

极海产品选型手册

Product Selection Guide



目录

产品组合矩阵	01
产品选型指南	02
产品型号表	03
■ G32R5实时控制MCU	03
■ APM32F4高性能MCU	04
■ APM32E1/F1主流型MCU	06
■ APM32E0/F0基础型MCU	08
■ 电机控制芯片	11
■ GW低功耗蓝牙MCU	12
■ BMP电池电量监测计	12
■ 汽车电子芯片	13
极海产品开发生态	15
软硬件工具	16
命名与封装	17

极海32位MCU-Arm® Cortex®-M内核

丰富的产品组合阵营，满足客户多样化应用需求



汽车 & 工业



功能安全 & 信息安全



电机控制



连接



触摸



Arm® Cortex®-M0+/M3/M4F/M52...



实时控制 MCU 	高性能 MCU 	主流型 MCU 	基础型 MCU 	电机控制专用 MCU 	低功耗蓝牙 MCU 	车规级 MCU 
G32R501	APM32F417	APM32E103	APM32F091	APM32M3514	GW8811(BLE4.2)	G32A1465
Cortex-M52	APM32F407/405	APM32F107/105	APM32F072	APM32F035	GW3323(BLE5.2)	G32A1445
	APM32F465	APM32F103	APM32F051	Cortex-M0+	Cortex-M0 RISC-V	APM32A407
	APM32F411	Cortex-M3	APM32E030			APM32A103
	APM32F402		APM32F030			APM32A091
	Cortex-M4F		APM32F003			APM32F103RCT7
			Cortex-M0+			APM32F072RBT7
						APM32F072CBT7
						APM32F003F6U7
						Cortex-M4F/M3/M0+



极海MCU产品选型指南

APM/G	32	F	103	(Blank)	T	4	T	6	s
Brand	Family 32:32-bit MCU W33:BLE MCU W88:BLE MCU	Product type A Auto grade E Enhanced F Foundation R Real-time S Standard 11 BLE4.2 23 BLE5.2	Specific features 0xx Entry-level(Cortex-M0+) 10x Mainstream(Cortex-M3) 4xx High-performance(Cortex-M4F) 5xx Excellent efficiency (Cortex-M52)	Core type D: Double Core Blank: Single Core	Pin count (pins) D 14 F 20 E 24 G 28 K 32 T 36 H 40 S 44 C 48 N 56 U 63 R 64 J 72 M 80 O 90 V 100 Q 132 Z 144 A 169 I 176	Flash(KB) 4 16 6 32 7 48 8 64 9 72 A 96 B 128 Z 192 C 256 D 384 E 512 Y 640 F 768 G 1024	Packaging H LFBGA/TFBGA I UFBGA Pitch 0.5 J UFBGA Pitch 0.8 K UFBGA Pitch 0.65 M SOP P TSSOP T LQFP/QFP U QFN Y WLCSP	Temp range 6 and A:-40~85 °C 7 and B:-40~105°C 8 and C:-40~125°C D:-40~150°C	Additional S:SiP 2MB SDRAM Q: AEC-Q100

多样化封装形式

- LQFP176/144/100/64/48/32
- QFN56/48/36/32/20
- TSSOP20
- SOP20
- BGA176



G32R5系列实时控制MCU – Arm® Cortex®-M52

Part No.	Core	Math Instruction Extension	Frequency(MHz)	DMA Channels	FLASH(KB)	SRAM(KB)	FPU	I/O	Voltage(V)	Operating Temperature(°C)	Timer			Analog					Control				Communication								Package
											GPWM(32-bit)	NMIWD	WWDT	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Cell	T-sensor	COMP (DAC 12-bit Cell Embedded)	CAP(HRCAP)	PWM (HRPWM Channels)	QEP	SDF Channels	SPI	QSPI	I2C	UART	CAN	LIN	PMBus	USB Device	
G32R501DNYU7	Dual Core	Zidian	250	6	640	128	✓	25	3.1~3.6	-40~105	3	✓	✓	3	14	2	1	5(10)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	QFN56
G32R501IDRYT7	Dual Core	Zidian	250	6	640	128	✓	26	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	6(12)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	LQFP64
G32R501IDMYT7	Dual Core	Zidian	250	6	640	128	✓	44	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	4(8)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP80
G32R501DVYT7	Dual Core	Zidian	250	6	640	128	✓	42	3.1~3.6	-40~105	3	✓	✓	3	31	2	1	7(14)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP100
G32R501INYU7	Single Core	Zidian	250	6	640	128	✓	25	3.1~3.6	-40~105	3	✓	✓	3	14	2	1	5(10)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	QFN56
G32R501RYT7	Single Core	Zidian	250	6	640	128	✓	26	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	6(12)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	LQFP64
G32R501MYT7	Single Core	Zidian	250	6	640	128	✓	44	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	4(8)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP80
G32R501VYT7	Single Core	Zidian	250	6	640	128	✓	42	3.1~3.6	-40~105	3	✓	✓	3	31	2	1	7(14)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP100
G32R501NCU7	Single Core	Zidian	250	6	256	64	✓	25	3.1~3.6	-40~105	3	✓	✓	3	14	2	1	5(10)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	QFN56
G32R501RCT7	Single Core	Zidian	250	6	256	64	✓	26	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	6(12)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	LQFP64
G32R501MCT7	Single Core	Zidian	250	6	256	64	✓	44	3.1~3.6	-40~105	3	✓	✓	3	16	2	1	4(8)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP80
G32R501VCT7	Single Core	Zidian	250	6	256	64	✓	42	3.1~3.6	-40~105	3	✓	✓	3	31	2	1	7(14)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP100
G32R501DNYU8Q	Dual Core	Zidian	200	6	640	128	✓	25	3.1~3.6	-40~125	3	✓	✓	3	14	2	1	5(10)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	QFN56
G32R501IDRYT8Q	Dual Core	Zidian	200	6	640	128	✓	26	3.1~3.6	-40~125	3	✓	✓	3	16	2	1	6(12)	7(2)	16(16)	2	2	2	1	1	2	2	1	1	0	LQFP64
G32R501IDMYT8Q	Dual Core	Zidian	200	6	640	128	✓	44	3.1~3.6	-40~125	3	✓	✓	3	16	2	1	4(8)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP80
G32R501IDVYT8Q	Dual Core	Zidian	200	6	640	128	✓	42	3.1~3.6	-40~125	3	✓	✓	3	31	2	1	7(14)	7(2)	16(16)	2	4	2	1	1	2	2	1	1	0	LQFP100

APM32F4系列高性能MCU – Arm® Cortex®-M4F

Part No.	Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/O	Voltage(V)	Timer							Analog Interface				Connectivity														Security			Package
							GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IMDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Channels	Analog Comparator	SPI	QSPI	I2S	I2C	U(S)ART	CAN	SDIO	USB OTG_FS	USB OTG_HS	DCI	SMC	DMC	Ethernet	RNG	AES/DES/TDES	BN/SM3/SM4		
APM32F402TBU6	120	128	32	✓	26	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	1	0	1	1	2+0	2	0	1	0	-	-	-	0	-	-	-	-	QFN36
APM32F402TBU7	120	128	32	✓	26	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	1	0	1	1	2+0	2	0	1	0	-	-	-	0	-	-	-	-	QFN36
APM32F402CBU6	120	128	32	✓	37	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	2	0	1	1	3+0	2	0	1	0	-	-	-	0	-	-	-	-	QFN48
APM32F402CBU7	120	128	32	✓	37	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	2	0	1	1	3+0	2	0	1	0	-	-	-	0	-	-	-	-	QFN48
APM32F402CBT6	120	128	32	✓	37	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	2	0	1	1	3+0	2	0	1	0	-	-	-	0	-	-	-	-	LQFP48
APM32F402CBT7	120	128	32	✓	37	2.0~3.6	3	1	2	0	✓	✓	✓	2	10	0	0	2	0	1	1	3+0	2	0	1	0	-	-	-	0	-	-	-	-	LQFP48
APM32F402RBT6	120	128	32	✓	51	2.0~3.6	3	1	2	0	✓	✓	✓	2	16	0	0	2	0	1	1	3+1	2	0	1	0	-	-	-	0	-	-	-	-	LQFP64
APM32F402RBT7	120	128	32	✓	51	2.0~3.6	3	1	2	0	✓	✓	✓	2	16	0	0	2	0	1	1	3+1	2	0	1	0	-	-	-	0	-	-	-	-	LQFP64
APM32F405RGT6	168	1024	192+4	✓	51	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	-	-	-	0	✓	-	-	-	LQFP64
APM32F405VGT6	168	1024	192+4	✓	82	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	-	✓	-	0	✓	-	-	-	LQFP100
APM32F405ZGT6	168	1024	192+4	✓	114	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	-	✓	-	0	✓	-	-	-	LQFP144
APM32F407RET6	168	512	192+4	✓	51	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	-	-	-	0	✓	-	✓	-	LQFP64
APM32F407RGT6	168	1024	192+4	✓	51	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	-	-	-	0	✓	-	✓	-	LQFP64
APM32F407VET6	168	512	192+4	✓	82	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	-	✓	-	LQFP100
APM32F407VGT6	168	1024	192+4	✓	82	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	-	✓	-	LQFP100
APM32F407ZET6	168	512	192+4	✓	114	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	-	✓	-	LQFP144
APM32F407ZGT6	168	1024	192+4	✓	114	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	-	✓	-	LQFP144
APM32F407IGT6	168	1024	192+4	✓	140	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	✓	1	✓	-	✓	-	LQFP176
APM32F407IGH6	168	1024	192+4	✓	140	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	✓	1	✓	-	✓	-	BGA176
APM32F411CEU6	120	512	128	✓	36	1.8~3.6	8	2	2	0	✓	✓	✓	2	10	0	2	3	0	3	3	3+1	2	1	1	0	-	-	-	0	✓	-	-	-	QFN48
APM32F411CET6	120	512	128	✓	36	1.8~3.6	8	2	2	0	✓	✓	✓	2	10	0	2	3	0	3	3	3+1	2	1	1	0	-	-	-	0	✓	-	-	-	LQFP48
APM32F411RET6	120	512	128	✓	50	1.8~3.6	8	2	2	0	✓	✓	✓	2	16	0	2	5	1	5	3	4+2	2	1	1	0	-	-	-	0	✓	-	-	-	LQFP64

APM32F4系列高性能MCU – Arm® Cortex®-M4F

Part No.	Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/O	Voltage(V)	Timer							Analog Interface			Connectivity														Security			Package
							GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IMDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Channels	Analog Comparator	SPI	QSPI	I2S	I2C	U(S)ART	CAN	SDIO	USB OTG_FS	USB OTG_HS	DCI	SMC	DMC	Ethernet	RNG	AES/DES/TDES	BN/SM3/SM4	
APM32F411VET6	120	512	128	✓	81	1.8~3.6	8	2	2	0	✓	✓	✓	2	16	0	2	5	1	5	3	4+2	2	1	1	0	-	✓	-	0	✓	-	-	LQFP100
APM32F417VGT6	168	1024	192+4	✓	82	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	✓	✓	LQFP100
APM32F417ZGT6	168	1024	192+4	✓	114	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	-	1	✓	✓	✓	LQFP144
APM32F417IGT6	168	1024	192+4	✓	140	1.8~3.6	8	2	2	2	✓	✓	✓	3	24	2	0	3	0	2	3	4+2	2	1	1	1+1	✓	✓	✓	1	✓	✓	✓	LQFP176
APM32F465KEU6	168	512	192+4	✓	21	1.8~3.6	8	2	1	2	✓	✓	✓	3	5	0	0	2	0	2	0	1	0	0	0	1	-	-	-	0	✓	-	-	QFN32
APM32F465CEU6	168	512	192+4	✓	37	1.8~3.6	8	2	1	2	✓	✓	✓	3	10	2	0	3	0	2	1	2+1	2	0	1	1	-	-	-	0	✓	-	-	QFN48
APM32F465RET6	168	512	192+4	✓	50	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	4+2	2	1	1	1	-	-	-	0	✓	-	-	LQFP64
APM32F465VET6	168	512	192+4	✓	81	1.8~3.6	8	2	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	4+2	2	1	1	1	-	✓	-	0	✓	-	-	LQFP100

APM32E1/F1系列主流型MCU – Arm® Cortex®-M3

Port No.	Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/Os	Voltage(V)	Timer							Analog Interface				Connectivity														Package
							GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IWDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Channels	Analog Comparator	SPI	QSPI	I2S	I2C	U(S)ART	CAN	SDIO	USB Device	CEC	USB OTG_FS	SMC	DMC	Ethernet		
APM32F103T8U6	96	64	20	-	26	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	1	0	0	1	2	1	0	1	0	0	-	-	0	QFN36	
APM32F103TBU6	96	128	20/36	✓	26	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	1	0	0	1	2	1/2	0	1	0	0	-	-	0	QFN36	
APM32F103TBU7	96	128	20/36	✓	26	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	1	0	0	1	2	1/2	0	1	0	0	-	-	0	QFN36	
APM32F103C8T6	96	64	20	-	37	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	2	0	0	2	3	1	0	1	0	0	-	-	0	LQFP48	
APM32F103CBT6	96	128	20/36	✓	37	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	2	0	0	2	3	1/2	0	1	0	0	-	-	0	LQFP48	
APM32F103CBT7	96	128	20/36	✓	37	2~3.6	3	0	1	0	✓	✓	✓	2	10	0	0	2	0	0	2	3	1/2	0	1	0	0	-	-	0	LQFP48	
APM32F103R8T6	96	64	20	-	51	2~3.6	3	0	1	0	✓	✓	✓	2	16	0	0	2	0	0	2	3	1	0	1	0	0	-	-	0	LQFP64	
APM32F103RBT6	96	128	20/36	✓	51	2~3.6	3	0	1	0	✓	✓	✓	2	16	0	0	2	0	0	2	3	1/2	0	1	0	0	-	-	0	LQFP64	
APM32F103RBT7	96	128	20/36	✓	51	2~3.6	3	0	1	0	✓	✓	✓	2	16	0	0	2	0	0	2	3	1/2	0	1	0	0	-	-	0	LQFP64	
APM32F103VBT6	96	128	20/36	✓	80	2~3.6	3	0	1	0	✓	✓	✓	2	16	0	0	2	1	0	2	3	1/2	0	1	0	0	-	-	0	LQFP100	
APM32F103CCT6	96	256	64	-	37	2~3.6	4	0	1	2	✓	✓	✓	2	10	2	0	3	0	2	2	3	2	0	1	0	0	-	-	0	LQFP48	
APM32F103RCT6	96	256	64	-	51	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	-	-	0	LQFP64	
APM32F103RCT7	96	256	64	-	51	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	-	-	0	LQFP64	
APM32F103VCT6	96	256	64	-	80	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	✓	✓	0	LQFP100	
APM32F103RET6	96	512	128	✓	51	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	1	1	1	0	0	-	-	0	LQFP64	
APM32F103VET6	96	512	128	✓	80	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	1	1	1	0	0	✓	-	0	LQFP100	
APM32F103VET7	96	512	128	✓	80	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	1	1	1	0	0	✓	-	0	LQFP100	
APM32F103ZET6	96	512	128	✓	112	2~3.6	4	0	2	2	✓	✓	✓	3	21	2	0	3	0	2	2	3+2	1	1	1	0	0	✓	✓	0	LQFP144	
APM32E103CCU6	120	256	64	✓	37	2~3.6	4	0	1	2	✓	✓	✓	2	10	2	0	3	0	2	2	3	2	0	1	0	0	-	-	0	QFN48	
APM32E103CEU6	120	512	128	✓	37	2~3.6	4	0	1	2	✓	✓	✓	2	10	2	0	3	0	2	2	3	2	0	1	0	0	-	-	0	QFN48	

APM32E1/F1系列主流型MCU – Arm® Cortex®-M3

Part No.	Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/Os	Voltage(V)	Timer						Analog Interface				Connectivity														Package
							GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IWDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Channels	Analog Comparator	SPI	QSPI	I2S	I2C	U(S)ART	CAN	SDIO	USB Device	CEC	USB OTG_FS	SMC	DMC	Ethernet	
APM32E103CCT6	120	256	64	✓	37	2~3.6	4	0	1	2	✓	✓	✓	2	10	2	0	3	0	2	2	3	2	0	1	0	0	-	-	0	LQFP48
APM32E103CET6	120	512	128	✓	37	2~3.6	4	0	1	2	✓	✓	✓	2	10	2	0	3	0	2	2	3	2	0	1	0	0	-	-	0	LQFP48
APM32E103RCT6	120	256	64	✓	51	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	-	-	0	LQFP64
APM32E103RET6	120	512	128	✓	51	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	-	-	0	LQFP64
APM32E103VCT6	120	256	64	✓	80	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	✓	-	0	LQFP100
APM32E103VET6	120	512	128	✓	80	2~3.6	4	0	2	2	✓	✓	✓	3	16	2	0	3	0	2	2	3+2	2	1	1	0	0	✓	-	0	LQFP100
APM32E103ZET6	120	512	128	✓	112	2~3.6	4	0	2	2	✓	✓	✓	3	21	2	0	3	0	2	2	3+2	2	1	1	0	0	✓	✓	0	LQFP144
APM32F105RBT6	96	128	64	-	51	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	2	3+2	2	0	0	0	1	-	-	0	LQFP64
APM32F105RCT6	96	256	64	-	51	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	2	3+2	2	0	0	0	1	-	-	0	LQFP64
APM32F105VBT6	96	128	64	-	80	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	2	3+2	2	0	0	0	1	-	-	0	LQFP100
APM32F105VCT6	96	256	64	-	80	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	2	3+2	2	0	0	0	1	-	-	0	LQFP100
APM32F107RBT6	96	128	64	-	51	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	1	3+2	2	0	0	0	1	-	-	1	LQFP64
APM32F107RCT6	96	256	64	-	51	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	1	3+2	2	0	0	0	1	-	-	1	LQFP64
APM32F107VBT6	96	128	64	-	80	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	1	3+2	2	0	0	0	1	-	-	1	LQFP100
APM32F107VCT6	96	256	64	-	80	2~3.6	4	0	1	2	✓	✓	✓	2	16	2	0	3	0	2	1	3+2	2	0	0	0	1	-	-	1	LQFP100

APM32E0/FO系列基础型MCU – Arm® Cortex®-M0+

Part No.	Connectivity																												Package
	CEC	USB Device	SDIO	CAN	U(s)ART	I2C	I2S	SPI	TSC (Channels)	Analog Comparator	DAC 12-bit Channels	DAC 12-bit Cell	ADC 12-bit Channels	ADC 12-bit Cell	RTC	WWDT	IWDT	Basic TMR	Advanced TMR(16bit)	GPTMR(32bit)	GPTMR(16bit)	Voltage(V)	I/Os	FPU	SRAM(KB)	FLASH(KB)	Frequency(MHz)		
APM32F003F4P6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	2	16	48	TSSOP20
APM32F003F6P6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	4	32	48	TSSOP20
APM32F003F6P7	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	4	32	48	TSSOP20
APM32F003F4M6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	2	16	48	SOP20
APM32F003F6M6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	4	32	48	SOP20
APM32F003F4U6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	2	16	48	QFN20
APM32F003F6U6	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	4	32	48	QFN20
APM32F003F6U7	0	0	0	0	3	1	0	1	0	0	0	0	0	0	-	✓	✓	✓	1	2	0	1	2.4~5.5	16	-	4	32	48	QFN20
APM32F030K6U6	0	0	0	0	1	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	27	-	4	32	48	QFN32	
APM32F030K6T6	0	0	0	0	1	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	25	-	4	32	48	LQFP32	
APM32F030K6T7	0	0	0	0	1	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	25	-	4	32	48	LQFP32	
APM32F030K8T6	0	0	0	0	1	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	25	-	8	64	48	LQFP32	
APM32F030C6T6	0	0	0	0	1	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	39	-	4	32	48	LQFP48	
APM32F030C8T6	0	0	0	0	2	2	0	2	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	39	-	8	64	48	LQFP48	
APM32F030R8T6	0	0	0	0	2	2	0	2	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	55	-	8	64	48	LQFP64	
APM32F030CCT6	0	0	0	0	6	2	0	2	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	37	-	32	256	48	LQFP48	
APM32F030RCT6	0	0	0	0	6	2	0	2	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	51	-	32	256	48	LQFP64	
APM32E030F8P6	0	0	0	0	2	0	0	0	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	15	-	8	64	72	TSSOP20	
APM32E030G8U6	0	0	0	0	2	1	0	1	0	0	0	0	0	0	✓	✓	✓	1	1	0	5	2~3.6	23	-	8	64	72	QFN28	

APM32E0/F0系列基础型MCU – Arm® Cortex®-M0+

Part No.	Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/Os	Voltage(V)	Timer							Analog Interface						Connectivity									Package
							GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IWDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Cell	DAC 12-bit Channels	Analog Comparator	TSC (Channels)	SPI	I2S	I2C	U(S)ART	CAN	SDIO	USB Device	CEC		
APM32E030K8U6	72	64	8	-	27	2~3.6	5	0	1	1	✓	✓	✓	1	10	0	0	0	0	1	0	1	2	0	0	0	0	QFN32	
APM32E030K8T6	72	64	8	-	25	2~3.6	5	0	1	1	✓	✓	✓	1	10	0	0	0	0	1	0	1	2	0	0	0	0	LQFP32	
APM32E030C8U6	72	64	8	-	39	2~3.6	5	0	1	1	✓	✓	✓	1	10	0	0	0	0	2	0	2	2	0	0	0	0	QFN48	
APM32E030C8T6	72	64	8	-	39	2~3.6	5	0	1	1	✓	✓	✓	1	10	0	0	0	0	2	0	2	2	0	0	0	0	LQFP48	
APM32E030C8T7	72	64	8	-	39	2~3.6	5	0	1	1	✓	✓	✓	1	10	0	0	0	0	2	0	2	2	0	0	0	0	LQFP48	
APM32E030R8T6	72	64	8	-	55	2~3.6	5	0	1	1	✓	✓	✓	1	16	0	0	0	0	2	0	2	2	0	0	0	0	LQFP64	
APM32F051K6U6	48	32	8	-	27	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	14	1	1	1	2	0	0	0	1	QFN32	
APM32F051K8U6	48	64	8	-	27	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	14	1	1	1	2	0	0	0	1	QFN32	
APM32F051C6U6	48	32	8	-	39	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	17	1	1	1	2	0	0	0	1	QFN48	
APM32F051C8U6	48	64	8	-	39	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	17	2	1	2	2	0	0	0	1	QFN48	
APM32F051K6T6	48	32	8	-	25	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	13	1	1	1	2	0	0	0	1	LQFP32	
APM32F051K8T6	48	64	8	-	25	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	13	1	1	1	2	0	0	0	1	LQFP32	
APM32F051C6T6	48	32	8	-	39	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	17	1	1	1	2	0	0	0	1	LQFP48	
APM32F051C8T6	48	64	8	-	39	2~3.6	5	1	1	1	✓	✓	✓	1	10	1	1	2	17	2	1	2	2	0	0	0	1	LQFP48	
APM32F051R6T6	48	32	8	-	55	2~3.6	5	1	1	1	✓	✓	✓	1	16	1	1	2	18	2	1	2	2	0	0	0	1	LQFP64	
APM32F051R8T6	48	64	8	-	55	2~3.6	5	1	1	1	✓	✓	✓	1	16	1	1	2	18	2	1	2	2	0	0	0	1	LQFP64	
APM32F072C8U6	48	64	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	QFN48	
APM32F072CBU6	48	128	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	QFN48	
APM32F072C8T6	48	64	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	LQFP48	

APM32E0/FO系列基础型MCU – Arm® Cortex®-M0+

Part No.	Connectivity																											Package
	SPI	I2S	I2C	U(S)ART	CAN	SDIO	USB Device	CEC																				
Frequency(MHz)	FLASH(KB)	SRAM(KB)	FPU	I/Os	Voltage(V)	GPTMR(16bit)	GPTMR(32bit)	Advanced TMR(16bit)	Basic TMR	IWDT	WWDT	RTC	ADC 12-bit Cell	ADC 12-bit Channels	DAC 12-bit Cell	DAC 12-bit Channels	Analog Comparator	TSC (Channels)										
APM32F072CBT6	48	128	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	LQFP48
APM32F072CBT7	48	128	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	LQFP48
APM32F072R8T6	48	64	16	-	51	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	18	2	2	2	4	1	0	1	1	LQFP64
APM32F072RBT6	48	128	16	-	51	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	18	2	2	2	4	1	0	1	1	LQFP64
APM32F072V8T6	48	64	16	-	87	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	4	1	0	1	1	LQFP100
APM32F072VBT6	48	128	16	-	87	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	4	1	0	1	1	LQFP100
APM32F091CBU6	48	128	32	-	38	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	24	2	2	2	6	1	0	0	1	QFN48
APM32F091CCU6	48	256	32	-	38	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	24	2	2	2	6	1	0	0	1	QFN48
APM32F091CBT6	48	128	32	-	38	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	24	2	2	2	6	1	0	0	1	LQFP48
APM32F091CCT6	48	256	32	-	38	2~3.6	5	1	1	2	✓	✓	✓	1	10	1	2	2	24	2	2	2	6	1	0	0	1	LQFP48
APM32F091RBT6	48	128	32	-	52	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	8	1	0	0	1	LQFP64
APM32F091RCT6	48	256	32	-	52	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	8	1	0	0	1	LQFP64
APM32F091VBT6	48	128	32	-	88	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	8	1	0	0	1	LQFP100
APM32F091VCT6	48	256	32	-	88	2~3.6	5	1	1	2	✓	✓	✓	1	16	1	2	2	24	2	2	2	8	1	0	0	1	LQFP100

APM32系列电机控制专用MCU/SoC

Package	Floating Gate Voltage(V)	LDO(V)	Driver Voltage(V)	Integrated Gate Driver	Connectivity										Analog Interface										Timer	Voltage(V)	I/Os	SRAM(Kb)	FLASH(Kb)	M0CP Coprocessor	Frequency(MHz)	Core	Part No.								
	CEC				USB Device	SDIO	CAN	USART	I2C	I2S	SPI	TSC (Channels)	Operational Amplifier	Analog Comparator	DAC 12-bit Channels	DAC 12-bit Cell	ADC 12-bit Channels	ADC 12-bit Cell	RTC	WWDT	IWDT	Systick(24bit)	Basic TMR	Advanced TMR(6bit)										GPTMR(32bit)	GPTMR(16bit)						
LQFP48	-	-	-	-	0	0	0	0	1	1	2	1	1	1	1	1	0	0	4	4	2	0	0	0	0	16	1	✓	✓	✓	✓	✓	2	2~3.6	42	10	64	1	72	Cortex-M0+	APM32F035C8T7
QFN48	200	3.3	5~20	6N	0	0	0	0	1	1	2	1	1	1	1	13	0	0	4	4	2	0	0	0	0	13	1	✓	✓	✓	✓	✓	2	2~3.6	29	10	64	1	72	Cortex-M0+	APM32M3514C8U7
LQFP48	200	3.3	5~20	6N	0	0	0	0	1	1	2	1	1	1	1	13	0	0	4	4	2	0	0	0	0	13	1	✓	✓	✓	✓	✓	2	2~3.6	29	10	64	1	72	Cortex-M0+	APM32M3514C8T7

GHD系列电机专用栅极驱动器

Part No.	Output Channel	Driver Power Transistor Type	Vs Voltage(V)	Voltage(V)	Operating Temperature(°C)	Logic Control	IO+/IO-(A)	VCC(UV+/UV-)(V)	VBS(UV+/UV-)(V)	Direct Current Prevention	Over Temperature Protection	Dead Time(ns)	LDO	LDO Voltage(V)	Bootstrap Diode	Package
GHD3440PF	6	6N	200	5.5~18	-40~105	HIN/LIN	0.8/-1.0	4.6/4.3	4.4/4.1	✓	-	250	-	-	-	TSSOP20
GHD3440QE	6	6N	200	5.5~18	-40~105	HIN/LIN	0.8/-1.0	4.6/4.3	4.4/4.1	✓	-	250	-	-	-	QFN24
GHD3440R3	6	6N	200	5~20	-40~105	HIN/LIN	0.9/-1.1	4.6/4.3	4.3/4.0	✓	-	500	✓	3.3	-	SSOP24
GHD3440R5	6	6N	200	5~20	-40~105	HIN/LIN	0.9/-1.1	4.6/4.3	4.3/4.0	✓	-	500	✓	5.5	-	SSOP24
GHD1620T	2	2N	600	10~20	-40~105	HIN/LIN	0.23/-0.50	8.8/8.2	8.6/8.0	✓	✓	500	-	-	✓	SOP8
GHD3125R	6	3P+3N	40	5~30	-40~105	HIN/LIN	-	4.0/3.8	-	✓	✓	350	✓	5	-	SOP16

GW系列低功耗蓝牙MCU

Part No.	CPU	Protocol	Frequency (MHz)	FLASH (KB)	SRAM (KB)	I/Os	Voltage(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	WDT(16bit)	RTC	Connectivity														Package
																		GPADC 10bit Cell	GPADC 10bit Channels	DAC 12bit Channels	SPI(Master)	I2C(Master)	UART	USB	SDIO	PWM	Quadrature Decoder	ISO7816	Infrared Emitting & Receiving	Key/scan Decoder (Rows & Columns)	AES Encryption Engine	
GW8811KEU6	Cortex-M0	4.2	64	512	24	21	1.8~3.6	+4	-94	4.8	2.8	2.7	1	-40~+85	5	1	1	1	4+1	0	2	2	2	0	0	6	Yes	Yes	Yes	8 x 20	128 bit	QFN32
GW8811CEU6	Cortex-M0	4.2	64	512	32	32	1.8~3.6	+4	-94	4.8	2.8	2.7	1	-40~+85	5	1	1	1	8+1	0	2	2	2	0	0	6	Yes	Yes	Yes	8 x 20	128 bit	QFN48
GW3323HGU6	RISC-V	5.2	160	1024	256	24	3~4.5	+9	-94	18.7	28	500	4	-40~+85	6	1	1	1	16	2	1	1	3	1	1	9	0	0	0	0	0	QFN40
GW3323HIU6	RISC-V	5.2	160	4096	256	24	3~4.5	+9	-94	18.7	28	500	4	-40~+85	6	1	1	1	16	2	1	1	3	1	1	9	0	0	0	0	0	QFN40
GW3323HJU6	RISC-V	5.2	160	8192	256	24	3~4.5	+9	-94	18.7	28	500	4	-40~+85	6	1	1	1	16	2	1	1	3	1	1	9	0	0	0	0	0	QFN40

BMP系列电池电量监测计

Part No.	Core	Frequency(MHz)	Code FLASH(KB)	Data FLASH(KB)	SRAM(KB)	I/Os	Voltage(V)	Advanced TMR(16bit)	Basic TMR(18-bit)	IWDT	WWDT	ADC 16-bit Cell	CADC Channels	VADC Channels	I2C	HSC	UART	EXIT	SHA256	Package
BMP561Y8Y6	Cortex-M0+	4	64	4	8	5	2~5.5	2	1	✓	✓	2	2	2	1	1	1	3	1	WLCSP12
BMP561Y8D6	Cortex-M0+	4	64	4	8	5	2~5.5	2	1	✓	✓	2	2	2	1	1	1	3	1	DFN12
BMP561L8U6	Cortex-M0+	4	64	4	8	9	2~5.5	2	1	✓	✓	2	2	2	1	1	1	3	1	QFN16

APM32系列车规级MCU

Part No.	Frequency (MHz)	FLASH(KB)	SRAM(KB)	FPU	I/Os	Voltage(V)	Timer							Analog Interface					Connectivity													Security			Package			
							GPTMR(6bit)	GPTMR(32bit)	Advanced TMR(6bit)	Basic TMR	Systick(24bit)	IWDT	WWDT	RTC	ADC 12-bit Channels	ADC 12-bit Cell	DAC 12-bit Channels	Analog Comparator	TSC (Channels)	SPI	I2S	I2C	USART	CAN	SDIO	USB Device	CEC	USB OTG_FS	USB OTG_HS	DCI	SMC	DMC	Ethernet	RNG		AES/DES/TDES	BN/SM3/SM4	
APM32F003F6U7	48	32	4	-	16	2.4~5.5	1	0	2	1	✓	✓	✓	-	1	8	0	0	0	1	0	1	3	0	0	0	0	0	-	-	-	0	-	-	-	QFN20		
APM32F072RBT7	48	128	16	-	51	2~3.6	5	1	1	2	✓	✓	✓	✓	1	16	1	2	2	18	2	2	2	4	1	0	1	1	0	0	-	-	-	0	-	-	-	LQFP64
APM32F072CBT7	48	128	16	-	37	2~3.6	5	1	1	2	✓	✓	✓	✓	1	10	1	2	2	17	2	2	2	4	1	0	1	1	0	0	-	-	-	0	-	-	-	LQFP48
APM32A091RCT7	48	256	32	-	52	2~3.6	5	1	1	2	✓	✓	✓	✓	1	16	1	2	2	24	2	2	2	8	1	0	0	1	0	0	-	-	-	0	-	-	-	LQFP64
APM32F103RCT7	96	256	64	-	51	2~3.6	4	0	2	2	✓	✓	✓	✓	3	16	2	2	0	0	3	2	2	3+2	1	1	1	0	0	0	-	-	-	0	-	-	-	LQFP64
APM32A103VET7	120	512	128	✓	80	2~3.6	4	0	2	2	✓	✓	✓	✓	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	0	0	-	✓	-	0	-	-	-	LQFP100
APM32A103RET7	120	512	128	✓	51	2~3.6	4	0	2	2	✓	✓	✓	✓	3	16	2	2	0	0	3	2	2	3+2	2	1	1	0	0	0	-	-	-	0	-	-	-	LQFP64
APM32A103CBT7	96	128	20	✓	37	2~3.6	3	0	1	0	✓	✓	✓	✓	2	10	0	0	0	0	2	0	2	3	1	0	1	0	0	0	-	-	-	0	-	-	-	LQFP48
APM32A407VGT7	168	1024	192+4	✓	82	1.8~3.6	8	2	2	2	✓	✓	✓	✓	3	16	2	2	0	0	3	2	3	4+2	2	1	0	0	1	1+1	✓	✓	-	1	✓	-	✓	LQFP100
APM32A407ZGT7	168	1024	192+4	✓	114	1.8~3.6	8	2	2	2	✓	✓	✓	✓	3	24	2	2	0	0	3	2	3	4+2	2	1	0	0	1	1+1	✓	✓	-	1	✓	-	✓	LQFP144

G32A系列汽车通用MCU

Package	Security				Connectivity								Analog Interface				Timer							Voltage(V)	I/Os	FPU	SRAM(KB)	FLASH(KB)	Frequency (MHz)	Part No.
	BN/ SM3/ SM4	AES/DES/ TDES	RNG	Ethernet	SAI	CAN	LP2C	LPUART	USPI	PDU	Comparator with 8-bit DAC	ADC 12-bit Channels	ADC 12-bit Cell	RTC	EWDt	WDT	Systick(24bit)	LPTMR(32bit)	LPTMR(16bit)	FTMR(6bit)										
LQFP64	-	✓	✓	✓	0	0	3	3	3	1	3	2	3	16+13	2	✓	✓	✓	✓	1	1	1	4	58	✓	64	512	112	G32A1445UATOMLH	
LQFP100	-	✓	✓	✓	0	0	3	3	3	1	3	2	3	16+16	2	✓	✓	✓	✓	1	1	1	4	89	✓	64	512	112	G32A1445UATOMLL	
LQFP64	-	✓	✓	✓	0	0	3	3	3	1	3	2	3	16+13	2	✓	✓	✓	✓	1	1	1	4	58	✓	128	1024	112	G32A1465UATOMLH	
LQFP100	-	✓	✓	✓	0	0	3	3	3	1	3	2	3	16+16	2	✓	✓	✓	✓	1	1	1	4	89	✓	128	1024	112	G32A1465UATOMLL	

GURC系列超声波传感和信号处理器

Part No.	Interface	Transducer frequency (kHz)	Operating Frequency (MHz)	Transducer driver type / output (mA)	Measurable Distance (cm)	V _{supply} (V)	Temp. Range (°C)	Package
GURC01	3-wire (bidirectional) SPI	30~83	12	187 ~ 404	10~700	6~18	-40~+105	QFN20

GALT系列汽车前灯LED矩阵控制IC

Part No.	Voltage (V)	Switch Channels	Max Current Per Switch (A)	ADC Cells	ADC Channels	PWM Dimming	I2C	UART	WDT	R _{DS(on)} (mohm)	Temp. Range (°C)	Package	Diagnosis and Protection
GALT61120	4.5~60	12	1.5	2*8-bit	2	10-bit	1	1	1	120	-40~+125	E-TQFP48	Fault Diagnosis, Open Circuit Fault Diagnosis, Short Circuit Fault Diagnosis, Temperature Compensation

极海产品开发生态

极海具备完善的生态体系，可提供灵活便捷、简单易用、丰富多样的软硬件开发工具及生态平台，为工程师提供出色的使用体验，助力客户缩短产品设计时间、降低开发成本，实现性能最优化。



开发设计

IDE



MCAL



SDK



可靠性测试



安全库



官方工具

烧录器



仿真器



MINI Board



TINY Board



EVAL Board



DFU



ISP



PROG



技术支持



选型工具

选型手册
在线选型工具

技术文档

数据手册
用户手册
应用笔记
FAQ

样品支持

样品
开发板

服务支持

销售
AE
FAE

第三方工具



生态平台



培训与宣传



在线研讨会

线上直播

线下培训

校园生态



师资培训

校园宣讲

大学生
设计竞赛

软硬件工具

GEEHY-LINK 仿真器

GEEHY-LINK是一款仿真器和编程器一体化的开发工具，可以在Keil集成开发环境下，对APM32全系列MCU芯片进行在线调试和仿真



APM32 PROG 烧录器

APM32 PROG烧录器是针对APM32全系列MCU的程序下载设备，利用计算机连接各类接口，配合上位机软件，可将编写好的程序写入芯片中



实时系统

- FreeRTOS
- RT-Thread

开发工具

- Keil MDK-Arm
- IAR Embedded Workbench
- Visual Studio Code
- Eclipse

配套资料

- 使用说明书
- 原理图

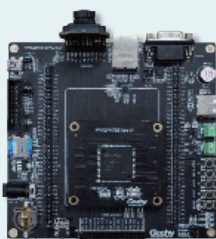
MINI开发板



TINY开发板



EVAL评估板



Micro-EVB板



命名与封装

缩写	全称	缩写	全称
ADC	Analog-to-digital converter	ISP	In-situ programming
ART	Auto-reload timer	I ² C	Inter-integrated circuit
CAN	Controller area network	I ² S	Inter-IC sound
CC	Capture compare	LCD	Liquid crystal display controller
CEC	Consumer electronic controller	LIN	Local interconnect network
COMP	Analog comparators	LVD	Low voltage detection
CRC	cyclic redundancy check	M0CP	Coprocessor
CSS	Clock security system	MMC	MultiMediaCard
DAC	Digital-to-Analog Converter	NMI	Non-maskable interrupt
DCI	Digital Camera Interface	PDR	Power down reset
DMA	Direct memory access	PLL	Phase locked loop
EMMC	External Memory Controller	POR	Power-on reset
DMC	Dynamic memory Controller	PVD	Programmable voltage detector
SMC	Static Memory Controller	PWM	Pulse width modulation
FPU	Float Point Unit	RTC	Real-time clock timer
GPTMR	General-Purpose Timer	SAI	Serial Audio Interface
IC/OC	Input capture/output compare	SC	Smartcard
PG	programming	SDIO	Secure digital input/output interface
IR	Infrared	SD/MMC	Secure Digital / Multi Media Card
IrDA	Infrared data association	TMR	Timer

缩写	全称
SPI	Serial peripheral interface
QSPI	Quad Serial Peripheral Interface
UART	Universal asynchronous receiver transmitter
USART	Universal sync/async receiver transmitter
USB	Universal Serial Bus
WUPT	Auto Wakeup
WDG	Watchdog timer
IWDT	Independent Watchdog Timer
WWDT	Windows Watchdog Timer

封装

LFBGA	Low Profile Fine Pitch Ball Grid Array
TFBGA	Thin Profile Fine Pitch Ball Grid Array
UFBGA	Ultra Thin Profile Fine Pitch Ball Grid Array
SOP	Small Outline package
TSSOP	Thin Small Outline Package
LQFP	Low Profile Quad Flat Package
QFN	Quad Flat No-lead
WLCSP	Wafer-Level Chip-Scale Package

TECHNOLOGY INSPIRED.

技术赋能
让灵感成为现实

极海总部

珠海香洲区广湾街83号01栋

☎ 0756 6299999

极海上海

上海市闵行区申滨南路1126号（龙湖天街C栋）701A

☎ 13601404717

极海深圳

深圳宝安区前海hop国际1501

☎ 0755 26923525

极海成都

成都高新区天府五街200号菁蓉汇5号楼B区8层803/804室

☎ 028 63108518

极海广州

广州番禺区汉溪大道386号番禺万达广场B4栋1501

☎ 020 22281152



极海官网



极海公众号



极海技术小程序



极海开发者社区



极海BiliBili



21ic技术论坛



珠海极海半导体有限公司
GEEHY SEMICONDUCTOR CO., LTD.

✉ info@geehy.com

🌐 www.geehy.com

☎ 0756-6299999

📍 广东省珠海市香洲区广湾街83号01栋

Copyright© Geehy Semiconductor Co., Ltd.Feb-2025. The information contained herein is subject to change without notice. Geehy shall not be liable for technical or editorial errors or omissions contained herein. Photographed products may not always match the description. All brand names & trademarks are the properties of their respective holders and used for descriptive purposes only.