

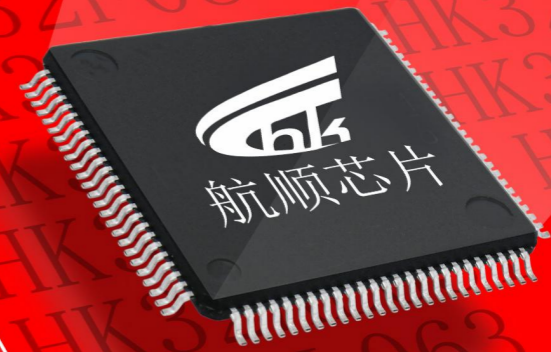
使命：车规SoC+高端MCU超市双战略 让万物互联更智慧 让智慧生活更美好
愿景：AIOT多核异构HK32MCU为核心 打造航顺无边界生态平台级企业



航顺HK32MCU

车规SOC+高端MCU超市双战略 让万物互联更智慧让智慧生活更美好

航顺芯 中国芯 世界芯



深圳行业领袖百强企业
深圳二十大创业榜样
深圳十大风云人物
中国十大IC独角兽
国家级高新技术企业
二十六大家族300余款32位MCU
深信微电子学院智能芯片设计工程中心
国家级专精特新重点小巨人企业

强大战略股东阵容

深圳市国资委深投控
汇顶科技
顺为资本
方广资本 美格智能
海尔汇智 中航
中科院国科投等



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COMPANY

公司介绍 PROFILE

航顺芯片2013年成立于深圳，在成都和上海设立分公司和办事处，作为世界顶级CPU研发团队，我们致力以“车规SoC+高端MCU超市双战略、让万物互联更智慧让智慧生活更美好”为使命，实现“AIOT多核异构HK32MCU为核心、打造航顺无边界生态平台级企业”的伟大愿景。

已量产数模混合8寸130nm至12寸40nm七种工艺平台，ARMCortex-M0、M0+、M3、M4及RISC-V等二十六大家族300余款工业/商业/车规级、通用/专用/定制化32位MCU。航顺HK32MCU分为经济型、主流型、低功耗型、高性能型、专用型和创新型。与小米、长虹、康佳、海信、TCL、创维、友讯达、上海沪工、众辰等企业完成批量交付。同时与国内众多高校及ARM-KEIL、IAR等达成长期生态计划和战略合作，用工匠精神建立完善的航顺HK32MCU产品阵列和生态体系。

深圳市国资委深投控、深创投、汇顶科技、中航、海尔、方广资本、顺为资本、美格智能、中科院国科投等战略股东从资金、供应链、智能终端应用全面赋能。航顺芯片先后获得国家级专精特新重点小巨人、国家级高新技术企业、中国创新创业大赛深圳总决赛亚军、深圳十大风云人物、深圳三十天创业榜样、深圳百名创新奋斗者等荣誉，共计申请知识产权发明专利超过200件并正在持续增长中。

战略投资方介绍：

深圳市国资委深投控：2021年世界500强排名396位，公司注册资本280.09亿元，全资、控股企业41家，其中上市公司13家。

深创投：1999年由深圳市政府出资并引导社会资本出资设立，现注册资本100亿元，管理各类资金总规模约4250亿元。

汇顶科技 (SH603160)：基于芯片设计和软件开发的整体应用解决方案提供商。产品和解决方案已经广泛应用于华为、OPPO、vivo、小米、Samsung、Google、Amazon、Dell、HP、LG、一加、Nokia、ASUS等国际国内知名品牌，服务全球数亿人群。

顺为资本：由雷军先生和许达来先生创立于2011年，目前管理超过50亿美元规模的美元和人民币双币基金。出资人主要来自于主权基金、家族基金、母基金及大学基金会等全球顶级投资机构。

海尔资本：海尔汇智，是海尔旗下投资科技供应链、半导体相关高端智能制造的专业基金。

方广资本：由前华为公司轮值CEO和前富达风险投资公司 (Fidelity Asia) 中国区合伙人联合创立。主要投资处于成长爆发期的科技类企业，诸多被投企业已成为行业领军者，并保持高速成长势头。

中科院国科投：是中国科学院国有资产经营有限责任公司控股、国务院国有资产监督管理委员会和员工持股公司参股的专业投资管理公司。

中航集团：中航集团是由中央管理的国有特大型企业，下辖100余家成员单位、26家上市公司员工逾45万人。注册资本640亿人民币年营业额达4000多亿人民币。世界500强企业排名143位。

美格智能 (股票代码：002881)：全球领先的无线通信模组及解决方案提供商，物联网行业客户已经遍及全球100多个国家和地区，物联网研发人员规模超过千人。



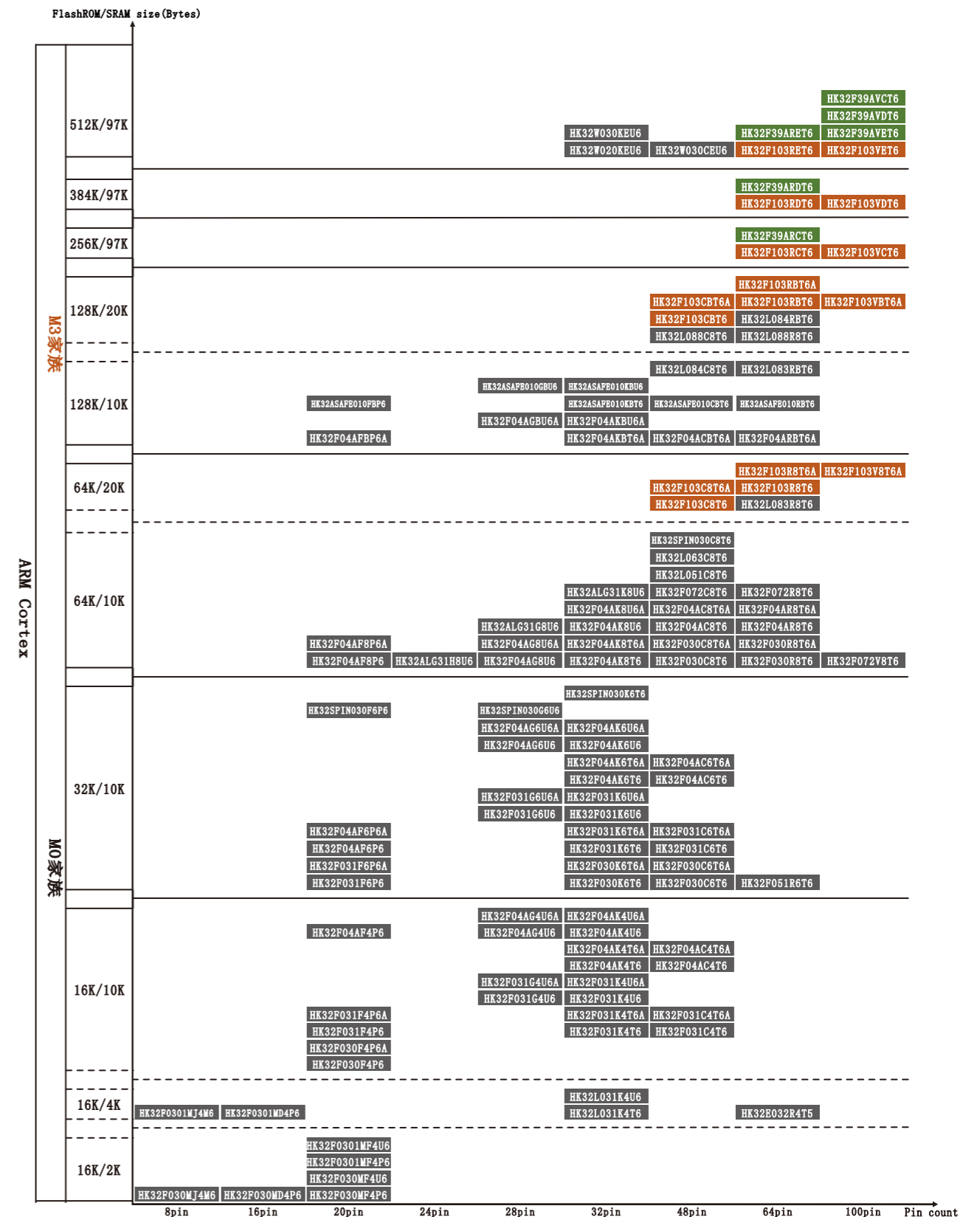
航顺芯片 - MCU产品线

创新型	高性能	低功耗	车规级/工业级	经济型	专用型
Cortex-M3 +触摸+指纹算法 U3009系列 <ul style="list-style-type: none"> ✓ 120MHz CM3, 1KB L1 Cache ✓ 527KB FLASH, 97KB SRAM ✓ 支持多点触摸 ✓ 内置HK独家指纹算法 	Cortex-M3 +浮点协处理器 F39A系列 <ul style="list-style-type: none"> ✓ 120MHz CM3, 1KB L1 Cache ✓ 527KB FLASH, 97KB SRAM ✓ 指令加密存储和执行 ✓ 32bit浮点运算协处理器 ✓ 支持部分64bit算术运算 ✓ 内置ABS/HASH/TRNG ✓ 单芯片完成图像采集处理显示 ✓ SAI接口支持大部分音频协议 ✓ 1GB外挂存储器并行接口 ✓ 256MB外挂FLASH串行SPI接口 ✓ 支持指令外部存储加密和执行 ✓ 丰富的通信接口和模拟资源 	Cortex-M0 L08X系列 <ul style="list-style-type: none"> ✓ 48MHz CM0 ✓ 128KB FLASH, 10KB SRAM ✓ 4KB true EEPROM ✓ 指令加密存储和执行 ✓ 内置ABS/HASH/TRNG ✓ 硬件除法和开方运算模块 ✓ 10mA@48MHz工作电流 ✓ 40uA @32kHz工作电流 ✓ 500uA STOP待机电流 ✓ 200uA Standby待机电流 ✓ 10mA Shutdown关机电流 ✓ Shutdown模式可引脚唤醒 	Cortex-M3 F103系列 <ul style="list-style-type: none"> ✓ 96MHz CM3 ✓ 128KB FLASH, 20KB SRAM ✓ 2.0V~5.5V超宽工作电压 ✓ 1.8V~5.5V独立VBAT电源域 ✓ 硬件除法和开方运算模块 ✓ 软件快速替代STM32F103 	Cortex-M0 F030M系列 F0301M系列 <ul style="list-style-type: none"> ✓ 超低售价 (< 1RMB) ✓ 48MHz CM0 ✓ 片内精度±1% 48MHz RC时钟 ✓ 16KB FLASH, 4KB SRAM ✓ 512B true EEPROM ✓ 2mA @48MHz工作电流 ✓ 最低10mA可唤醒待机电流 ✓ 20-pin产品提供18个GP0 ✓ 8-pin产品提供6个GP10 ✓ 外设I/O可配置在任意GP0上 ✓ 快速替代STM8S001/S003 ✓ HBM ESD: 6KV 	Cortex-M0 A103X系列 <ul style="list-style-type: none"> ✓ 光模块专用CM0 MCU ✓ 基于应用深度定制
Cortex-M3 +图像AI识别 HP103系列 <ul style="list-style-type: none"> ✓ 120MHz CM3, 1KB L1 Cache ✓ 527KB FLASH, 97KB SRAM ✓ 指令加密存储和执行 ✓ 内置HK专利图像识别算法 	Cortex-M4 开发中... Cortex-M3 + RISC-V U1xx9系列 <ul style="list-style-type: none"> ✓ 丰富的通信接口和模拟资源 ✓ 支持指令外部存储加密和执行 	Cortex-M4 开发中... <ul style="list-style-type: none"> ✓ CM4加速完成任务 ✓ CM4加快事件响应速度 ✓ 加大应用中待机时间比例 ✓ 提供高性能以及超低功耗 ✓ 例如便携式健康医疗设备 ✓ 例如个人穿戴式设备 	Cortex-M0 F04A系列 <ul style="list-style-type: none"> ✓ 72MHz CM0 ✓ 64KB FLASH, 10KB SRAM ✓ 指令加密存储和执行 ✓ 2.0V~5.5V超宽工作电压 ✓ 1.8V~5.5V独立VBAT电源域 ✓ 硬件除法和开方运算模块 ✓ 内置USB1.1 Device接口 ✓ 软硬件快速替代STM32F03X 	Cortex-M0 E032X系列 <ul style="list-style-type: none"> ✓ 48MHz+LCD Driver 4*32 	Cortex-M3 SPINM3 <ul style="list-style-type: none"> ✓ 电机专用CM3 MCU ✓ FOC核心算法硬件化设计 ✓ 内置电机应用模拟电路 ✓ 支持双FOC算法应用

航顺HK系列命名规则

HK32 F 1 03 C 8 T 6

专用型产品	HK32W0 HK32ALG3 HK32SPIN HK32ASAFE	<p>产品系列 基于ARM内核的32位处理器、SoC</p> <p>产品类型 E (Economy 经济型) F (Formal 主流型) L (Low Energy 低能耗) AL (Application Laser 光模块专用型) AWL (Application Wireless Link 无线专用型) AW (Application Wearable 智能穿戴专用型) ASPIN (Application Spin 电机专用型) AM (Application Meter 计量表专用型) AH (Application Health 健康医疗专用型)</p> <p>子系列 (内核) 0 = Cortex-M0/M0+ 1 = Cortex-M3 2 = 预留 3 = Cortex-M3+协处理器 4 = Cortex-M4 5 = Cortex-M23 6 = Cortex-M33 7 = Cortex-M7 8 = Cortex-M55 G = 通用型CPU, 例如ARM, RISC-V U = 定制型CPU</p> <p>子系列 (外设) x0 = 超值型 x1 = 入门型 x2 = USB型 x3 = 性能型 x4 = 预留 x5 = USB2. OHS/OTG型 x6 = 预留 x7 = 以太网 x8 = 预留 x9 = 高级外设接口 (QSPI/TFT/DCMI) xA = 安全类</p> <p>管脚数 J = 8pins D = 16pins F = 20pins K = 32pins C = 48pins R = 64pins V = 100pins</p> <p>闪存容量 4 = 16KB 6 = 32KB 8 = 64KB B = 128KB C = 256KB D = 384KB E = 512KB</p> <p>封装 H = BGA M = SOP8 P = TSSOP T = LQFP U = QFN Y = WLCS64</p> <p>Temperature range 6 = -40°C to 85°C 7 = -40°C to 105°C 8 = -40°C to 125°C 9 = -55°C to 150°C</p>
高性能产品	HK32F4 HK32F3	
主流型产品	HK32F1 HK32F0	
低能耗产品	HK32L0	
经济型产品	HK32F030M HK32F031M	





Available
Not available

32位ARM® Cortex®-(M0)HK32F030M(超低价)家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Lists various HK32F030M series components.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode. Interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M0)HK32F0301M(超低价)家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Part Number. Lists various HK32F0301M series components.

(2) The SPI interface can be used either in SPI mode or in I2S audio mode. Interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M0)HK32E032 (LCD驱动) 家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity										Analog Function					Co-Processor		Security			Power supply		Power consumption					Operating temperature(°C)	Part Number																		
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTTM	Usart	Uart	Lowpower Uart	IIC	SPI(I)	IIS(I)	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD Driver	Camera DCMI	FSMC Units(Banks)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	电机算法硬件化			Type	Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC					
HK32E032R4T5	LQFP64	Cortex-M0	48	16	4	448	13	1 (16)	1 (16)	1 (16)	-	1 (24)	2	-	-	1	0	-	1	1	1	1	-	-	-	-	4*32	-	-	-	1 (x5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4 ~ 3.6	-	71uA /MHz	37uA /MHz	30 uA @3.3V	-	-	-	-25 ~75	-

32位ARM® Cortex®-(M0)HK32F030家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity										Analog Function					Co-Processor		Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number																				
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTTM	Usart	Uart	Lowpower Uart	IIC	SPI(I)	IIS(I)	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD TFT	Camera DCMI	CLU	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	电机算法硬件化			Type	Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC							
HK32F030R8T6	LQFP64	Cortex-M0	72	64	10	-	55	4(16) 1(32)	1 (16)	1 (16)	-	1 (24)	2	1	1	2	-	2	2	2	-	-	-	-	1 (x5)	-	-	-	-	-	1 (x16+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	-	120uA /MHz	60uA /MHz	10.5 uA @3.3V	1.6uA @3.3V	2.6uA@3.3v	-40 ~ 105	STM32F030R8T6			
HK32F030C8T6	LQFP48	Cortex-M0	72	64	10	-	39	4(16) 1(32)	1 (16)	1 (16)	-	1 (24)	2	1	1	2	-	2	2	2	-	-	-	-	1 (x5)	-	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	-	120uA /MHz	60uA /MHz	10.5 uA @3.3V	1.6uA @3.3V	2.6uA@3.3v	-40 ~ 105	STM32F030C8T6	
HK32F030C6T6	LQFP48	Cortex-M0	72	32	10	-	39	4(16) 1(32)	1 (16)	1 (16)	-	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x5)	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	-	120uA /MHz	60uA /MHz	10.5 uA @3.3V	1.6uA @3.3V	2.6uA@3.3v	-40 ~ 105	STM32F030C6T6	
HK32F030K6T6	LQFP32	Cortex-M0	72	32	10	-	26	4(16) 1(32)	1 (16)	1 (16)	-	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x5)	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	-	120uA /MHz	60uA /MHz	10.5 uA @3.3V	1.6uA @3.3V	2.6uA@3.3v	-40 ~ 105	STM32F030K6T6	
HK32F030F4P6	TSSOP20	Cortex-M0	72	16	10	-	15	4(16) 1(32)	1 (16)	1 (16)	-	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x5)	-	-	-	-	1 (x9+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	-	120uA /MHz	60uA /MHz	10.5 uA @3.3V	1.6uA @3.3V	2.6uA@3.3v	-40 ~ 105	STM32F030F4P6	
HK32F030R8T6A	LQFP64	Cortex-M0	96	64	10	-	55	5(16) 1(32)	1 (16)	1 (16)	1	1 (24)	2	1	1	2	-	1	2	2	2	-	-	-	-	1 (x7)	-	-	-	-	1 (x16+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8~3.6	-	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F030R8T6		
HK32F030C8T6A	LQFP48	Cortex-M0	96	64	10	-	39	5(16) 1(32)	1 (16)	1 (16)	1	1 (24)	2	1	1	2	-	1	2	2	2	-	-	-	-	1 (x7)	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8~3.6	-	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F030C8T6
HK32F030C6T6A	LQFP48	Cortex-M0	96	32	10	-	39	5(16) 1(32)	1 (16)	1 (16)	1	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x7)	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8~3.6	-	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F030C6T6	
HK32F030K6T6A	LQFP32	Cortex-M0	96	32	10	-	26	5(16) 1(32)	1 (16)	1 (16)	1	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x7)	-	-	-	-	1 (x10+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8~3.6	-	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F030K6T6
HK32F030F4P6A	TSSOP20	Cortex-M0	96	16	10	-	15	5(16) 1(32)	1 (16)	1 (16)	1	1 (24)	2	1	1	1	-	1	1	1	-	-	-	-	1 (x7)	-	-	-	-	1 (x9+2)	-	-	1	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8~3.6	-	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F030F4P6

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.



32位ARM® Cortex®-(M0)HK32F031家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include various device models like HK32F031C6T6, HK32F031C4T6, etc.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.

32位ARM® Cortex®-(M0)HK32F04A家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity											Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number												
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI(1)	IIS(1)	SDIO	USB FS	USB HS	CAN 2.0A/B	Units(Channels)	Ethernet	QSPI Units(Banks)		LCD TFT	Camera DCMI	CLU	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIV/SQRT			电机算法硬件化	Type	Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPs	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop
HK32F04AC6T6A	LQFP48	Cortex-M0	96	32	10	-	39	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AC4T6A	LQFP48	Cortex-M0	96	16	10	-	39	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AKBT6A	LQFP32	Cortex-M0	96	128	10	-	25	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK8T6A	LQFP32	Cortex-M0	96	64	10	-	25	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK6T6A	LQFP32	Cortex-M0	96	32	10	-	25	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK4T6A	LQFP32	Cortex-M0	96	16	10	-	25	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AKBU6A	UFQFPN32	Cortex-M0	96	128	10	-	27	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK8U6A	UFQFPN32	Cortex-M0	96	64	10	-	27	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK6U6A	UFQFPN32	Cortex-M0	96	32	10	-	27	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AK4U6A	UFQFPN32	Cortex-M0	96	16	10	-	27	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AGBU6A	UFQFPN28	Cortex-M0	96	128	10	-	23	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AG8U6A	UFQFPN28	Cortex-M0	96	64	10	-	23	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AG6U6A	UFQFPN28	Cortex-M0	96	32	10	-	23	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AG4U6A	UFQFPN28	Cortex-M0	96	16	10	-	23	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x10+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AFBP6A	TSSOP20	Cortex-M0	96	128	10	-	15	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	1	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x9+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AF8P6A	TSSOP20	Cortex-M0	96	64	10	-	15	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	1	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x9+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AF6P6A	TSSOP20	Cortex-M0	96	32	10	-	15	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	1	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x9+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-
HK32F04AF4P6A	TSSOP20	Cortex-M0	96	16	10	-	15	5(16) 1(32)	1(16)	1(16)	1(24)	2	1	1	2	-	1	1	2	2	-	-	-	1	1(x7)	-	-	-	-	4	3	1(x9+3)	-	-	1	-	√	√	-	-	√	√	√	-	1.8~3.6V	1.8~3.6V	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.

32位ARM® Cortex®-(M0)HK32F042家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity												Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number											
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI0	I2S0	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD TFT		Camera DCMI	CLU	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU Type			Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby
HK32F042RBT6	LQFP64	Cortex-M0	96	128	10	-	55	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042RBT6			
HK32F042R8T6	LQFP64	Cortex-M0	96	64	10	-	55	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042R8T6			
HK32F042CBT6	LQFP48	Cortex-M0	96	128	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042CBT6		
HK32F042C8T6	LQFP48	Cortex-M0	96	64	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042C8T6	
HK32F042CBU6	UFQFPN48	Cortex-M0	96	128	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042CBU6	
HK32F042C8U6	UFQFPN48	Cortex-M0	96	64	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F042C8U6

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.

32位ARM® Cortex®-(M0)HK32F051家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity												Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number														
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI0	I2S0	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD TFT		Camera DCMI	CLU	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU Type			Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC		
HK32F051RBT6	LQFP64	Cortex-M0	96	128	10	-	55	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051RBT6		
HK32F051R8T6	LQFP64	Cortex-M0	96	64	10	-	55	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051R8T6	
HK32F051CBT6	LQFP48	Cortex-M0	96	128	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051CBT6	
HK32F051C8T6	LQFP48	Cortex-M0	96	64	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051C8T6	
HK32F051CBU6	UFQFPN48	Cortex-M0	96	128	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051CBU6	
HK32F051C8U6	UFQFPN48	Cortex-M0	96	64	10	-	39	5(16) 1(32)	1(16)	1(16)	1(16)	1(24)	2	1	1	2	-	1	2	2	2	-	-	1	1(x7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	STM32F051C8U6

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.



32位ARM® Cortex®-(M0)HK32F072家族

Table with columns: Part Number, Package, Core, Max Frequency(MHz), Memory Size (Flash, SRAM, EEPROM), GPIO, Timer (General, Advanced, Basic, LowPower, SysTick, Watchdog, RTC, IRTIM, Usart, Lowpower Usart, IIC, SPI, IIS, SDIO, USB FS, USB HS, CAN 2.0A/B, DMA, Ethernet, QSPI, LCD TFT, Camera DCM, Comparator, FSMC), Connectivity (12-bit ADC, 16-bit ADC, 12-bit DAC, Temperature sensor, Operational amplifier, DVSQRT, FPU, Co-Processor, Security (AES, Crypto-HASH, TRNG), Power supply (Supply Voltage, Battery for RTC), Power consumption (Dynamic, SLEEP, Stop, Standby, VBAT RTC), Operating temperature(C), Pin to Pin Part Number.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.

32位ARM® Cortex®-(M3)HK32AUTO103(车规级)家族

Table with columns: Part Number, Package, Core, Max Frequency(MHz), Memory Size (Flash, SRAM, EEPROM), GPIO, Timer (General, Advanced, Basic, LowPower, SysTick, Watchdog, RTC, IRTIM, Usart, Lowpower Usart, IIC, SPI, IIS, SDIO, USB FS, USB HS, CAN 2.0A/B, DMA, Ethernet, QSPI, LCD TFT, Camera DCM, Comparator, FSMC), Connectivity (12-bit ADC, 16-bit ADC, 12-bit DAC, Temperature sensor, Operational amplifier, DVSQRT, FPU, Co-Processor, Security (AES, Crypto-HASH, TRNG), Power supply (Supply Voltage, Battery for RTC), Power consumption (Dynamic, SLEEP, Stop, Standby, VBAT RTC), Operating temperature(C), Pin to Pin Part Number.

32位ARM® Cortex®-(M3)HK32F103家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity														Analog Function					Co-Processor			Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number										
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTM	Usart	Usart	Lowpower Usart	IIC	SPI1	I2S1	SDIO	USB FS	USB HS	CAN 2.0A/B	Units(Channels)	Ethernet	OSPI Units(Banks)	LCD TFT	Camera DCMI	Units(Banks)	FSMC	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU	Type	Max Freq (MHz)	AES	Crypto-HASH			TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC	
HK32F103RBT6	LQFP64	Cortex-M3	96	128	20	-	51	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	175uA/MHz	80uA/MHz	10uA @3.3V	1.6uA @3.3V	1.5uA @3.3V	-40 ~ 105	STM32F103RBT6	
HK32F103R8T6	LQFP64	Cortex-M3	96	64	20	-	51	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	175uA/MHz	80uA/MHz	10uA @3.3V	1.6uA @3.3V	1.5uA @3.3V	-40 ~ 105	STM32F103R8T6	
HK32F103CBT6	LQFP48	Cortex-M3	96	128	20	-	37	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x10)	-	-	1	-	√	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	175uA/MHz	80uA/MHz	10uA @3.3V	1.6uA @3.3V	1.5uA @3.3V	-40 ~ 105	STM32F103CBT6	
HK32F103C8T6	LQFP48	Cortex-M3	96	64	20	-	37	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x10)	-	-	1	-	√	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	175uA/MHz	80uA/MHz	10uA @3.3V	1.6uA @3.3V	1.5uA @3.3V	-40 ~ 105	STM32F103C8T6	
HK32F103VBT6A	LQFP100	Cortex-M3	120	128	20	-	80	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103VBT6	
HK32F103V8T6A	LQFP100	Cortex-M3	120	64	20	-	80	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103V8T6	
HK32F103RBT6A	LQFP64	Cortex-M3	120	128	20	-	51	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103RBT6	
HK32F103R8T6A	LQFP64	Cortex-M3	120	64	20	-	51	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x16)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103R8T6	
HK32F103CBT6A	LQFP48	Cortex-M3	120	128	20	-	37	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x10)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103CBT6	
HK32F103C8T6A	LQFP48	Cortex-M3	120	64	20	-	37	3 (16)	1 (16)	-	-	1 (24)	2	1	-	3	-	-	2	2	2	-	1	-	1	2 (x12)	-	-	-	-	-	-	2 (x10)	-	-	1	-	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103C8T6	
HK32F103VET6	LQFP100	Cortex-M3	120	527	97	-	80	4 (16)	1 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	1 (x4)	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103VET6
HK32F103VDT6	LQFP100	Cortex-M3	120	384	97	-	80	4 (16)	2 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	1 (x4)	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103VDT6
HK32F103VCT6	LQFP100	Cortex-M3	120	256	97	-	80	4 (16)	2 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	1 (x4)	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103VCT6
HK32F103RET6	LQFP64	Cortex-M3	120	527	97	-	51	4 (16)	2 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	-	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103RET6
HK32F103RDT6	LQFP64	Cortex-M3	120	384	97	-	51	4 (16)	2 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	-	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103RDT6
HK32F103RCT6	LQFP64	Cortex-M3	120	256	97	-	51	4 (16)	2 (16)	2 (16)	-	1 (24)	2	1	-	5	-	-	2	3	3	1	1	-	1	2 (x12)	-	-	-	-	-	-	3 (x16)	-	2 (x2)	1	-	√	√	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	133uA/MHz	58.3uA/MHz	30uA @3.3V	2uA @3.3V	1uA @3.3V	-40 ~ 105	STM32F103RCT6

(1) The SPI2 and SPI3 interfaces give the flexibility to work in an exclusive way in either the SPI mode or the I2S audio mode.
(2) For the LQFP100 packages, only FSMC Bank1 and Bank2 are available. Bank1 can only support a multiplexed NOR/PSRAM memory using the NE1 Chip Select. Bank2 can only support a 16- or 8-bit NAND Flash memory using the NCE2 Chip Select. The interrupt line cannot be used since Port G is not available in this package.



32位ARM® Cortex®-(M4) HK32F39A(浮点运算) 家族

Table with 32 columns: Part Number, Package, Core, Max Frequency, Memory Size, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32F39AVET6, HK32F39AVDT6, HK32F39AVCT6, HK32F39ARET6, HK32F39ARDT6, HK32F39ARCT6.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.
(2) For the LQFP100 and BGA100 packages, only FSMC Bank1 and Bank2 are available. Bank1 can only support a multiplexed NOR/PSRAM memory using the NE1 Chip Select. Bank2 can only support a 16- or 8-bit NAND Flash memory using the NCE2 Chip Select. The interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M0) HK32L0超低功耗家族(低压版)

Table with 32 columns: Part Number, Package, Core, Max Frequency, Memory Size, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32L031K4U6, HK32L031K4T6, HK32L051K6U6, HK32L051K6T6, HK32L051C8T6, HK32L052K6U6, HK32L052K6T6, HK32L063C8T6, HK32L083R8T6, HK32L083RBT6, HK32L084CBT6, HK32L084RBT6, HK32L088C8T6, HK32L088R8T6.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode. Interrupt line cannot be used since Port G is not available in this package.



32位ARM® Cortex®-(M0) HK32L0超低功耗家族(高压版)

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32L031K4U6H, HK32L031K4T6H, HK32L051K6U6H, HK32L051K6T6H, HK32L051C8T6H, HK32L052K6U6H, HK32L052K6T6H, HK32L063C8T6H, HK32L083R8T6H, HK32L083R8T6H, HK32L084C8T6H, HK32L084R8T6H, HK32L088C8T6H, HK32L088R8T6H.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode. Interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M0) HK32ALG31x(光模块) 家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32ALG31K8U6, HK32ALG31G8U6, HK32ALG31H8U6.



32位ARM® Cortex®-(M0)HK32W0xx(蓝牙BLE)家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32W030KEU6, HK32W020KEU6, HK32W030CEU6.

32位ARM® Cortex®-(M0)HK32ASPINO10(电机驱动)家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32ASPINO10RBT6, HK32ASPINO10CBT6, HK32ASPINO10KBT6, HK32ASPINO10KBU6, HK32ASPINO10GBU6, HK32ASPINO10FBP6, HK32ASPINO10RBT6A, HK32ASPINO10CBT6A, HK32ASPINO10KBT6A, HK32ASPINO10KBU6A, HK32ASPINO10GBU6A, HK32ASPINO10FBP6A.



32位ARM® Cortex®-(M0)HK32ASAFE010 (安全管理) 家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32ASAFE010RBT6, HK32ASAFE010CBT6, HK32ASAFE010KBT6, HK32ASAFE010KBU6, HK32ASAFE010GBU6, HK32ASAFE010FBP6.

32位ARM® Cortex®-(M3)+RISC-V HK32U1009 (多核异构) 家族

Table with columns: Part Number, Package, Core, Max Frequency, Memory Size, GPIO, Timer, Connectivity, Analog Function, Co-Processor, Security, Power supply, Power consumption, Operating temperature, Pin to Pin Part Number. Rows include HK32U1009VET6, HK32U1009VDT6, HK32U1009VCT6, HK32U1009RET6, HK32U1009RDT6, HK32U1009RCT6.

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.
(2) For the LQFP100 and BGA100 packages, only FSMC Bank1 and Bank2 are available. Bank1 can only support a multiplexed NOR/PSRAM memory using the NE1 Chip Select. Bank2 can only support a 16- or 8-bit NAND Flash memory using the NCE2 Chip Select. The interrupt line cannot be used since Port G15 is not available in this package.

32位ARM® Cortex®-(M4)+RISC-V HK32U3019(多核异构)家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity										Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number															
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	Low Power Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI(1)	IIS(1)	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet		QSPI Units(Banks)	LCD TFT	Camera DCMI	FSMC Units(Banks)(2)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier			DIVSQRT	FPU Type	Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC	
HK32U3019VET6	LQFP100	Cortex-M4+RISC-V	120	527	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32U3019VDT6	LQFP100	Cortex-M4+RISC-V	120	384	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32U3019VCT6	LQFP100	Cortex-M4+RISC-V	120	256	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32U3019RET6	LQFP64	Cortex-M4+RISC-V	120	527	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32U3019RDT6	LQFP64	Cortex-M4+RISC-V	120	384	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32U3019RCT6	LQFP64	Cortex-M4+RISC-V	120	256	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	-	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.
(2) For the LQFP100 and BGA100 packages, only FSMC Bank1 and Bank2 are available. Bank1 can only support a multiplexed NOR/PSRAM memory using the NE1 Chip Select. Bank2 can only support a 16- or 8-bit NAND Flash memory using the NCE2 Chip Select. The interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M4)HK32H3009(触摸+指纹)家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity										Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number															
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	Low Power Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI(1)	IIS(1)	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet		QSPI Units(Banks)	LCD TFT	Camera DCMI	FSMC Units(Banks)(2)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier			DIVSQRT	FPU Type	Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT RTC	
HK32H3009VET6	LQFP100	Cortex-M3+FPU	120	527	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32H3009VDT6	LQFP100	Cortex-M3+FPU	120	384	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32H3009VCT6	LQFP100	Cortex-M3+FPU	120	256	97	-	80	5(16) 1(32)	2(16)	2(16)	-	1(24)	2	1	-	6	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	1	1	1(x4)	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32H3009RET6	LQFP64	Cortex-M3+FPU	120	527	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32H3009RDT6	LQFP64	Cortex-M3+FPU	120	384	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-
HK32H3009RCT6	LQFP64	Cortex-M3+FPU	120	256	97	-	51	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	-	5	-	-	2	3	3	1	1	-	2	2(x12)	-	1(x2)	-	1	-	4	3(x16)	-	2	1	-	√	√	-	-	AES 128	√	√	-	1.8~3.6	Yes	TBD	TBD	TBD	TBD	TBD	TBD	-40~105	-

(1) The SPI interface can be used either in SPI mode or in I2S audio mode.
(2) For the LQFP100 and BGA100 packages, only FSMC Bank1 and Bank2 are available. Bank1 can only support a multiplexed NOR/PSRAM memory using the NE1 Chip Select. Bank2 can only support a 16- or 8-bit NAND Flash memory using the NCE2 Chip Select. The interrupt line cannot be used since Port G is not available in this package.

32位ARM® Cortex®-(M0) HK32T088 (多点触摸) 家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity												Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number																
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI	IIS	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	TOUCH		Camera DCMI	FSMC Units(Banks)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU Type			Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT_RTC				
HK32T088RBT6	LQFP64	Cortex-M0	96	128	20	-	51	3(16) 1(32)	-	-	-	1(24)	2	1	-	3	-	-	2	2	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	-	-	-	-	-	-	-40 ~ 85	-			
HK32T088C8T6	LQFP48	Cortex-M0	96	64	20	-	37	3(16) 1(32)	-	-	-	1(24)	2	1	-	3	-	-	2	2	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 5.5	Yes	-	-	-	-	-	-	-40 ~ 85	-

32位ARM® Cortex®-(M0) HK32HA030 (语音AI识别) 家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity												Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number																				
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI	IIS	SDIO	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD TFT		voice recognition	FSMC Units(Banks)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU Type			Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT_RTC								
HK32HA030RBT6	LQFP64	Cortex-M0	96	128	10	-	15	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	1	2	-	-	1	2	2	-	-	-	-	-	1(x5)	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-		
HK32HA030C8T6	LQFP48	Cortex-M0	96	64	10	-	15	5(16) 1(32)	1(16)	1(16)	-	1(24)	2	1	1	2	-	-	1	2	2	-	-	-	-	-	1(x5)	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0 ~ 3.6	1.8 ~ 3.6	TBD	TBD	TBD	TBD	TBD	TBD	-40 ~ 105	-

32位ARM® Cortex®-(M3) HK32HP103 (图像AI识别) 家族

Part Number	Package	Core	Max Frequency(MHz)	Memory Size			GPIO	Timer					Connectivity												Analog Function					Co-Processor	Security			Power supply		Power consumption					Operating temperature(°C)	Pin to Pin Part Number																					
				Flash(KB)	SRAM(KB)	EEPROM(Bytes)		General Units(Bits)	Advanced Units(Bits)	Basic Units(Bits)	LowPower Units(Bits)	Systick Units(Bits)	Watchdog	RTC	IRTIM	Usart	Uart	Lowpower Uart	IIC	SPI	IIS	AI	USB FS	USB HS	CAN 2.0A/B	DMA Units(Channels)	Ethernet	QSPI Units(Banks)	LCD TFT		Camera DCMI	FSMC Units(Banks)	Comparator	12-bit ADC Units(Channels)	16-bit ADC Units(Channels)	12-bit DAC Units(Channels)	Temperature sensor	Operational amplifier	DIVSQRT	FPU Type			Max Freq (MHz)	AES	Crypto-HASH	TRNG	SMPS	Supply Voltage(V)	Battery for RTC	Dynamic	SLEEP	Stop	Standby	VBAT_RTC									
HK32HP103RET6	LQFP64	Cortex-M3	120	527	97	-	51	3(16)	1(16)	-	-	1(24)	2	1	-	5	-	-	2	3	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	175uA/Mhz	80uA/MHz	10uA@3.3V	1.6uA@3.3V	1.5uA@3.3V	-40 ~ 125	-				
HK32HP103RCT6	LQFP64	Cortex-M3	120	256	97	-	51	3(16)	1(16)	-	-	1(24)	2	1	-	5	-	-	2	3	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	175uA/Mhz	80uA/MHz	10uA@3.3V	1.6uA@3.3V	1.5uA@3.3V	-40 ~ 125	-
HK32HP103CET6	LQFP48	Cortex-M3	120	527	97	-	37	3(16)	1(16)	-	-	1(24)	2	1	-	3	-	-	2	2	-	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8 ~ 3.6	Yes	175uA/Mhz	80uA/MHz	10uA@3.3V	1.6uA@3.3V	1.5uA@3.3V	-40 ~ 125	-

医疗电子方案

指夹式血氧仪 方案介绍

- MCU型号: HK32F030C8T6
- Cortex-M0 32位内核,最高工作频率72MHz
- 64KB Flash, 10KB SRAM
- 应用领域: 医疗、家用
- 工作电压: DC3V(AAA电池*2)
- 通讯模式: I2C通讯
- 可监测血氧饱和度、脉搏参数。精度达
- 到±1%,并有脉搏状图显示。
- 在无信号时约8秒钟后自动关机功能。
- 使用两节AAA电池,功耗低,所配电池
- 可持续使用20小时。
- 低电压报警显示。
- 产品轻,体积小,便于携带。
- 使用方便,一键操作。
- 具有较高的准确性和重复性。



额温枪 方案介绍

- 单片机型号: K32F030K6T6
- 72M主频,32KB Flash,10KB SRAM
- 应用领域: 医疗、家用测温
- 工作电压: DC3V(AAA电池*2)
- 通讯模式: I2C通讯
- 传感器类型: 数字传感器
- 测量方法: 非接触式
- 测温提醒: 振动
- 发烧提醒: 37.5°C~42.9°C
- 测量范围: 额头35.5°C~42.9°C
- 测量距离: 1~3厘米
- 工作环境: 16°C~35°C,相对湿度15%~85%
- 显示精度: ±0.1°C
- 关机时间: 10秒进入待机



眼部按摩仪 方案介绍

- MCU: HK32F030F4P6
- 内核 Cortex-M0 工作主频72MHz
- 16KB Flash ROM, 10KB SRAM
- 支持DMA、USART、SPI、IIC、ADC、RTC等
- 支持Flash加密功能
- Standby待机功耗: 1.6uA@3.3V
- 工作电压: 20V~5.0V
- 工作温度: -40°C~105°C
- 封装: TSSOP20



电机驱动方案

冰箱变频控制板 方案介绍

- MCU: HK32F030K6T6
- 最高频率72M、32K Flash、10KB SRAM
- 输入电压: 176V~264V
- 输入信号: 50~180Hz
- 压缩机转速: 2000~3500rpm
- 过压保护: 270V
- 欠压保护: 172V
- 过流保护: 4A



吊扇灯控制板 方案介绍

- MCU: HK32F0301MF4P6
- 最高频率48M、16K Flash、4KB SRAM
- 支持 USART、SPI、IIC、ADC、Beeper等外设
- 支持死区互补输出高级定时器
- 输入电压: 高压220V转24V/2A低压
- 输出功率: 10~40W
- 电机转速: 250~300rpm
- 电机控制: 矢量FOC
- 过压保护: 24V
- 过流保护: 15A



电钻控制板 方案介绍

- MCU: HK32F0301MF4P6
- 最高频率48M、16K Flash、4KB SRAM
- 支持 USART、SPI、IIC、ADC、Beeper等外设
- 支持死区互补输出高级定时器
- 输入电压: 16V
- 空载转速: 1400rpm
- 电机控制: 矢量FOC
- 最大扭矩: 40牛·米



扫地机器人 方案介绍

- 内核: Cortex-M3,最高工作频率:120MHz
- Flash rom大小: 512KB,SRAM 大小: 97KB
- 支持 DMA、USART、SP、C、ADC、高级定时器等外设
- 支持 USB、CAN通讯
- 支持 DCMI、SA、SDO等接口
- 产品类型: 拖扫一体
- 最大吸力: 2100Pa
- 导航方式: LDS雷达测距,SLAM算法
- 特色功能: 支持断电续扫功能,自动回充;
- 支持路线规划,定点清扫;支持手机互联,设定清扫区域



汽车电子方案

汽车诊断盒子 (OBD) 方案介绍

- MCU: HK32F030C8T6
- 最高工作频率72MHz 64K FLASH 10KB SRAM
- 应用领域: 汽车诊断系统
- 工作电压: DC12V
- 通讯模式: CAN总线
- 支持CAN总线通讯
- 支持汽车各种故障检测
- 支持各种故障码读取
- 兼容大部分车型



汽车智能关窗器 方案介绍

- MCU: HK32F1030C8T6
- 工作频率最高 120MHz,64K Flash,20KB SRAM
- 产品工作电压: 12V静态电流: ≤20mA
- 支持 CAN 总线控制
- 支持门窗电动马达驱动
- 保留原车遥控器解锁
- 支持 PWM 互补功能控制有感电机正反转



工业控制方案

多功能电力仪表 方案介绍

- MCU: HK32F103C8T6
- 最高工作频率96MHz 128K FLASH 20KB SRAM
- 应用领域: 电力测控系统
- 通讯协议: Modbus-RTU通讯协议
- 支持三项三线、三项四线
- 支持功率、功率因素、电量、能量频率等高亮度LED显示
- 支持电能脉冲输出功能和高精度电流电压采样



舞台灯控方案 方案介绍

- MCU: HK32F103C8T6
- 工作频率最高120MHz,64K Flash,20KB SRAM
- 产品工作电压: 外接输入24V直流电压供电
- 内置直流电机灯光转动驱动
- 支持红外遥控灯光各种功能
- 支持话筒检测声音控制频率闪灯
- 支持DM512协议、协调三大系统(调光控制系统、电脑灯光控制系统、换色器控制系统)实现数字调光调色



车机中控显示屏 方案介绍

- MCU: HK32F030C8T6
- 最高频率72M、64K Flash、10KB SRAM
- 支持DMA、USART、SPI、IIC、ADC等外设
- 输入电压:12V
- 安卓9.1系统,支持4G全网通
- 内置专业发烧级DSP语音芯片
- 支持ADH高清倒车影像
- 支持蓝牙通话蓝牙音乐
- 10寸IPS高清大屏、支持触摸按键



电动车扫码充电桩 方案介绍

- MCU: HK32F103C816
- 工作频率最高120MHz,64K Flash,20KB SRAM
- 产品工作电压: 交流220V输入
- 交流输出配合车充适配器充电方式
- 支持两路交流输出,可同时两台充电
- 支持微信扫码方式
- 支持直流输出与电动车直接充电方式



消费类电子方案



小明医生智能机器人

方案介绍

- 单片机型号: HK32F030C8T6
- 采用 Cotex-M0位内核,最高工作频率72MHz
- 集成片内64 KB FLASH以及10 KB SRAM
- 单电源域: VDD2.0V-5.5
- 支持串口、IIC、SPI、定时器等多种外设
- 支持低功耗(1.6uA)待机以及快速唤醒功能
- 小巧便捷、操控简单
- APP无线连接、海量存储
- 高清显示、触摸控制
- 语音对讲、回答准确
- 联网同步更新、实时环境检测

指纹锁

方案介绍

- MCU: HK32F030C8T6
- 最高工作频率72MHz
- 64K FLASH 10KB SRAM
- 应用领域: 家用、商用办公门锁
- 供电方式: 电池供电
- 支持多种开锁方式
- 自带员工考勤功能
- 支持APP远程操作
- 高清彩屏显示
- 自带门铃功能



身份证阅读器

方案介绍

- MCU: HK32F103RBT6
- 支持二代身份证读取
- 支持USB升级
- 支持蓝牙通信
- 支持锂电池输入



激光扫码枪

方案介绍

- MCU: HK32F103CBT6
- 工作频率72MHz, 128KB Flash, 20KB SRAM
- 支持 USB通信
- 支持 USB HID键盘,
- 支持虚拟串口
- 支持RS232



红外测距仪器

方案介绍

- 单片机型号:HK32F103C8T6
- 采用M0内核,最高工作频率72MHz
- 集成片内64 KB FLASH以及10 KB SRAM
- 单电源域:VDD2.0V-5.5V
- 支持串口、IIC、SPI、定时器等多种外设
- 小巧便捷、方便携带
- 一键测量、多种模式
- 双水平泡、双感光孔
- 自动校准、高清显示
- 抗摔防滑、支持数据存储



无线麦克风

方案介绍

- MCU: HK32F031F4P6
- 最高工作频率72MHz 16K FLASH 10KB SRAM
- 应用领域: KTV、会议系统
- 工作频段: 600-900MUHF
- 供电方式: 电池供电
- 工作方式: 无线方式
- 支持智能降噪、LED显示
- 高强度抗摔麦头、支持超长待机
- 支持多频点(100多个)

H K32 MCU Support Tools 支持工具

HK32F103和HK32F030系列产品 兼容和支持 HK -Link/J-Link仿真调试工具, 以及市场上广泛使用的小批量/批量烧录工具。

HK-Link V2 仿真调试器



- 支持在Keil、IAR集成开发环境进行仿真调试;
- 支持SWD下载调试;
- 支持最多4个硬件断点设置;
- 支持全速运行、单步调试、断点调试等各种调试方法。

批量烧录器



- 支持HK32F103/030/031/04A/39A/063/003等HK系列MCU产品
- 支持脱机联机操作
- 支持擦除、查空、编程、校验、加密读保护等批量操作

J-Link仿真调试器



- 支持在Keil、IAR集成开发环境进行仿真调试;
- 支持JTAG或SWD下载调试;
- 支持最多4个硬件断点设置;
- 支持全速运行、单步调试、断点调试等各种调试方法;
- 支持JTAG/SWD宽电压范围1.8V-5V。



世界首创7nA超低功耗32位MCU

7nA芯片评估板3D效果图



7nA芯片评估板电流测量实物图



- 航顺利用积累多年的专利技术, 已经成功研发了世界级7nA超低功耗平台
- 缩短超低功耗针对物联网定制化芯片研发周期, 这个平台将是未来物联网杀手锏

非易失性存储产品EEPROM芯片24CXX系列

型号	存储容量 (bit)	工作电压	工作温度	封装规格	通讯协议
HK24C02	2K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8/SOT23-5	I ² C
HK24C04	4K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C08	8K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C16	16K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C32	32K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C64	64K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C128	128K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C256	256K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C
HK24C512	512K	1.8V-5.5V	-40°C-85°C	SOP8/DIP8/TSSOP8	I ² C

LCD/LED液晶显示驱动

型号	通讯接口数	驱动点阵	段位	工作电压	按键	内置振荡器	封装外形
HK1621B	4	128	32*4	2.4-5.2V	-	256K	SSOP48

SPI NOR FLASH闪存存储器芯片

型号	存储容量 (bit)	工作电压	工作温度	封装规格	通讯协议
HK25Q40	4M	2.7V-3.6V	0°C-70°C	SOP8(150mil/208mil) /TSSOP8	SPI
HK25Q80	8M	2.7V-3.6V	0°C-70°C	SOP8(150mil/208mil)	SPI
HK25Q16	16M	2.7V-3.6V	0°C-70°C	SOP8(150mil/208mil)	SPI
HK25Q32	32M	2.7V-3.6V	0°C-70°C	SOP8(208mil)	SPI
HK25Q64	64M	2.7V-3.6V	0°C-70°C	SOP8(208mil)	SPI
HK25Q128	128M	1.65V-1.95V	0°C-70°C	SOP8(208mil)	SPI

时钟IC系列

型号	主要特点	工作电压	封装	兼容型号
HK1381	串行时钟电路	2.0V-5.5V	SOP8	HT1381

3-wire EEPROM (SPI) Series

型号	存储容量 (bit)	工作电压	工作温度	封装规格	通讯协议
HK93CXX	2K、4K	1.8V-5.5V	-40°C-+85°C	SOP8/DIP8	SPI

低功耗高耐压电源稳压LDO系列

HK71XX系列 (Vin(max)=24V/36V, Iq=2uA, Iout=30mA, Vout=3.0V-5.0V)
HK75XX系列 (Vin(max)=24V/36V, Iq=2uA, Iout=100mA, Vout=3.0V-5.0V)
HK73XX系列 (Vin(max)=12V, Iq=2uA, Iout=250mA, Vout=1.8V-5.0V)
HK78XX系列 (Vin(max)=10V, Iq=2uA, Iout=500mA, Vout=2.1V-5.0V)
HK70XX系列 (Vin(max)=18V/24V, Iq=2uA, Vout=2.1V-7.0V)

大功率电源稳压系列

HK1117-XX系列 (Vin(max)=18V, 工作电流 800mA, Vout=1.2V-5.0V/ADJ)
HK78MXX系列 (Vin(max)=35V, 工作电流 500mA, Vout=5V-18V)
HK78LXX系列 (Vin(max)=30V, 工作电流 100mA, Vout=5V-24V)
HK78XXCV系列 (Vin(max)=42V, 工作电流 1.5A, Vout=5V-24V)
HK6206XX系列 (Vin(max)=10V, 工作电流 300mA, Vout=1.2V-5.0V)

锂电池充电管理系列

型号	工作电压 (V)	最大电流 (mA)	反接保护	灯闪模式	封装	兼容型号
HK4054	4.2V-7V	500mA	是	单灯	SOT23-5	TP4054
HK4056	4.2V-10V	1A	是	双灯	ESOP8	TP4056
HK4057	4.2V-7V	500mA	是	双灯	SOT23-6	TP4057

运放系列

型号	输入电压	电源电压	最小失调电压	电压增益	封装	兼容型号
HK358	-0.3V-32V	32V/±16V	7mV	100dB	SOP8/DIP8	LM358
HK324	-0.3V-32V	32V/±16V	7mV	100dB	SOP14	LM324
HK339	-0.3V-32V	32V/±16V	±5mV	/	SOP14	LM339
HK393	-0.3V-32V	36V/±18V	9mV	/	SOP8	LM393
HK4558	±15V	±22V	6mV	100dB	SOP8/DIP8	JRC4558