega644P	64	4096	2	32	20	1.8-5.5	1	2	6	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40	7.76	
ATmega645	64	4096	2	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	23	17	Yes			
ATmega6450	64	4096	2	69	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	32	17	Yes			
ATmega649	64	4096	2	54	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	17	Yes			
ATmega6490	64	4096	2	69	16	1.8-5.5	1	2	4	Yes	1-USI	1	USI	Yes	01/07/00	Yes	Yes	Yes	Yes	25	32	Yes			
ATmega64RZAPV	64	4096	2	32	20	1.8-5.5	1	2	6	Yes	1+2 USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40		
ATmega64RZAV	64	4096	2	32	20	1.8-5.5	1	2	6	Yes	1-USART	1	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	31	32	Yes	40		
ATmega640	64	8192	4	86	16	1.8-5.5	4	2	16	Yes	1-USART	4	Yes	Yes	01/15/00	Yes	Yes	Yes	Yes	57	32	Yes		11.80	10.16
ATmega128	128	4096	4	53	16	2.7-5.5	2	2	8	Yes	1	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	34	8	Yes			12.95
ATmega1280	128	8192	4	86	16	1.8-5.5	4	2	16	Yes	1-USART	4	Yes	Yes	01/15/00	Yes	Yes	Yes	Yes	57	32	Yes		15.72	13.53
ATmega1281	128	8192	4	54	16	1.8-5.5	4	2	9	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	48	17	Yes			12.36
ATmega128RZAV	128	8192	4	54	16	1.8-5.5	4	2	9	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	48	17	Yes			
ATmega128RZBV	128	8192	4	86	16	1.8-5.5	4	2	16	Yes	1-USART	4	Yes	Yes	01/15/00	Yes	Yes	Yes	Yes	57	32	Yes			
ATmega2560	256	8192	4	86	16	1.8-5.5	4	2	16	Yes	1-USART	4	Yes	Yes	01/15/00	Yes	Yes	Yes	Yes	57	32	Yes			
ATmega2561	256	8192	4	54	16	1.8-5.5	4	2	9	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	48	17	Yes			
ATmega256RZAV	256	8192	4	54	16	1.8-5.5	4	2	9	Yes	1-USART	2	Yes	Yes	01/07/00	Yes	Yes	Yes	Yes	48	17	Yes			
ATmega256RZBV	256	8192	4	86	16	1.8-5.5	4	2	16	Yes	1-USART	4	Yes	Yes	01/15/00	Yes	Yes	Yes	Yes	57	32	Yes			