



# APM32 Series Industrial Grade MCUs – Arm® Cortex®-M3

Part No.	Frequency (MHz)	FLASH (KB)	SRAM (KB)	SDRAM	FPU	I/Os	Vmin(V)	Vmax(V)	Timer								Analog Interface						Connectivity							Package	
									GP TMR(16bit)	GP TMR(32bit)	Advanced TMR(16bit)	Basic TMR	System(24bit)	IWDG	WWDG	RTC	ADC 12 bit Cell	ADC 12 bit channels	DAC 12 bit Cell	DAC 12 bit channels	Analog Comparator	EMMC	SPI	I2S	I2C	U(S)ART	CAN	SDIO	USB Device		CEC
APM32E103CCU6	120	256	64	0	1	37	2	3.6	4	0	1	2	1	1	1	1	2	10	2	2	0	0	3	2	2	3	2	0	1	0	QFN48
APM32E103CEU6	120	512	128	0	1	37	2	3.6	4	0	1	2	1	1	1	1	2	10	2	2	0	0	3	2	2	3	2	0	1	0	QFN48
APM32E103CCT6	120	256	64	0	1	37	2	3.6	4	0	1	2	1	1	1	1	2	10	2	2	0	0	3	2	2	3	2	0	1	0	LQFP48
APM32E103CET6	120	512	128	0	1	37	2	3.6	4	0	1	2	1	1	1	1	2	10	2	2	0	0	3	2	2	3	2	0	1	0	LQFP48
APM32E103RCT6	120	256	64	0	1	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	LQFP64
APM32E103RET6	120	512	128	0	1	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	LQFP64
APM32E103VCT6	120	256	64	0	1	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	2	1	1	0	LQFP100
APM32E103VET6	120	512	128	0	1	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	2	1	1	0	LQFP100
APM32E103ZCT6	120	256	64	1	1	112	2	3.6	4	0	2	2	1	1	1	1	3	21	2	2	0	1	3	2	2	3+2	2	1	1	0	LQFP144
APM32E103ZET6	120	512	128	1	1	112	2	3.6	4	0	2	2	1	1	1	1	3	21	2	2	0	1	3	2	2	3+2	2	1	1	0	LQFP144
APM32F103T4U6	96	16	6	0	1	26	2	3.6	2	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	QFN36
APM32F103T6U6	96	32	10	0	1	26	2	3.6	2	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	QFN36
APM32F103T8U6	96	64	20	0	1	26	2	3.6	3	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	QFN36
APM32F103TBU6	96	128	20	0	1	26	2	3.6	3	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	QFN36
APM32F103C4T6	96	16	6	0	1	37	2	3.6	2	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	LQFP48
APM32F103C6T6	96	32	10	0	1	37	2	3.6	2	0	1	0	1	1	1	1	2	10	0	0	0	0	1	0	1	2	1	0	1	0	LQFP48
APM32F103C8T6	96	64	20	0	1	37	2	3.6	3	0	1	0	1	1	1	1	2	10	0	0	0	0	2	0	2	3	1	0	1	0	LQFP48
APM32F103CBT6	96	128	20	0	1	37	2	3.6	3	0	1	0	1	1	1	1	2	10	0	0	0	0	2	0	2	3	1	0	1	0	LQFP48
APM32F103R4T6	96	16	6	0	1	51	2	3.6	2	0	1	0	1	1	1	1	2	16	0	0	0	0	1	0	1	2	1	0	1	0	LQFP64
APM32F103R6T6	96	32	10	0	1	51	2	3.6	2	0	1	0	1	1	1	1	2	16	0	0	0	0	1	0	1	2	1	0	1	0	LQFP64
APM32F103R8T6	96	64	20	0	1	51	2	3.6	3	0	1	0	1	1	1	1	2	16	0	0	0	0	2	0	2	3	1	0	1	0	LQFP64
APM32F103RBT6	96	128	20	0	1	51	2	3.6	3	0	1	0	1	1	1	1	2	16	0	0	0	0	2	0	2	3	1	0	1	0	LQFP64
APM32F103V8T6	96	64	20	0	1	80	2	3.6	3	0	1	0	1	1	1	1	2	16	0	0	0	0	2	0	2	3	1	0	1	0	LQFP100
APM32F103VBT6	96	128	20	0	1	80	2	3.6	3	0	1	0	1	1	1	1	2	16	0	0	0	0	2	0	2	3	1	0	1	0	LQFP100
APM32F103CCT6	96	256	64	0	0	37	2	3.6	4	0	1	1	1	1	1	1	2	10	2	2	0	0	3	2	2	3	2	0	1	0	LQFP48
APM32F103RCT6	96	256	64	0	0	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	LQFP64
APM32F103VCT6	96	256	64	0	0	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	2	1	1	0	LQFP100
APM32F103RDT6	96	384	64	0	1	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	1	1	1	0	LQFP64
APM32F103RET6	96	512	128	0	1	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	1	1	1	0	LQFP64
APM32F103VDT6	96	384	64	0	1	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	1	1	1	0	LQFP100
APM32F103VET6	96	512	128	0	1	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	1	1	1	0	LQFP100
APM32F103VET7	96	512	128	0	1	80	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	1	3	2	2	3+2	1	1	1	0	LQFP100
APM32F103ZDT6	96	384	64	1	1	112	2	3.6	4	0	2	2	1	1	1	1	3	21	2	2	0	1	3	2	2	3+2	1	1	1	0	LQFP144
APM32F103ZET6	96	512	128	1	1	112	2	3.6	4	0	2	2	1	1	1	1	3	21	2	2	0	1	3	2	2	3+2	1	1	1	0	LQFP144



## APM32 Series Industrial Grade MCUs – Arm® Cortex®-M4

Part No.	Frequency (MHz)	FLASH (KB)	SRAM (KB)	SROM (KB)	FPU	I/O	Voltage	Timer							Analog Interface							Connectivity							Security			Package	
								GP TMR (16bit)	GP TMR (32bit)	Advanced TMR (16bit)	Basic TMR	Systick	WWDG	WWDG	RTC	ADC 12 bit Cell	ADC 12 bit channels	DAC 12 bit channels	EMMC	SPI	I2S	I2C	U(S)ART	CAN	SDIO	USB OTG_FS	USB OTG_HS	DCI	Ethernet	RNG	AES/DES/TDES		BN/SM3/SM4
APM32F407IGT6	168	1024	192+4	1	1	140	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP176
APM32F407IET6	168	512	192+4	1	1	140	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP176
APM32F407ZGT6	168	1024	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP144
APM32F407ZET6	168	512	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP144
APM32F407VGT6	168	1024	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP100
APM32F407VET6	168	512	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	0	1	LQFP100
APM32F407RGT6	168	1024	192+4	0	1	51	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	0	3	2	3	4+2	2	1	1	1+1	0	0	1	0	1	LQFP64
APM32F407RET6	168	512	192+4	0	1	51	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	0	3	2	3	4+2	2	1	1	1+1	0	0	1	0	1	LQFP64
APM32F417IGT6	168	1024	192+4	1	1	140	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP176
APM32F417IET6	168	512	192+4	1	1	140	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP176
APM32F417ZGT6	168	1024	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP144
APM32F417ZET6	168	512	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP144
APM32F417VGT6	168	1024	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP100
APM32F417VET6	168	512	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	1	1	1	1	1	LQFP100
APM32F405ZGT6	168	1024	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	0	0	1	0	0	LQFP144
APM32F405VGT6	168	1024	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	0	0	1	0	0	LQFP100
APM32F405RGT6	168	1024	192+4	0	1	51	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	0	3	2	3	4+2	2	1	1	1+1	0	0	1	0	0	LQFP64
APM32F415ZGT6	168	1024	192+4	0	1	114	1.8-3.6	8	2	2	2	1	1	1	1	3	24	2	1	3	2	3	4+2	2	1	1	1+1	0	0	1	1	1	LQFP144
APM32F415VGT6	168	1024	192+4	0	1	82	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	1	3	2	3	4+2	2	1	1	1+1	0	0	1	1	1	LQFP100
APM32F415RGT6	168	1024	192+4	0	1	51	1.8-3.6	8	2	2	2	1	1	1	1	3	16	2	0	3	2	3	4+2	2	1	1	1+1	0	0	1	1	1	LQFP64

## APM32 Series Automotive Grade MCUs – Arm® Cortex®-M0+/M3

Part No.	Frequency (MHz)	FLASH (KB)	SRAM (KB)	EMMC	FPU	I/Os	Vmin (V)	Vmax (V)	Timer							Analog Interface					Connectivity							Package			
									GP TMR (16bit)	GP TMR (32bit)	Advanced TMR (16bit)	Basic TMR	Systick (24bit)	WWDG	WWDG	RTC	ADC 12 bit Cell	ADC 12 bit channels	DAC 12 bit Cell	DAC 12 bit channels	DAC 12 bit channels	Analog Comparator	TSC (Channels)	SPI	I2S	I2C	U(S)ART		CAN	SDIO	USB Device
APM32F103RCT7	96	256	64	1	0	51	2	3.6	4	0	2	2	1	1	1	1	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	LQFP64
APM32F072RBT7	48	128	16	0	0	51	2	3.6	5	1	1	2	1	1	1	1	16	1	2	2	2	18	2	2	2	4	1	0	1	1	LQFP 64

## GW88 Series BLE4.2

Part No.	Frequency (MHz)	FLASH (KB)	SRAM (KB)	I/Os	Vmin (V)	Vmax (V)	Max. TX Power (dbm)	RX Sensitivity (dbm)	TX Current (mA@0dbm)	RX Current (mA@0dbm)	Sleep Mode Current (µA)	Deep Sleep Mode Current (µA)	Operating Temperature (°C, Tj)	Timer			Analog Interface		Connectivity										Package
														Low Speed TM (32bit)	High Speed TM (16bit)	WDT (16bit)	RTC	GPADC 10bit cell	GPADC 10bit channels	SPI (master)	I2C (master)	U(S)ART	PWM	Quadrature Decoder	ISO7816	Infrared emitting & receiving	Keystroke decoder (rows & columns)	AES Encryption Engine	
GW8811KEU6	64	512	24	21	1.8	3.6	+4	-94	4.8	2.8	2.7	1	-40~+85	4	1	1	1	1	4+1	2	2	2	6	Yes	Yes	Yes	8 x 20	128 bit	QFN32
GW8811CEU6	64	512	32	32	1.8	3.6	+4	-94	4.8	2.8	2.7	1	-40~+85	4	1	1	1	1	8+1	2	2	2	6	Yes	Yes	Yes	8 x 20	128 bit	QFN48

# Product Selection Guide

