

Introduction

After its establishment in 1983 and until the present day, Holtek Semiconductor has released an unceasing stream of competitive semiconductor devices onto the global market. While continuing to concentrate its design efforts in the 8-bit and 32-bit microcontroller development area, the extensive and increasing range of peripheral semiconductor products should also not be ignored. At the foundation of these successful product developments exists many years of semiconductor design experience accumulated by the company's professional engineering design teams. The results of these extensive efforts have led to Holtek customers being provided with a huge range of high quality industrial grade semiconductor devices. Among Holtek's many customers are included a wide array of popular global brand consumer appliances and industrial products, which shows the global confidence in the company's devices. With this background, Holtek remains fully committed to a continuous expansion of its high quality and superior price-performance semiconductor devices well into the future.

Product Device Range

Holtek's product development focus will remain firmly in the microcontroller area for both 8-bit and Arm® core based 32-bit microcontrollers. These highly functionally integrated microcontrollers includes digital and analog features such as A/D converters, comparators, LCD drivers, PWM generators, high current LED drivers, touch switches, SPI, I²C, UART and USB interfaces, voice functions, RF functions etc. All of the company's 32-bit and 8-bit microcontroller devices meet with full industry specifications in having a wide voltage and temperature operating range. In addition to its microcontrollers there exists a wide range of peripheral devices such as stand-alone touch switch ICs, LCD drivers, power management devices, video processors, sensors etc, further increasing the Holtek product diversity and opening up applications into a wider market area.

Product Development Strategy

In following market trends and customer requirements, Holtek's commitment to new product development and innovation can be seen through its continuously expanding device functionality. As the world of IOT continues to extend its reach into demands for an increasingly connected lifestyle, Holtek's multi-function product range stands in a strong position to have a strong presence in this rapidly expanding market area. The integration of features such as RF functions, voice, touch key and power management functions into its microcontroller range demonstrates this commitment to IOT product trends. Holtek's range of standard microcontroller products will continue to expand but alongside it will be the design of application specific products such as those for motor control, personal health care, home appliances and many others. With its long history of working alongside its customers to assist in the design their custom microcontrollers, Holtek welcomes product manufacturers to contact them to discuss new custom microcontroller design possibilities. Additionally, and as no functionally rich microcontroller is useful without an appropriate development platform, all of Holtek's products are fully supported by a comprehensive range of hardware and software development tools to simplify the designer product development process. Holtek's obligation to ISO compliance and its string of innovation awards and intellectual properties provide further evidence of the company's commitment to product development excellence.

Marketing Service Network

Holtek's range of semiconductor products is fully complemented by its extensive global marketing network with a sales presence in most parts of the world. Having established a large number of worldwide sales offices and agents, Holtek's global marketing structure is well placed to take advantage of any new market opportunities and trends as they arise.

Selecting Your Holtek Device

As the range of 8-bit and 32-bit microcontroller devices covers such a vast range of types and functions, Holtek recommends that customers consult its on-line "Product Selector" to assist them in their selection of the most suitable microcontroller for their specific application. With Holtek continually releasing new products onto the market, it should be noted that the website version, rather than the printed version of the selection guide, will contain the most up to date product information.

To use our MCU Product Selector and more tool information, please visit: <https://www.holtek.com>.

General Purpose 32-Bit MCU	General Purpose 8-Bit MCU	Motor MCU & Peripheral
32-Bit Cortex®-M4 MCU 3	8-Bit Flash MCU 5	32-Bit BLDC Motor MCU 9
32-Bit Cortex®-M3 MCU 3	8-Bit OTP MCU 7	8-Bit BLDC Motor MCU 9
32-Bit Cortex®-M0+ MCU 3	8-Bit USB MCU 7	32-Bit BLDC Motor MCU with Gate-Driver 10
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24-Bit A/D Peripheral 13	Fire Protection Flash MCU 17	AC Charger MCU 20
Health Care Flash MCU 14	CO/GAS Detector Flash MCU 18	DC Charger MCU 20
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Touch OTP MCU 23	Voice MCU 26	8-Bit ASSP MCU 27
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32-Bit Cortex®-M4 MCU															
32-Bit M4 USB MCU															
Part No.	Max. Freq.	VDD	Flash	SRAM	DMA	ADC	DAC CH	Timer	RTC	USB	CAN	Interface	Others	Max. I/O	Package
HT32F49041	96MHz	2.4V~3.6V	64KB	20KB	7CH x1	2Msps 12-bitx16ch	—	ACTMRx1, 32-bit GPTMRx1 16-bit GPTMRx6, BTMRx2 WWDTx1	√	FS OTG	1	USARTx4, SPI/I²Sx3, I²Cx2 IRTMRx1	CRC	55	20TSSOP 32QFN 48/64LQFP
HT32F49153	150MHz	2.4V~3.6V	128KB	48KB	7CH x2	5.33Msps 12-bitx24ch	12-bit x2	ACTMRx1, 32-bit GPTMRx1 16-bit GPTMRx8, BTMRx2 WWDTx1	√	FS OTG	2	USARTx8 SPI/I²Sx3, I²Cx3 IRTMRx1	CRC, XMC	87	32QFN 48/64/100LQFP
HT32F49163			256KB												
HT32F49365	240MHz	2.6V~3.6V	256KB	224KB	7CH x2	2Msps 12-bitx16chx3	12-bit x2	ACTMRx2, 32-bit GPTMRx2 16-bit GPTMRx8, BTMRx2 WWDTx1	√	FS Device	2	USARTx4 UARTx4 SPI/I²Sx4, I²Cx3	CRC, SPIM, XMC, SDIO	80	48QFN 48/64/100LQFP
HT32F49395			1024KB												
Operating Temperature: -40°C ~ 105°C Note: WWDT: Window Watchdog Timer ACTMR: Advanced Control Timer IRTMRx1: Infrared Transmitter BTMR: Basic Timer SPIM: External SPI Flash Memory Extension SDIO: Secure Digital Input Output GPTMR: General Purpose Timer XMC: External Memory Controller.															

32-Bit Cortex®-M3 MCU														
32-Bit M3 USB MCU														
Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	Timer	RTC	USB	Interface	Others	Max. I/O	Package
HT32F12345	96MHz	2.0V~3.6V	64KB	16KB	12CH	1Msps 12-bit×12	2	BFTM×2, GPTM×2 MCTM×2	√	√	USART×2, UART×2 SPI×2, I²C×2, I²S×1	CRC, EBI SDIO	51	46QFN 48/64LQFP
HT32F12365	96MHz	2.0V~3.6V	256KB	64KB	12CH	1Msps 12-bit×16	2	BFTM×2, GPTM×2 MCTM×2	√	√	USART×2, UART×2 SPI×2, I²C×2, I²S×1	CRC, SCI EBI, AES, SDIO	80	46QFN 48/64/100LQFP
HT32F12366			128KB											
HT32F22366	96MHz	2.0V~3.6V	256KB	128KB	12CH	1Msps 12-bit×16	2	BFTM×2, GPTM×2 MCTM×2	√	√	USART×2, UART×2 SPI×2, I²C×2, I²S×1	CRC, SCI, EBI AES, SDIO, CSIF	80	46QFN 48/64/100LQFP
HT32F12364	72MHz	1.65V~3.6V	256KB	128KB	6CH	1Msps 12-bit×8	—	BFTM×2, SCTM×2 PWM×1, GPTM×1	√	√	USART×1, UART×2 SPI×2, I²C×2	CRC, SCI EBI, AES	52	40QFN 48/64LQFP
Note: BFTM: Basic Function Timer GPTM: General Purpose Timer AES: Advanced Encryption Standard SCTM: Single Channel Timer MCTM: Motor Control Timer SDIO: Secure Digital Input Output PWM: Pulse Width Modulation SCI: Smart Card Interface CSIF: CMOS Sensor Interface														

32-Bit Cortex®-M0+ MCU															
32-Bit M0+ MCU															
Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	DAC CH	Timer	RTC	Interface	Others	Max. I/O	Package		
HT32F52220	40MHz	2.0V~3.6V	16KB	4KB	—	1Msps 12-bit×8	—	BFTM×1, SCTM×2 GPTM×1	—	USART×1, UART×1 SPI×1, I²C×1	—	23	24/28SSOP 33QFN		
HT32F52230			32KB												
HT32F52231	40MHz	2.0V~3.6V	32KB	4KB	—	1Msps 12-bit×12	—	BFTM×2, SCTM×4 GPTM×1, MCTM×1	√	USART×1, UART×2 SPI×2, I²C×2	CRC	40	24/28SSOP 33QFN, 48LQFP		
HT32F52241			64KB	8KB											
HT32F52234	60MHz	1.65V~3.6V	32KB	4KB	6CH	1Msps 12-bit×12	500ksps 12-bit×4	BFTM×2, SCTM×2 PWM×1	√	USART×1, UART×1 SPI×1, I²C×3	CRC, DIV	40	24/32/46QFN 48LQFP		
HT32F52244			64KB	8KB											
HT32F52243	40MHz	2.0V~3.6V	64KB	8KB	6CH	1Msps 12-bit×12	—	BFTM×2, SCTM×4 GPTM×1, MCTM×1	√	USART×2, UART×4 SPI×2, I²C×3	CRC, DIV	52	33/46QFN 48/64LQFP		
HT32F52253			128KB	16KB											
HT32F52234/HT32F52244 Operating Temperature: -40°C ~ 105°C															
32-Bit M0+ USB MCU															
Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	DAC CH	Timer	RTC	USB	Interface	Others	Max. I/O	Package
HT32F52331	48MHz	2.0V~3.6V	32KB	4KB	—	1Msps 12-bit×12	—	—	BFTM×2, SCTM×4 GPTM×1, MCTM×1	√	√	USART×1, UART×2 SPI×2, I²C×2	CRC, SCI	38	33QFN 48LQFP
HT32F52341			64KB	8KB											
HT32F52342	48MHz	2.0V~3.6V	64KB	8KB	6CH	1Msps 12-bit×12	2	—	BFTM×2, SCTM×2 GPTM×2, MCTM×1	√	√	USART×2, UART×2 SPI×2, I²C×2, I²S×1	CRC, SCI, EBI	51	33QFN 48/64LQFP
HT32F52352			128KB	16KB											
HT32F52344	60MHz	1.65V~3.6V	64KB	8KB	6CH	1Msps 12-bit×12	2	—	BFTM×2, SCTM×2 GPTM×1, MCTM×1	√	√	UART×2, SPI×2 I²C×1	CRC, DIV EBI	54	33/46QFN 48/64LQFP
HT32F52354			128KB												
HT32F52357	60MHz	1.65V~3.6V	128KB	16KB	6CH	1Msps 12-bit×12	2	500ksps 12-bit×2	BFTM×2, SCTM×2 PWM×2, GPTM×1 MCTM×1	√	√	USART×2, UART×4, SPI×2 QSPI×1, I²C×2, I²S×1	CRC, DIV SCI, EBI, AES	67	46QFN 48/64/80LQFP
HT32F52367			256KB	32KB											

32-Bit Cortex®-M0+ MCU

32-Bit M0+ USB LCD MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	DAC CH	Timer	RTC	USB	LCD	Interface	Others	Max. I/O	Package
HT32F57331	60MHz	1.65V~3.6V	32KB	4KB	—	1Msps 12-bit×10	—	—	BFTM×2, PWM×2 GPTM×1	√	√	29×4~25×8	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV SCI	53	46QFN 48/64LQFP
HT32F57341			64KB	8KB												
HT32F57342	60MHz	1.65V~3.6V	64KB	8KB	6CH	1Msps 12-bit×10	2	500ksps 12-bit×2	BFTM×2, SCTM×2 PWM×2, GPTM×1	√	√	37×4~33×8	USART×1, UART×2 SPI×2, I²C×2, I²S×1	CRC, DIV SCI, AES	67	46QFN 48/64/80LQFP
HT32F57352			128KB	16KB												

32-Bit M0+ Ultra Low Power MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	Timer	RTC	Interface	Others	Max. I/O	Package
HT32L52231	48MHz	1.65V~3.6V	32KB	4KB	6CH	1Msps 12-bit×12	BFTM×2, SCTM×2 GPTM×1, MCTM×1	√	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV	40	32/46QFN 48LQFP
HT32L52241			64KB	8KB								

HT32L522x1 Operating Temperature: -40°C ~ 105°C

32-Bit M0+ 5V MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	Timer	RTC	Interface	Others	Max. I/O	Package
HT32F50020	16MHz	2.5V~5.5V	16KB	2KB	—	500ksps 12-bit×12	—	BFTM×1, SCTM×3	√	UART×2, SPI×1 I²C×1	LEDC	42	24/28SSOP 24/32/46QFN, 48LQFP
HT32F50030			32KB										
HT32F50220	20MHz	2.5V~5.5V	16KB	4KB	—	1Msps 12-bit×12	—	BFTM×1, PWM×2 GPTM×1	√	UART×2, SPI×2 I²C×1	DIV	40	24/28SSOP 24/33/46QFN, 48LQFP
HT32F50230			32KB										
HT32F50231	20MHz	2.5V~5.5V	32KB	4KB	—	1Msps 12-bit×12	—	BFTM×2, PWM×2 GPTM×1, MCTM×1	√	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV	40	24/28SSOP, 24/33/46QFN, 48LQFP
HT32F50241			64KB	8KB									
HT32F50431	60MHz	2.5V~5.5V	32KB	4KB	6CH	2Msps 12-bit×12	—	BFTM×2, PWM×1 GPTM×1, MCTM×1	√	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV LEDC	40	32/46QFN 44/48LQFP
HT32F50441			64KB	8KB									
HT32F50442	60MHz	2.5V~5.5V	64KB	8KB	6CH	2Msps 12-bit×12	2	BFTM×2, PWM×2 GPTM×1, MCTM×1	√	USART×2, UART×2 SPI×2, I²C×2	CRC, DIV LEDC, EBI	54	32/46QFN 44/48/64LQFP
HT32F50452			128KB	16KB									

HT32F504xx Operating Temperature: -40°C ~ 105°C

32-Bit M0+ 5V USB MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	Timer	RTC	USB	Interface	Others	Max. I/O	Package
HT32F50343	60MHz	2.5V~5.5V	64KB	12KB	6CH	1Msps 12-bit×12	BFTM×2, SCTM×2 8-PWM×3, GPTM×1	√	√	UART×2, SPI×2 I²C×2, SLED×2	CRC, DIV	51	32/46QFN 48/64LQFP

32-Bit M0+ 5V CAN MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	Timer	RTC	CAN	Interface	Others	Max. I/O	Package
HT32F53231	60MHz	2.5V~5.5V	32KB	4KB	6CH	2Msps 12-bit×12	—	BFTM×2, PWM×1 GPTM×1, MCTM×1	√	√	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV LEDC	40	32/46QFN 48LQFP
HT32F53241			64KB	8KB										
HT32F53242	60MHz	2.5V~5.5V	64KB	8KB	6CH	2Msps 12-bit×12	2	BFTM×2, PWM×2 GPTM×1, MCTM×1	√	√	USART×2, UART×2 SPI×2, I²C×2	CRC, DIV LEDC, EBI	54	32/46QFN 48/64LQFP
HT32F53252			128KB	16KB										

Operating Temperature: -40°C ~ 105°C

32-Bit M0+ 5V Touch MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	Timer	RTC	Touch Key	Interface	Others	Max. I/O	Package
HT32F54231	60MHz	2.5V~5.5V	32KB	4KB	—	1Msps 12-bit×10	—	BFTM×2, SCTM×2 GPTM×1, MCTM×1	√	24	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV LEDC	40	28SSOP, 32/46QFN 48LQFP
HT32F54241			64KB	8KB										
HT32F54243	60MHz	2.5V~5.5V	64KB	8KB	6CH	1Msps 12-bit×10	2	BFTM×2, SCTM×4 GPTM×1, MCTM×1	√	28	USART×2, UART×4 SPI×2, I²C×3	CRC, DIV LEDC	54	32/46QFN 48/64LQFP
HT32F54253			128KB	16KB										

32-Bit M0+ 24-Bit A/D MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	ADC		Timer	RTC	Interface	Others	Max. I/O	Package
HT32F59041	20MHz	2.5V~5.5V	64KB	8KB	SAR ADC 1Msps 12-bit×12	Delta Sigma ADC 24-bit×4	BFTM×2, PWM×2 GPTM×1, MCTM×1	√	USART×1, UART×2 SPI×1, I²C×1	CRC, DIV	30	48LQFP

32-Bit M0+ 24-Bit A/D LCD MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	ADC		Timer	RTC	USB	LCD	Interface	Others	Max. I/O	Package
HT32F59741	60MHz	1.65V~3.6V	64KB	8KB	SAR ADC 1Msps 12-bit×10	Delta Sigma ADC 24-bit×4	BFTM×2, PWM×2 GPTM×1	√	√	29×4~25×8	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV SCI	53	64/80LQFP

Note:

BFTM: Basic Function Timer
GPTM: General Purpose Timer
QSPI: Quad serial peripheral interface
SCI: Smart Card Interface
AES: Advanced Encryption Standard

SCTM: Single Channel Timer
MCTM: Motor Control Timer
SLED: Strip LED Controller
LEDC: LED controller

PWM: Pulse Width Modulation
USB: 2.0 Full Speed device
DIV: Hardware Divider
EBI: External Bus Interface for NOR Flash/SRAM/LCD

8-Bit Flash MCU

Low Pin Count A/D Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	CMP	Interface	Package
HT66F302	8MHz	1.8V~5.5V	1K×14	64×8	32×8	2	—	8	10-bit STM×1 10-bit PTM×1	12-bit×4	—	—	8SOP, 10SOP
HT66F303								14					16NSOP
HT66F0025	8MHz	2.2V~5.5V	2K×14	64×8	32×8	4	—	8	10-bit STM×1	12-bit×4	—	—	8SOP, 10SOP
HT66F2030	8MHz	1.8V~5.5V	2K×15	128×8	32×8	4	—	14	10-bit CTM×1 10-bit PTM×1	12-bit×4	—	UART×1 SPI/I ² C×1	8SOP, 10MSOP 16NSOP, 16QFN
HT66F2040	8MHz	1.8V~5.5V	4K×16	512×8	512×8	8	√	18	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	12-bit×7	2	UART×1 UART/SPI/I ² C×1	8SOP, 10MSOP 16NSOP, 16QFN 20SSOP
HT66F2050			8K×16										

A/D Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	CMP	RTC	PWM	Interface	Package
HT66F3126*	8MHz	1.8V~5.5V	1K×14	128×8	64×8	4	—	14	10-bit PTM×1 10-bit STM×1	12-bit×7	—	—	—	—	8SOP, 10SOP 16NSOP
HT66F3132*	8MHz	1.8V~5.5V	2K×15	128×8	64×8	4	—	18	10-bit CTM×1 10-bit PTM×2	12-bit×9	—	—	10-bit ×3	—	16NSOP, 20NSOP 20SSOP
HT66F004	8MHz	2.2V~5.5V	2K×15	96×8	32×8	4	—	18	10-bit PTM×2	12-bit×8	—	—	—	—	16NSOP, 20NSOP 24SSOP
HT66F3185	16MHz	1.8V~5.5V	4K×16	256×8	128×8	8	√	26	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	12-bit×12	1	√	—	UART×1 SPI/I ² C×1	16NSOP, 20NSOP 24SSOP, 28SSOP 24QFN, 28QFN
HT66F3195	16MHz	1.8V~5.5V	8K×16	512×8	128×8	8	√	26	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	12-bit×12	1	√	—	UART×1 SPI/I ² C×1	20NSOP 24SSOP, 28SSOP 24QFN, 28QFN
HT66F31A5	16MHz	1.8V~5.5V	16K×16	1024×8	1024×8	12	√	30	10-bit PTM×2 16-bit CTM×1 16-bit STM×1	12-bit×12	1	√	—	UART×2 SPI/I ² C×1	24SSOP, 28SSOP 24QFN, 28QFN 32QFN
HT66F2362	16MHz	1.8V~5.5V	16K×16	2048×8	1024×8	16	√	44	10-bit PTM×2 16-bit CTM×2 16-bit STM×3	12-bit×16	2	√	—	UART×2 SPI/I ² C×1 SPIA×1	32QFN 44LQFP, 48LQFP
HT66F2372	16MHz	1.8V~5.5V	32K×16	3072×8	2048×8	16	√	44	10-bit PTM×2 16-bit CTM×2 16-bit STM×3	12-bit×16	2	√	—	UART×3 SPI/I ² C×1 SPIA×1	28SSOP, 32QFN 44LQFP, 48LQFP

* Under development, available in 2Q, 2025.

A/D Flash LCD MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	LCD	CMP	RTC	Interface	Package
HT67F2355	12MHz	1.8V~5.5V	8K×16	512×8	512×8	8	√	46	10-bit CTM×3 10-bit PTM×1	12-bit×10	32×4, 31×5 30×6, 28×8	—	√	UART×1 SPI/I ² C×1	44LQFP 48LQFP
HT67F2362A	16MHz	1.8V~5.5V	16K×16	2048×8	1024×8	16	√	57	10-bit PTM×6 16-bit PTM×2 16-bit STM×3	12-bit×16	46×4 44×6 42×8	2	√	UART×2 SPI/I ² C×1 SPIA×1	48LQFP 64LQFP
HT67F2372A	16MHz	1.8V~5.5V	32K×16	3072×8	2048×8	16	√	71	10-bit PTM×6 16-bit PTM×2 16-bit STM×3	12-bit×20	27×8 42×8 52×8	2	√	UART×3 SPI/I ² C×1 SPIA×1	48LQFP 64LQFP 80LQFP

I/O Flash LCD MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	LCD	RTC	Interface	Package
HT69F340	16MHz	1.8V~5.5V	4K×16	256×8	64×8	8	√	39	10-bit PTM×1 10-bit CTM×1	24×4 25×3	√	SPI/I ² C×1	48LQFP
HT69F350	16MHz	1.8V~5.5V	8K×16	512×8	64×8	8	√	55	10-bit PTM×1 10-bit CTM×1 16-bit STM×1	36×4 37×3	√	SPI/I ² C×1	48LQFP 64LQFP
HT69F360	16MHz	1.8V~5.5V	16K×16	1024×8	128×8	8	√	63	10-bit PTM×2 10-bit CTM×1 16-bit STM×1	48×4 49×3	√	UART×1 SPI/I ² C×1	64LQFP 80LQFP

8-Bit Flash MCU

Low Power A/D Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Temp. Sensor	RTC	Interface	Package
HT66L2530A	16MHz	1.8V~5.5V	2K×16	128×8	128×8	8	√	18	16-bit PTM×1 16-bit STM×1	10/12-bit×4	√	√	UART/SPI/I ² C×1	16NSOP, 20NSOP 16QFN, 20QFN
HT66L2540A	16MHz	1.8V~5.5V	4K×16	256×8	256×8	8	√	26	16-bit PTM×1 16-bit STM×1	10/12-bit×8	√	√	UART/SPI/I ² C×1	16NSOP, 24SSOP 28SSOP, 28QFN
HT66L2550A	16MHz	1.8V~5.5V	8K×16	512×8	256×8	8	√	30	16-bit PTM×2 16-bit STM×1	10/12-bit×8	√	√	UART/SPI/I ² C×1	24SSOP, 28SSOP 32QFN

Low Power A/D Flash LCD MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Temp. Sensor	LCD	RTC	Interface	Package
HT67L2540A	16MHz	1.8V~5.5V	4K×16	256×8	256×8	8	√	22	16-bit PTM×1 16-bit STM×1	10/12-bit×8	√	24×4	√	UART/SPI/I ² C×1	48LQFP
HT67L2550A	16MHz	1.8V~5.5V	8K×16	512×8	512×8	8	√	30	16-bit PTM×2 16-bit STM×1	10/12-bit×8	√	32×4	√	UART/SPI/I ² C×1	48LQFP 64LQFP

Advanced OPA Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Temp. Sensor	DAC	CMP	OPA	PWM	Interface	Package
HT66F4640	16MHz	1.8V~5.5V	4K×16	512×8	512×8	8	√	22	10-bit CTM×1 10-bit PTM×1	12-bit×8	√	8-bit×3	2	2	16-bit×1	UART×1 SPI/I ² C×1	24SSOP

Note: 1. The MCU internal OPA gain bandwidth is software programmable.
2. PWM supports edge-aligned and center-aligned PWM mode and includes dead time, complementary, mask, protection functions.

High Accuracy HIRC MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Touch Key	LCD	RTC	IR Driver	Interface	Package
BX68R2420	4MHz	2.0V~5.5V	1K×14	32×8	—	2	—	16	9-bit×1	—	—	—	—	√	—	8SOP, 16NSOP 20NSOP, 20SSOP
HT68F2420	4MHz	1.8V~5.5V	1K×13	32×8	—	2	—	16	9-bit×1	—	—	—	—	√	—	8SOP, 16NSOP 20NSOP, 20SSOP
HT67F2432	4MHz	1.8V~5.5V	2K×16	128×8	32×16	6	—	26	9-bit×1 10-bit CTM×1	10-bit×4	—	20×4	√	—	UART×1	24SSOP 28SOP, 28SSOP
BS67F2432	4MHz	1.8V~5.5V	2K×16	128×8	32×16	6	—	21	9-bit×1 10-bit CTM×1	10-bit×4	8	15×4	√	—	UART×1	28SSOP 32QFN
HT67F2452	4MHz	1.8V~5.5V	8K×16	512×8	128×8	8	√	44	10-bit CTM×1 10-bit PTM×1 16-bit STM×1	12-bit×8	—	30×4 29×5 28×6	√	√	UART×1	32LQFP 44LQFP 48LQFP

Note: BX68R2420 Program Memory is OTP type.

RGB LED Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	Multiple RGB LED	Constant Current	Interface	Package
HT45F0060	8MHz	2.2V~5.5V	1K×14	64×8	2	8	10-bit CTM×3	—	3	Cascade	8SOP 10SOP
HT45F0062	8MHz	2.2V~5.5V	2K×16	128×8	4	14	10-bit CTM×1	√	12	I ² C×1 Cascade	16NSOP-EP 16QFN
HT45F0063	8MHz	2.2V~5.5V	4K×16	256×8	4	20	10-bit CTM×1	√	15	I ² C×1 Cascade	24SSOP-EP 24QFN

8-Bit OTP MCU

I/O OTP MCU										
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	PWM	Package
BX68R002	8MHz	2.0V~5.5V	1K×14	64×8	2	8	8-bit×1, 16-bit×1	—	8-bit×1	8SOP, 10SOP
BX68R003	8MHz	2.0V~5.5V	1K×14	64×8	2	14	8-bit×1, 16-bit×1	—	8-bit×3	8SOP, 16NSOP
BX68R004	8MHz	2.0V~5.5V	2K×15	96×8	4	18	8-bit×1, 16-bit×1	—	8-bit×3	16NSOP, 20NSOP 20SOP, 20SSOP

A/D OTP MCU										
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	PWM	Package
BX66R002	8MHz	2.0V~5.5V	1K×14	64×8	2	8	8-bit×1, 16-bit×1	8-bit×4	8-bit×1	8SOP 10SOP
BX66R0025			2K×16	128×8	4					
BX66R003	8MHz	2.0V~5.5V	1K×14	64×8	2	14	8-bit×1, 16-bit×1	8-bit×5	8-bit×3	8SOP, 16NSOP
BX66R004	8MHz	2.0V~5.5V	2K×15	96×8	4	18	8-bit×1, 16-bit×1	8-bit×10	8-bit×3	16NSOP, 20NSOP 20SOP, 20SSOP
BX66R006	16MHz	1.8V~5.5V	4K×16	256×8	8	18	10-bit STM×1 16-bit PTM×1	12-bit×8	16-bit×5	16NSOP, 20NSOP 20SOP, 20SSOP, 20QFN

8-Bit USB MCU

I/O USB OTP MCU										
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	Endpoints	LDO 3.3V	Package
HT82B45R*	12MHz	2.2V~5.5V	4K×16	256×8	8	35	8-bit×1 16-bit×1	3	√	Dice, 48LQFP

* Under development, available in 1Q, 2025.

I/O USB Flash MCU												
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	IAP/ISP	I/O	Timer	Endpoints	LDO 3.3V	Interface	Package
HT68FB550	16MHz	2.2V~5.5V	8K×16	512×8	8	√	25	10-bit CTM×2 10-bit STM×1 16-bit STM×1	6	√	SPI/I ² C×1 SPI×1	24SSOP 28SSOP
HT68FB560	16MHz	2.2V~5.5V	16K×16	768×8	12	√	37	10-bit CTM×2 10-bit STM×1 16-bit STM×1	8	√	SPI/I ² C×1 SPI×1	28SSOP 48LQFP

A/D USB Flash MCU																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP/ISP	I/O	Timer	ADC	RTC	Endpoints	LDO 3.3V	CMP	Interface	Package
HT66FB542	16MHz	2.2V~5.5V	4K×16	256×8	—	8	√	17	10-bit CTM×2 10-bit STM×1 16-bit STM×1	12-bit ×4	—	4	√	1	SPI/I ² C×1 SPI×1	24SSOP
HT66FB540	16MHz	2.2V~5.5V	4K×16	512×8	—	8	√	25	10-bit CTM×2 10-bit STM×1 16-bit STM×1	12-bit ×8	√	4	√	2	SPI/I ² C×1 SPI×1	28SSOP 48LQFP
HT66FB570	16MHz	2.2V~5.5V	32K×16	1024×8	256×8	12	√	55	10-bit PTM×5 16-bit STM×1	12-bit ×24	√	8	√	2	UART×1 SPI/I ² C×1 SPI×1	48LQFP 64LQFP

Note: # MDU: Multiplier Divider Unit, 16-bit unsigned multiplier and a 32-bit/16-bit divider.

RGB LED USB Flash MCU																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP/ISP	I/O	Timer	ADC	Endpoints	LDO 3.3V	LED PWM	Const. Current	Interface	Package
HT68FB541	16MHz	3.0V~5.5V	4K×16	256×8	64×8	8	√	18	16-bit×2	—	4	√	3×8	—	SPI×1	24SSOP
HT68FB571	16MHz	3.0V~5.5V	8K×16	512×8	64×8	8	√	41	16-bit×2	—	4	√	16×8	—	SPI×1	28SSOP 48LQFP
HT66FB572	16MHz	2.2V~5.5V	8K×16	1024×8	256×8	12	√	34	10-bit PTM×3 16-bit STM×1	12-bit×8	8	√	15×8	15	UART×1 SPI/I ² C×1 SPI×1	48LQFP 64LQFP

8-Bit CAN Bus Flash MCU														
CAN Bus Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	CAN Protocol	Message Objects	Interface	Package
HT66F3352	16MHz	1.8V~5.5V	8K×16	512x8	128x8	8	√	26	16 bit CTMx1 16 bit STMx1 10 bit PTMx1	12-bit×12	CAN 2.0A/B ISO11898-1	32	CAN×1 UART×1 SPI/I ² C×1	28SSOP 46QFN 48LQFP
HT66F3362			16K×16	1K×8	1K×8	12		28	16 bit CTMx1 16 bit STMx1 10 bit PTMx2				CAN×1 UART×2 SPI/I ² C×1	
Note: Based on BOSCH CAN IP module C_CAN.														

32-Bit BLDC Motor MCU
Cortex®-M0+ 32-Bit BLDC Motor MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	OPA / PGA	Timer ^{*1}	Cap. ^{*2} or PWM	Cpm. PWM ^{*3}	RTC	Interface	Others	I/O	Package
HT32F65232	60MHz	2.5V~5.5V	32KB	4KB	6CH	2Msps×1 12-bit×12	2	1 / 0	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	20 28 44	24SSOP 32QFN 48LQFP
HT32F65230			64KB	8KB		1Msps×2 12-bit×8	3	2 / 0	BFTM×2 SCTM×4 GPTM×1 MCTM×1			√			40	48LQFP
HT32F65240																

Cortex®-M0+ 32-Bit BLDC Motor MCU (CORDIC + PID Engine)

HT32F66246	80MHz	2.5V~5.5V	64KB	8KB	6CH	2.5Msps×1 12-bit×12	2	0 / 4	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	CAN×1 USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	20 28 44	24SSOP 32QFN 48LQFP
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Note: 1. BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer, MCTM: Motor Control Timer, LSTM: Low Speed Timer.
2. Cap.: Input Capture.
3. Cpm. PWM: Complementary PWM for 3-phase motor control or inverter application.

8-Bit BLDC Motor MCU
8-Bit BLDC Motor Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	MDU	OCF	PWM	CMP	Inter-face	Package
BD66FM5245	20MHz	4.5V~5.5V	4K×16	512×8	—	8	√	22	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×14	√	√	10-bit ×3	3	UART×1	16NSOP 24SSOP
BD66FM5252			8K×16	2048×8	512×8			30	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×11					UART×1 I ² C×1	24/28SSOP 32QFN

32-Bit BLDC Motor MCU with Gate-Driver
Cortex®-M0+ 32-Bit BLDC Motor MCU with 36V P/N Gate-Driver

Part No.	Max. Freq.	VCC	LDO	Flash	SRAM	PDMA	ADC	CMP	OPA / PGA	Timer ²	Cap. ³ or PWM	Cpm. PWM ⁴	RTC	Interface	Others	I/O	Package
HT32F65432A	60MHz	6V~32V	5V ¹	32KB	4KB	6CH	2Msps×1 12-bit×12	2	1 / 0	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	16 29	32QFN 48LQFP-EP
HT32F65440A				64KB	8KB		1Msps×2 12-bit×7	3	2 / 0							28	48LQFP-EP

Cortex®-M0+ 32-Bit BLDC Motor MCU with 36V P/N Gate-Driver (CORDIC + PID Engine)

HT32F66446A*	80MHz	6V~32V	5V ¹	64KB	8KB	6CH	2.5Msps×1 12-bit×11	2	0 / 4	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	CAN×1 USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	16 26 29	32QFN 46QFN 48LQFP-EP
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Cortex®-M0+ 32-Bit BLDC Motor MCU with 48V N/N Gate-Driver

HT32F65532G	60MHz	6V~40V	5V	32KB	4KB	6CH	2Msps×1 12-bit×12	2	1 / 0	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	12 28	32QFN 48LQFP-EP
HT32F65540G				64KB	8KB		1Msps×2 12-bit×8	3	2 / 0							26	48LQFP-EP

Cortex®-M0+ 32-Bit BLDC Motor MCU with 48V N/N Gate-Driver (CORDIC + PID Engine)

HT32F66546G*	80MHz	6V~40V	5V	64KB	8KB	6CH	2.5Msps×1 12-bit×11	2	0 / 4	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	CAN×1 USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	25 28	46QFN 48LQFP-EP
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Cortex®-M0+ 32-Bit BLDC Motor MCU with 110V N/N Gate-Driver

HT32F65732G	60MHz	6V~20V	5V	32KB	4KB	6CH	2Msps×1 12-bit×12	2	1 / 0	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	22 26	46QFN 48LQFP-EP
HT32F65740G				64KB	8KB		1Msps×2 12-bit×8	3	2 / 0							24	48LQFP-EP

Cortex®-M0+ 32-Bit BLDC Motor MCU with 110V N/N Gate-Driver (CORDIC + PID Engine)

HT32F66746G*	80MHz	6V~20V	5V	64KB	8KB	6CH	1Msps×2 12-bit×10	3	0 / 4	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	—	CAN×1 USART×1 UART×1 SPI×1, I ² C×1	CRC DIV	22 26	46QFN 48LQFP-EP
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* Under development, available in 1Q, 2025.

Note: 1. LDO: Support external signal wakeup to realize zero standby power function.

2. BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer, MCTM: Motor Control Timer, LSTM: Low Speed Timer.

3. Cap.: Input Capture.

4. Cpm. PWM: Complementary PWM for 3-phase motor control or inverter application.

8-Bit BLDC Motor MCU with Gate-Driver
8-Bit BLDC Motor Flash MCU with 26V P/N Gate-Driver

Part No.	Max. Freq.	VCC	LDO	Program Memory	Data Memory	Data EEPROM	I/O	Timer	ADC	MDU	OCP	PWM	CMP	Interface	Package
BD66FM6352A*	20MHz	6V~32V	5V*	8K×16	2048×8	512×8	18	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×9	√	√	10-bit ×3	3	UART×1 I ² C×1	32QFN

8-Bit BLDC Motor Flash MCU with 36V P/N Gate-Driver

Part No.	Max. Freq.	VCC	LDO	Program Memory	Data Memory	Data EEPROM	I/O	Timer	ADC	MDU	OCP	PWM	CMP	Interface	Package
BD66FM6445A	20MHz	6V~32V	5V*	4K×16	512×8	—	15	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×12	√	√	10-bit ×3	3	UART×1	32QFN
BD66FM6452A				8K×16	2048×8	512×8	18	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×9					UART×1 I ² C×1	
BD66FM6446B BD66FM6446C			5V	4K×16	512×8	512×8	16	10-bit PTM×2 16-bit PTM×2 16-bit CTM×1 16-bit CAPTM×1	12-bit ×10					UART×1 I ² C×1	24QFN

8-Bit BLDC Motor Flash MCU with 48V N/N Gate-Driver

BD66FM6546G	20MHz	6V~40V	5V	4K×16	512×8	512×8	13	10-bit PTM×2 16-bit PTM×2 16-bit CTM×1 16-bit CAPTM×1	12-bit ×8	√	√	10-bit ×3	3	UART×1 I ² C×1	28QFN
BD66FM6545G						—	15	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×12					UART×1	32QFN
BD66FM6550G				8K×16	2048×8	512×8	24	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×10					UART×1 I ² C×1	32QFN 48LQFP-EP

8-Bit BLDC Motor Flash MCU with 110V N/N Gate-Driver

BD66FM6746G	20MHz	6V~20V	5V	4K×16	512×8	512×8	16	10-bit PTM×2 16-bit PTM×2 16-bit CTM×1 16-bit CAPTM×1	12-bit ×13	√	√	10-bit ×3	3	UART×1 I ² C×1	28QFN 32QFN
BD66FM6752G				8K×16	2048×8		24	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×10						28QFN 32QFN 48LQFP-EP

* Under development, available in 1Q, 2025.

Note: LDO: Support external signal wakeup to realize zero standby power function.

8-Bit 1-phase BLDC Motor OTP MCU with 36V P/N Gate-Driver

Part No.	Max. Freq.	VCC	LDO	Program Memory	Data Memory	ORPP	I/O	Timer	ADC	MDU	OCP	PWM	CMP	Interface	Package
BD66RM2441B	20MHz	6V~32V	5V	4K×16	384×8	√	7	16-bit PTM×1 16-bit CTM×3	12-bit ×5	√	√	10-bit ×3	1	UART	16TSSOP-EP 16QFN

8-Bit 1-phase BLDC Motor OTP MCU with 48V N/N Gate-Driver

Part No.	Max. Freq.	VCC	LDO	Program Memory	Data Memory	ORPP	I/O	Timer	ADC	MDU	OCP	PWM	CMP	Interface	Package
BD66RM2541G	20MHz	6V~40V	5V	4K×16	384×8	√	7	16-bit PTM×1 16-bit CTM×3	12-bit ×5	√	√	10-bit ×3	1	UART	24QFN

32-Bit BLDC Motor MCU with Driver

Cortex®-M0+ 32-Bit BLDC Motor MCU with Driver

Part No.	Max. Freq.	VM	LDO	Peak Current	Flash	SRAM	PDMA	ADC	CMP	OPA / PGA	Timer ¹	Cap. ² or PWM	Cpm. PWM ³	Interface	Others	I/O	Package		
HT32F65B33F*	60MHz	6V~20V	5V	3.5A	32KB	4KB	6CH	2MSPS×1 12-bit×12	2	1 / 2	BFTM×2 SCTM×4 GPTM×1 MCTM×1 LSTM×1	12	3	USART×1 UART×1 SPI×1 I ² C×1	CRC DIV	23	48LQFP-EP		
HT32F65B40F*					64KB	8KB		1MSPS×2 12-bit×8	3	2 / 0						26	48LQFP-EP		
HT32F65C32F		6V~32V			32KB	4KB		2MSPS×1 12-bit×12	2	1 / 0						28	48LQFP-EP		
HT32F65C40F					64KB	8KB		1MSPS×2 12-bit×8	3	2 / 0						26	48LQFP-EP		

* Under development, available in 2Q, 2025.

Note: 1. BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer, MCTM: Motor Control Timer, LSTM: Low Speed Timer.

2. Cap.: Input Capture.

3. Cpm. PWM: Complementary PWM for 3-phase motor control or inverter application.

8-Bit BLDC Motor MCU with Driver

8-Bit BLDC Motor Flash MCU with Driver

Part No.	Max. Freq.	VM	LDO	Peak Current	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	MDU	OCF	PWM	CMP	Interface	Package
BD66FM8345C	20MHz	6V~15V	5V	1.5A	4K×16	512×8	—	√	11	10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×9	√	√	10-bit ×3	3	UART×1	24SSOP-EP 32QFN
BD66FM8346F*		6V~20V		3.5A			512×8		14	10-bit PTM×2 16-bit PTM×2 16-bit CTM×2 16-bit CAPTM×1	12-bit ×11					UART×1 I ² C×1	32QFN
BD66FM8446F		6V~32V		8K×16	2048×8	13			10-bit PTM×2 16-bit PTM×2 16-bit CAPTM×1	12-bit ×9							
BD66FM8352F*		6V~20V															
BD66FM8452F		6V~32V															

* Under development, available in 2Q, 2025.

8-Bit 1-phase BLDC Motor OTP MCU with Driver

Part No.	Max. Freq.	VM	LDO	Peak Current	Program Memory	Data Memory	ORPP	I/O	Timer	ADC	MDU	OCF	PWM	CMP	Interface	Package
BD66RM3341C-1 BD66RM3341C-2	20MHz	6V~15V	5V	1.5A	4K×16	384×8	√	6	16-bit PTM×1 16-bit CTM×3	12-bit ×4	√	√	10-bit ×3	1	UART	16NSOP-EP 16TSSOP-EP

Driver Peripheral

H-Bridge Driver

Part No.	Supply Voltage	Max. Motor Voltage	Motor Peak Current (A)	Motor RMS Current (A)	Max. Sleep Current (μA)	Max. PWM Frequency (Hz)	Number of H-Bridge	Protection	Package
HT7K1201	1.8V~6.0V	6V	1.3	0.8	0.1	200K	1	UVLO, OCP OTP, OSP	SOT23-6
HT7K1211		7.5V	2.1	1.5					
HT7K1311	2.5V~5.5V	15V	3.0	2.4	1.0	200K	1	UVLO, OCP OTP, OSP	8SOP-EP
HT7K1312									8DFN
HT7K1401	2.5V~5.5V	24V	2.0	1.8	1.0	200K	1	UVLO, OCP OTP, OSP	8SOP-EP
HT7K1411			3.2	2.5					

24-Bit A/D Flash MCU

32-Bit M0+ 24-Bit A/D MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	ADC		Timer		RTC	Interface		Others	Max. I/O	Package
HT32F59041	20MHz	2.5V~5.5V	64KB	8KB	SAR ADC 1Msps 12-bit×12	Delta Sigma ADC 24-bit×4	BFTM×2, PWM×2 GPTM×1, MCTM×1		√	USART×1, UART×2 SPI×1, I ² C×1		CRC, DIV	30	48LQFP

32-Bit M0+ 24-Bit A/D LCD MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	ADC		Timer		RTC	USB	LCD	Interface		Others	Max. I/O	Package
HT32F59741	60MHz	1.65V~3.6V	64KB	8KB	SAR ADC 1Msps 12-bit×10	Delta Sigma ADC 24-bit×4	BFTM×2, PWM×2 GPTM×1		√	√	29×4~25×8	USART×1, UART×2 SPI×2, I ² C×2		CRC, DIV SCI	53	64/80LQFP

Note:

BFTM: Basic Function Timer
GPTM: General Purpose Timer
QSPI: Quad serial peripheral interface
SCI: Smart Card Interface
AES: Advanced Encryption Standard

SCTM: Single Channel Timer
MCTM: Motor Control Timer
SLED: Strip LED Controller
LEDC: LED controller

PWM: Pulse Width Modulation
USB: 2.0 Full Speed device
DIV: Hardware Divider
EBI: External Bus Interface for NOR Flash/SRAM/LCD

24-Bit A/D Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer		ADC	ENOB	Temp. Sensor	CMP	OPA	Interface		Package
BH66F5350	12MHz	2.2V~5.5V	8K×16	512×8	128×8	8	√	13	10-bit CTM×1 16-bit PTM×1		24-bit×4	19.5	±0.2°C	—	2	UART/SPI/I ² C×1		24SSOP 28SSOP
BH66F5355	12MHz	2.2V~5.5V	8K×16	512×8	512×8	8	—	10	10-bit CTM×1 16-bit PTM×1		24-bit×4	19.5	±0.2°C	—	2	UART×1 SPI/I ² C×1		24QFN 24SSOP
BH66F5362	16MHz	1.8V~5.5V	16K×16	2048×8	1024×8	16	√	32	10-bit PTM×2 16-bit PTM×2 16-bit STM×2		12-bit×9 24-bit×4	— 19.5	—	2	—	UART×2 SPI×1, SPI/I ² C×1		48LQFP

24-Bit A/D LCD Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	MDU	Stack	IAP	I/O	Timer		ADC	ENOB	LCD	OPA	RTC	Interface		Package
BH67F5255	8MHz	2.2V~5.5V	8K×16	512×8	512×8	—	16	√	30	10-bit PTM×2 16-bit STM×1		24-bit×4	19.1	24×4 22×6	2	—	UART×1 SPI/I ² C×1		32QFN 48LQFP
BH67F5265	16MHz	2.2V~5.5V	16K×16	1024×8	1024×8	√	16	√	43	10-bit PTM×3 16-bit STM×1		24-bit×6	19.1	30×4 28×6 26×8	2	√	UART×1 SPI×1 SPI/I ² C×1		32QFN 48/64LQFP
BH67F5275	16MHz	2.2V~5.5V	32K×16	2048×8	2048×8	√	16	√	57	10-bit ATM×1 10-bit PTM×3 16-bit STM×1		24-bit×6	19.1	44×4 42×6 40×8	2	√	UART×1 SPI×1 SPI/I ² C×1		32QFN 48/64LQFP 80LQFP
BH67F5362	16MHz	1.8V~5.5V	16K×16	2048×8	1024×8	√	16	√	45	10-bit PTM×6 16-bit PTM×2 16-bit STM×3		12-bit×14 24-bit×4	— 19.5	36×4 34×6 32×8	—	√	UART×2 SPI/I ² C×1		64LQFP
BH67F5372	16MHz	1.8V~5.5V	32K×16	3072×8	2048×8	√	16	√	45	10-bit PTM×6 16-bit PTM×2 16-bit STM×3		12-bit×14 24-bit×4	— 19.5	36×4 34×6 32×8	—	√	UART×3 SPI/I ² C×1		64LQFP

Note: Test Conditions of ENOB are PGA Gain = 64, Data Rate = 10Hz, and Vref=1.65V.

24-Bit A/D Peripheral

24-Bit A/D Peripheral

Part No.	Max. Freq.	VDD	ADC	ENOB	Data Rate	PGA	Interface	Package
BH45B1225	4.91MHz	2.4V~5.5V	24-bit×4	19.5	5Hz~1.6kHz	1~128	I ² C×1	8SOP, 16NSOP
BH45B1525	4.91MHz	2.7V~5.5V	24-bit×4	21.3	10Hz~1.28kHz	1~128	SPI×1, I ² C×1	20SSOP

Note: Test Conditions of ENOB are PGA Gain = 64, Data Rate = 10Hz, and Vref=1.65V.

Health Care Flash MCU

Health Measurement Cortex®-M0+ 32-Bit LCD MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	I/O	ADC	ENOB	CMP	OPA	Timer	USB	RTC	LCD	Phase Detect	Interface	Package
HT32F59740*	60MHz	1.65V~3.6V	64KB	8KB	54	12-bit×8 24-bit×6	— 19.1	—	3	BFTM×2, PWM×2 GPTM×1	√	√	29×4 27×6 25×8	√	USART×1 UART×2, SPI×2 I²C×2, SCI×1	80LQFP 100LQFP
HT32F59750*	60MHz	1.65V~3.6V	128KB	16KB	62	12-bit×8 24-bit×6	— 19.1	2	3	BFTM×2, SCTM×2 PWM×2, GPTM×1	√	√	37×4 35×6 33×8	√	USART×1 UART×2, SPI×2 I²C×2, SCI×2	80LQFP 100LQFP

* Under development, available in 1Q, 2025

Note: 1. They are Suitable for Glucose Meter (HCT), Blood Pressure Meter, Infrared Thermometer, Body Fat Scale, and so on.

2. Test Conditions of ENOB are PGA Gain = 64, Data Rate = 10Hz, and Vref=1.65V.

Impedance & Electrochemical LCD Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	MDU	Stack	IAP	I/O	Timer	ADC	ENOB	LCD	RTC	OPA	Phase Detect	USB	Interface	Package
BH67F2476	16MHz	2.2V~5.5V	32K×16	2048×8	2048×8	—	16	√	49	10-bit PTM×2 16-bit STM×1 10-bit ATM×1	24-bit ×10	19.1	36×4 34×6 32×8	√	2	√	—	UART×2 SPI/I²C×1	64LQFP 80LQFP
BH67F2477*	8MHz	2.2V~5.5V	32K×16	2048×8	2048×8	√	16	√	47	10-bit PTM×1 16-bit STM×1	12-bit ×6	—	32×4 30×6	√	2	√	—	UART×2	64LQFP
BH67F2495	16MHz	2.2V~5.5V	64K×16	4096×8	4096×8	√	16	√	52	10-bit PTM×2 16-bit STM×1 10-bit ATM×1	24-bit ×10	19.1	36×4 34×6 32×8	√	2	√	√	UART×2 SPI/I²C×1	64LQFP 80LQFP

* Under development, available in 1Q, 2025

Note: Test Conditions of ENOB are PGA Gain = 64, Data Rate = 10Hz, and VREF = 1.65V.

Glucose Meter LCD Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	MDU	Stack	IAP	I/O	Timer	ADC	LCD	RTC	OPA	USB	Interface	Package
BH67F2472	16MHz	2.2V~5.5V	32K×16	2048×8	2048×8	—	16	√	58	10-bit PTM×2 16-bit STM×1 10-bit ATM×1	12-bit ×6	36×4 34×6 32×8	√	2	—	UART/SPI/I²C×2 SPI×1	64LQFP 80LQFP
BH67F2475	16MHz	2.2V~5.5V	32K×16	2048×8	2048×8	√	16	√	56	10-bit PTM×2 16-bit STM×1 10-bit ATM×1	12-bit ×6	36×4 34×6 32×8	√	2	√	UART/SPI/I²C×2 SPI×1	32QFN 64LQFP 80LQFP
BH67F2480	16MHz	2.2V~5.5V	48K×16	1024×8	64×8	√	12	√	46	10-bit PTM×3 16-bit STM×1	12-bit ×6	48×4 46×6 44×8	√	2	—	UART×2 SPI/I²C×1, SPI×1	80LQFP

Continuous Glucose Monitoring Flash MCU

Part No.	Max. Freq.	Input Voltage	Voltage Pump	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	OPA	Interface	Package
BH66F2452*	4MHz	0.85V~2.5V	√	8K×16	512×8	512×8	16	√	9	10-bit CTM×1 16-bit PTM×1	24-bit ×2	3	UART×1 SPI×1	24QFN

* Under development, available in 2Q, 2025

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	MDU	Stack	IAP	I/O	Timer	ADC	OPA	CMP	Interface	Package
BH66F2455*	4MHz	2.2V~5.5V	8K×16	512×8	512×8	—	16	√	9	10-bit CTM×1 16-bit PTM×1	24-bit ×2	3	—	UART×1 SPI×1	16/24QFN 25WLCSP
BH66F2475	16MHz	2.2V~5.5V	32K×16	2048×8	2048×8	√	16	√	9	10-bit CTM×2 16-bit PTM×1	24-bit ×2	3	√	UART×1 SPI×1	16/24QFN

* Under development, available in 2Q, 2025

Blood Pressure Meter LCD Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	LCD	RTC	OPA	Const. Current	Interface	Package
BH67F2265	8MHz	2.2V~5.5V	16K×16	512×8	1024×8	12	√	30	10-bit CTM×2 16-bit STM×1	12-bit ×4	32×4 30×6	√	3	√	UART×1 SPI/I²C×1	64LQFP

Pulse Oximeter Cortex®-M0+ 32-Bit MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	I/O	RTC	Timer	ADC	Oximeter AFE	Others	Interface	Package
HT32F59045	20MHz	2.5V~5.5V	64KB	8KB	34	√	BFTM×2, PWM×2 GPTM×1, MCTM×1	12-bit×12	√	CRC DIV	USART×1, UART×2 SPI×2, I²C×2	46QFN

Pulse Oximeter Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	SCOM	Oximeter AFE	Interface	Package
BH66F2560	16MHz	2.2V~5.5V	16K×16	1024×8	1024×8	16	√	24	10-bit PTM×1 10-bit STM×2	12-bit×8	4	√	UART×1 SPI/I²C×1	24/32QFN 28SSOP

Health Care Flash MCU															
Body Fat Measurement Cortex®-M0+ 32-Bit Flash MCU															
Part No.	Max. Freq.	VDD	Flash	SRAM	I/O	RTC	Timer	LCD	ADC	Electrode	Phase Detect	Interface	Package		
HT32F59746*	60MHz	2.2V~3.6V	64KB	8KB	51	√	BFTM×2, PWM×2 GPTM×1	29×4 27×6 25×8	12-bit×4	8	√	USART×1 UART×2, SPI×2 I²C×2, SCI×1	80LQFP		
									24-bit×4						
* Under development, available in 1Q, 2025															
Body Fat Measurement Flash MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	IAP	Timer	ADC	RTC	Electrode	Phase Detect	Interface	Package
BH66F2665	8MHz	2.2V~5.5V	16K×16	1024×8	1024×8	16	26	√	10-bit CTM×1 10-bit STM×1	24-bit×6	√	8	√	UART×1 SPI/I²C×1	24/32QFN 48LQFP
Body Fat Measurement DFE OTP MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	Electrode	Phase Detect	Interface	Package			
BH66R2640	8MHz	2.2V~5.5V	4K×16	512×8	12	15	10-bit CTM×1	24-bit×4	4	√	UART×1 SPI/I²C×1	24SSOP 32QFN			
Ultra-Low Voltage R to F LCD Flash MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	LCD	R to F	EL	LVD	Package		
BH67F2132	128kHz	1.1V~2.2V	2K×16	128×8	128×8	4	24	10-bit CTM×1	21×3 22×2	2CH	√	1.15V	32QFN 48LQFP		
BH67F2142			4K×16	256×8									48LQFP		

Smoke Detector Flash MCU

Cortex-M0+ 32-Bit Smoke Detector MCU with Buzzer Driver

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	Timer	RTC	AFE	IR Driver	Boost	Interface	Others	Max. I/O	Package
HT32L62141	48MHz	2.2V~3.6V	64KB	8KB	6CH	1MSPS 12-bit x7	BFTM×2 SCTM×2 GPTM×1 MCTM×1	√	1CH	2	√	USART×1 UART×2 SPI×2 I ² C×2	CRC DIV	30	64LQFP

Note: BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer, MCTM: Motor Control Timer.

Smoke Detector Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	Interface	Package
BA45F5220	8MHz	2.2V~5.5V	1K×14	64×8	32×14	—	4	10-bit PTM×1	10-bit x3	—	1CH	2	—	—	8SOP 10SOP
BA45F5240	8MHz	2.2V~5.5V	4K×16	256×8	64×8	—	13	10-bit PTM×1 10-bit STM×1	12-bit x4	—	1CH	2	—	UART/SPI/I ² C×1	16NSOP 20SSOP
BA45F5240-2							11								16NSOP
BA45F5250	8MHz	2.2V~5.5V	8K×16	1024×8	128×8	√	22	10-bit PTM×1 10-bit STM×2	12-bit x8	16-bit x1	1CH	2	—	UART×1 SPI/I ² C×1	16NSOP 20/24/28SSOP
BA45F5260	16MHz	2.2V~5.5V	16K×16	2048×8	256×8	√	26	10-bit PTM×3 10-bit STM×2	12-bit x12	16-bit x1	1CH	2	√	UART×2 SPI/I ² C×1	24/28SSOP 48LQFP

Enhanced Smoke Detector Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	CRC	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	Interface	Package
BA45F52540	8MHz	2.2V~5.5V	4K×16	256×8	64×8	—	√	15	10-bit PTM×1 10-bit STM×1	12-bit x4	—	2CH	2	√	UART/SPI/I ² C×1	16NSOP 20/24SSOP
BA45F52540-2								11								16NSOP
BA45F52550	8MHz	2.2V~5.5V	8K×16	1024×8	128×8	√	√	22	10-bit PTM×1 10-bit STM×2	12-bit x8	16-bit x1	2CH	2	√	UART×1 SPI/I ² C×1	16NSOP 20/24/28SSOP
BA45F52560	16MHz	2.2V~5.5V	16K×16	2048×8	256×8	√	√	31	10-bit PTM×3 10-bit STM×2	12-bit x16	16-bit x1	2CH	2	√	UART×2 SPI/I ² C×1	28SSOP 48LQFP

Smoke Detector Flash MCU with Buzzer Driver

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	Boost	Interface	Package
BA45F5320	8MHz	2.2V~5.5V	1K×14	64×8	32×14	—	4	10-bit PTM×1	10-bit x3	—	1CH	2	—	√	—	20SSOP
BA45F5340	8MHz	2.2V~5.5V	4K×16	256×8	64×8	—	13	10-bit PTM×1 10-bit STM×1	12-bit x4	—	1CH	2	—	√	UART/SPI/I ² C×1	24SSOP 28SSOP
BA45F5350	8MHz	2.2V~5.5V	8K×16	1024×8	128×8	√	22	10-bit PTM×1 10-bit STM×2	12-bit x8	16-bit x1	1CH	2	—	√	UART×1 SPI/I ² C×1	28SSOP 48LQFP
BA45F5360	16MHz	2.2V~5.5V	16K×16	2048×8	256×8	√	26	10-bit PTM×3 10-bit STM×2	12-bit x12	16-bit x1	1CH	2	√	√	UART×2 SPI/I ² C×1	28SOP 48LQFP

Enhanced Smoke Detector Flash MCU with Buzzer Driver

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	CRC	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	Boost	Interface	Package
BA45F5343	8MHz	2.2V~5.5V	4K×16	256×8	64×8	—	√	12	10-bit PTM×1 10-bit STM×1	12-bit x4	—	2CH	2	√	√	UART/SPI/I ² C×1	24SSOP 28SSOP
BA45F5353	8MHz	2.2V~5.5V	8K×16	1024×8	128×8	√	√	22	10-bit PTM×1 10-bit STM×2	12-bit x8	16-bit x1	2CH	2	√	√	UART×1 SPI/I ² C×1	28SSOP 48LQFP
BA45F5363	16MHz	2.2V~5.5V	16K×16	2048×8	256×8	√	√	31	10-bit PTM×3 10-bit STM×2	12-bit x16	16-bit x1	2CH	2	√	√	UART×2 SPI/I ² C×1	48LQFP

9V Battery Smoke Detector MCU with Buzzer Driver

Part No.	Max. Freq.	VCC (HV)	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	LDO	Buzzer Driver	Interface	Package
BA45F5420	8MHz	4.3V~12V	1K×14	64×8	32×14	—	4	10-bit PTM×1	10-bit x3	—	1CH	2	—	√	√	—	16NSOP
BA45F5440	8MHz	4.3V~12V	4K×16	256×8	64×8	—	9	10-bit PTM×1 10-bit STM×1	12-bit x4	—	1CH	2	—	√	√	UART/SPI/I ² C×1	20SOP 20SSOP
BA45F5450	8MHz	4.3V~12V	8K×16	1024×8	128×8	√	17	10-bit PTM×1 10-bit STM×2	12-bit x8	16-bit x1	1CH	2	—	√	√	UART×1 SPI/I ² C×1	20SOP 24/28SOP
BA45F5460	16MHz	4.3V~12V	16K×16	2048×8	256×8	√	24	10-bit PTM×3 10-bit STM×2	12-bit x12	16-bit x1	1CH	2	√	√	√	UART×2 SPI/I ² C×1	48LQFP

Smoke Detector Flash MCU

Smoke Detector Flash MCU with Addressable Power Line Transceiver

Part No.	Max. Freq.	VCC (HV)	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	AFE	IR Driver	Power Line Transceiver	LDO	Temp. Sensor	Interface	Package
BA45F5542	8MHz	42V	4K×16	256×8	64×8	—	9	10-bit PTM×1 10-bit STM×1	12-bit ×4	1CH	2	√	√	—	UART/SPI/I ² C×1	16NSOP 20SSOP
BA45F5542-2							7		12-bit ×3							16NSOP
BA45F5552	8MHz	42V	8K×16	1024×8	128×8	√	13	10-bit PTM×1 10-bit STM×2	12-bit ×8	1CH	2	√	√	—	UART×1 SPI/I ² C×1	16NSOP 20/24SOP
BA45F5562	16MHz	42V	16K×16	2048×8	256×8	√	23	10-bit PTM×3 10-bit STM×2	12-bit ×12	1CH	2	√	√	√	UART×2 SPI/I ² C×1	24SOP, 28SOP 28SSOP, 48LQFP

Enhanced Smoke Detector Flash MCU with Addressable Power Line Transceiver

Part No.	Max. Freq.	VCC (HV)	Program Memory	Data Memory	Data EEPROM	IAP	CRC	I/O	Timer	ADC	AFE	IR Driver	Power Line Transceiver	LDO	Temp. Sensor	Interface	Package
BA45F25543	8MHz	±42V [#]	4K×16	256×8	64×8	—	√	10	10-bit PTM×1 10-bit STM×1	12-bit ×4	2CH	2	√	3.3V 5.0V	√	UART/SPI/I ² C×1	16NSOP 24SSOP
BA45F25553	8MHz	±42V [#]	8K×16	1024×8	128×8	√	√	13	10-bit PTM×1 10-bit STM×2	12-bit ×8	2CH	2	√	3.3V 5.0V	√	UART×1 SPI/I ² C×1	16NSOP 28SOP
BA45F25563	16MHz	±42V [#]	16K×16	2048×8	256×8	√	√	28	10-bit PTM×3 10-bit STM×2	12-bit ×16	2CH	2	√	3.3V 5.0V	√	UART×2 SPI/I ² C×1	28SOP 48LQFP

Note: # Built-in MOSFET bridge rectifier can achieve non-polar voltage input.

Smoke Detector Flash MCU with Sub-1GHz Transceiver

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	AFE	IR Driver	Band	Data Rate	Output Power	Temp. Sensor	Interface	Package
BA45F5640	8MHz	2.2V~3.6V	4K×16	256×8	64×8	—	13	10-bit PTM×1 10-bit STM×1	12-bit ×4	1CH	2	315MHz 433MHz 470MHz 868MHz 915MHz	2~250 kbps	13dBm	—	UART/SPI/I ² C×1	46QFN
BA45F5650			8K×16	1024×8	128×8	√	17	10-bit PTM×1 10-bit STM×2	12-bit ×5							UART×1 SPI/I ² C×1	
BA45F5660			16K×16	2048×8	256×8		22	10-bit PTM×3 10-bit STM×2	12-bit ×8						√	UART×2 SPI/I ² C×1	48LQFP-EP

Smoke Detector Flash MCU with Calendar

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	I/O	Timer	ADC	Voice DAC	AFE	IR Driver	Temp. Sensor	Interface	Package
BA45F5740	8MHz	2.2V~5.5V	4K×16	256×8	64×8	—	13	10-bit PTM×1 10-bit STM×1	12-bit ×4	—	1CH	2	—	UART/SPI/I ² C×1	16NSOP 20/24SOP
BA45F5740-2							6		12-bit ×2						16NSOP
BA45F5750	8MHz	2.2V~5.5V	8K×16	1024×8	128×8	√	22	10-bit PTM×1 10-bit STM×2	12-bit ×8	16-bit ×1	1CH	2	—	UART×1 SPI/I ² C×1	16NSOP 20/24SOP 48LQFP
BA45F5760	16MHz	2.2V~5.5V	16K×16	2048×8	256×8	√	26	10-bit PTM×3 10-bit STM×2	12-bit ×12	16-bit ×1	1CH	2	√	UART×2 SPI/I ² C×1	24SOP 28SOP 48LQFP

Fire Protection Flash MCU

Fire Protection Flash MCU with Power Line Transceiver

Part No.	Max. Freq.	VCC (HV)	VDD	Program Memory	Data Memory	Data EEPROM	IAP	CRC	I/O	Timer	ADC	Power Line Transceiver	LDO	Interface	Package
BA45F3541	8MHz	42V	3.3V	4K×16	256×8	512×8	√	√	13	10-bit PTM×2 10-bit CTM×4	12-bit×4	√	√	UART×1	16NSOP 20SSOP

Fire Emergency Indicating Flash MCU with Power Line Transceiver

Part No.	Max. Freq.	VCC (HV)	LDO	Program Memory	Data Memory	Data EEPROM	ADC	I/O	Power Line Transceiver	LED Constant Current	Open/Short Detection	Short Protection	Thermal Shutdown	Package
BA45F3631*	8MHz	60V	3.3V	2K×14	64×8	32×14	12-bit ×3	6	√	Max. 63mA×1 Max. 31mA×2	√	√	√	16NSOP
BA45F3641*	8MHz	60V	3.3V	4K×15	128×8	32×15	12-bit ×4	6	√	Max. 63mA×1 Max. 31mA×2	√	√	√	16NSOP

* Under development, available in 2Q, 2025.

CO/GAS Detector Flash MCU

CO/GAS(Catalytic Gas Sensor) Detector Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	Temp. Sensor	Voice DAC	Interface	Package
BA45F6730	8MHz	2.2V~5.5V	2K×16	128×8	32×8	6	—	14	10-bit PTM×1	12-bit×5	√	—	—	UART/SPI/I ² C×1	16NSOP, 20SSOP
BA45F6740	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	22	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	—	UART/SPI/I ² C×1	16NSOP, 20SSOP 24SSOP, 28SSOP
BA45F6750	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	36	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	28SSOP 32QFN, 48LQFP
BA45F6760	8MHz	2.2V~5.5V	16K×16	2024×8	256×8	8	√	42	10-bit PTM×1 10-bit STM×2	12-bit×8	√	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	28SSOP 48LQFP

CO/GAS(Catalytic Gas Sensor) Detector Flash LCD MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	LCD Driver	Temp. Sensor	Voice DAC	Interface	Package
BA45F6746	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	31	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	12SEG ×4COM	√	—	UART/SPI/I ² C×1	28SSOP 32QFN, 48LQFP
BA45F6756	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	36	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	16SEG ×4COM	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	28SSOP 48LQFP
BA45F6766	8MHz	2.2V~5.5V	16K×16	2048×8	256×8	8	√	38	10-bit PTM×1 10-bit STM×2	12-bit ×8	√	20SEG ×4COM	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	28SSOP 48LQFP

CO/GAS(Catalytic Gas Sensor) Detector Flash MCU with Calendar

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	Temp. Sensor	Voice DAC	Interface	Package
BA45F6742	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	22	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	—	UART/SPI/I ² C×1	28SSOP 48LQFP
BA45F6752	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	31	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	48LQFP
BA45F6762*	8MHz	2.2V~5.5V	16K×16	2048×8	256×8	8	√	31	10-bit PTM×1 10-bit STM×2	12-bit×8	√	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	48LQFP

* Under development, available in 1Q, 2025.

CO/GAS(Catalytic Gas Sensor) Detector Flash LCD MCU with Calendar

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	LCD Driver	Temp. Sensor	Voice DAC	Interface	Package
BA45F6748	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	31	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	12SEG ×4COM	√	—	UART/SPI/I ² C×1	48LQFP
BA45F6758	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	32	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	13SEG ×4COM	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	48LQFP
BA45F6768*	8MHz	2.2V~5.5V	16K×16	2048×8	256×8	8	√	32	10-bit PTM×1 10-bit STM×2	12-bit ×8	√	14SEG ×4COM	√	16-bit ×1	UART×1 UART/SPI/I ² C×1	48LQFP

* Under development, available in 1Q, 2025.

GAS(Semiconductor Gas Sensor) Detector Flash MCU with Calendar

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Interface	Package
BA45F6753	16MHz	2.2V~5.5V	8K×16	512×8	128×8	8	√	26	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	12-bit×12	UART×1 SPI/I ² C×1	28SSOP 48LQFP
BA45F6763	16MHz	2.2V~5.5V	16K×16	1024×8	1024×8	8	√	28	10-bit PTM×2 16-bit CTM×1 16-bit STM×1	12-bit×12	UART×2 SPI/I ² C×1	28SSOP 48LQFP

CO/GAS Detector Flash MCU

CO/GAS(Catalytic Gas Sensor) Detector Flash MCU with Buzzer Driver

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	Temp. Sensor	Voice DAC	Boost	Interface	Package
BA45F6830	8MHz	2.2V~5.5V	2K×16	128×8	32×8	6	—	14	10-bit PTM×1 10-bit STM×1	12-bit×5	√	—	—	√	UART/SPI/I ² C×1	24SSOP 28SSOP
BA45F6840	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	22	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	—	√	UART/SPI/I ² C×1	24/28SSOP 48LQFP
BA45F6850	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	34	10-bit PTM×1 10-bit STM×1	12-bit×8	√	√	16-bit ×1	√	UART×1 UART/SPI/I ² C×1	28SSOP 48LQFP
BA45F6860*	8MHz	2.2V~5.5V	16K×16	2048×8	256×8	8	√	34	10-bit PTM×1 10-bit STM×2	12-bit×8	√	√	16-bit ×1	√	UART×1 UART/SPI/I ² C×1	48LQFP

* Under development, available in 2Q, 2025.

CO/GAS(Catalytic Gas Sensor) Detector Flash LCD MCU with Buzzer Driver

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	AFE	LCD Driver	Temp. Sensor	Voice DAC	Boost	Interface	Package
BA45F6846	8MHz	2.2V~5.5V	4K×16	256×8	128×8	8	√	31	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	12SEG ×4COM	√	—	√	UART/SPI/I ² C×1	48LQFP
BA45F6856	8MHz	2.2V~5.5V	8K×16	1024×8	256×8	8	√	31	10-bit PTM×1 10-bit STM×1	12-bit ×8	√	12SEG ×4COM	√	16-bit ×1	√	UART×1 UART/SPI/I ² C×1	48LQFP
BA45F6866*	8MHz	2.2V~5.5V	16K×16	2048×8	256×8	8	√	31	10-bit PTM×1 10-bit STM×2	12-bit ×8	√	13SEG ×4COM	√	16-bit ×1	√	UART×1 UART/SPI/I ² C×1	48LQFP

* Under development, available in 2Q, 2025.

PIR Flash MCU

PIR Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	OPA	Interface	Package
BA45F6622	8MHz	2.2V~5.5V	1K×14	64×8	32×14	4	6	10-bit STM×1	10-bit×2	2	—	16NSOP 16QFN
BA45F6630	8MHz	2.2V~5.5V	2K×16	256×8	32×8	6	15	10-bit STM×2	12-bit×4	2	UART/SPI/I ² C×1	24SSOP 24QFN
BA45F6640	8MHz	2.2V~5.5V	4K×16	384×8	64×8	8	18	10-bit STM×2 10-bit CTM×1	12-bit×8	2	UART/SPI/I ² C×1	24/28SSOP 28QFN

PIR Controller

PIR Controller

Part No.	VDD	Standby Current	Vreg	Comparator Window	Effective Trigger Width	LVD	Output	CDS Debounce Time	Sensitivity	Package
BA76220	2.2V~5.5V	17μA	√	Vreg×(1/2±1/6)	>24ms	√	High Active [#]	<3s	Adjustable [#]	8SOP, 16NSOP

Note: # Adjusted by resistors or development platform.

USB Charging Protocol MCU

USB Charging Protocol Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	Type-C Ports	Termination Resistor	Max. CC Voltage	Interface	I/O	Package
HT45F9160	20MHz	2.2V~5.5V	16K×16	2K×8	1K×8	√	12-bit ×11	10-bit PTM×2 16-bit PTM×2 16-bit STM×1	1	Rp, Rd-db	24V	UART×1 SPI/I ² C×1	19	32QFN

AC Charger MCU

AC Charger Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	OPA	DAC	CAN	Interface	I/O	Package
HT45F5Q-2A	8MHz	2.2V~5.5V	2K×15	128×8	32×15	—	12-bit ×7	10-bit CTM×1	3	12-bit×1 14-bit×1	—	UART×1	15	16NSOP 20NSOP
HT45F5Q-3	8MHz	2.2V~5.5V	4K×15	256×8	32×15	—	12-bit ×11	10-bit CTM×1, 10-bit STM×1	3	12-bit×1 14-bit×1	—	UART×1 SPI/I ² C×1	23	24SSOP 28SSOP
HT45F5Q-5	8MHz	2.2V~5.5V	8K×16	512×8	512×8	√	12-bit ×12	10-bit CTM×1 10-bit STM×1, 16-bit STM×1	3	14-bit×2	—	UART×1 SPI/I ² C×1	27	24/28SSOP 32QFN
HT45F5Q-6	20MHz	2.7V~5.5V	16K×16	1024×8	1024×8	√	12-bit ×12	10-bit PTM×2, 10-bit CTM×1 10-bit STM×1, 16-bit STM×1	3	14-bit×2	—	UART×1 SPI/I ² C×1	27	24/28SSOP 32QFN
HT45F5QC-5	8MHz	2.2V~5.5V	8K×16	512×8	512×8	√	12-bit ×9	10-bit CTM×1, 10-bit STM×1 16-bit STM×1	3	14-bit×2	1	—	16	28SSOP 32QFN
HT45F5QC-6	20MHz	2.7V~5.5V	16K×16	1024×8	1024×8	√	12-bit ×9	10-bit PTM×2, 10-bit CTM×1 10-bit STM×1, 16-bit STM×1	3	14-bit×2	1	UART×1	16	28SSOP 32QFN

AC Charger OTP MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	ORPP	ADC	Timer	OPA	DAC	HVO	LDO	Interface	I/O	Package
HT45R5Q-2	8MHz	2.2V~5.5V	2K×16	128×8	√	12-bit ×5	8-bit×1	3	12-bit ×2	—	—	—	11	16NSOP 16QFN
HT45R5Q-3	8MHz	2.2V~5.5V	4K×16	256×8	√	12-bit ×10	10-bit CTM×1 10-bit STM×1	3	14-bit ×2	—	—	UART×1 SPI/I ² C×1	23	24SSOP 28SSOP
HT45R6Q-2	8MHz	2.2V~5.5V	2K×16	128×8	√	12-bit ×4	8-bit×1	3	12-bit ×2	1xLS 30V	5V/30mA	—	10	16NSOP 20NSOP
HT45R6Q-3	8MHz	2.2V~5.5V	4K×16	256×8	√	12-bit ×7	10-bit CTM×1 10-bit STM×1	3	14-bit ×2	1xLS 30V	5V/30mA	UART×1 SPI/I ² C×1	15	24SSOP

DC Charger MCU

Power Bank Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	Hardware Protect	HVO	Δt _{PM}	Interface	I/O	Package
HT45F4MA	15MHz	2.55V~5.5V	2K×16	128×8	64×8	—	12-bit ×8	10-bit PTM×1 16-bit STM×1	OVP×1 OCP×1	—	33ns	—	16	16NSOP 20SSOP
HT45FH4MA-1										2xLS 30V			13	20SSOP
BP45F4NB	15MHz	2.6V~5.5V	4K×16	256×8	—	√	12-bit ×11	10-bit CTM×2 16-bit PTM×1	OUVP×1 OCP×2	—	33ns	UART×1	26	24/28SSOP 28QFN
BP45FH4NB										2xLS 30V			21	28SSOP
HT45F5N	8MHz	2.55V~5.5V	4K×16	256×8	64×8	—	12-bit ×14	10-bit PTM×1 16-bit STM×1	OUVP×1 OCP×2	—	8ns	—	26	28SSOP
HT45FH5N										2xLS 30V			28	46QFN

DC Charger MCU														
32-Bit M0+ PD Li Battery Management MCU														
Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	Timer	RTC	Interface	Others	Max. I/O	Package		
HT32F61052	60MHz	2.5V~5.5V	128KB	16KB	6CH	2Msps 12bit×12ch	BFTM×2, PWM×2 GPTM×1, MCTM×1	√	USART×2, UART×2 SPI×2, I²C×2	CRC, DIV LEDC, EBI	39	64LQFP		
Linear Charger Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	I _{CRG}	Touch Key	Other Function	Interface	I/O	Package
HT45F2440	16MHz	1.8V~5.5V	4K×16	256×8	128×8	√	12-bit×6	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	1A	—	Boost (5V/0.3A)	UART×1 I²C×1	17	32QFN
HT45F2140	16MHz	1.8V~5.5V	4K×16	256×8	128×8	—	12-bit×5	10-bit STM×1 10-bit PTM×1	1A	—	—	—	11	16NSOP
BS45F2141*	16MHz	1.8V~5.5V	4K×16	512×8	512×8	—	12-bit×3	10-bit CTM×1 10-bit PTM×1	1A	3	—	UART×1 I²C×1	10	16NSOP
* Under development, available in 2Q, 2025.														
Linear Charger OTP MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	ORPP	ADC	Timer	I _{CRG}	Touch Key	Interface	I/O	Package		
HT45R2140*	8MHz	2.5V~4.2V	4K×16	256×8	√	12-bit×5	10-bit STM×1 16-bit PTM×1	1A	—	—	11	16NSOP		
BS45R2141*	16MHz	2.0V~5.5V	4K×16	384×8	√	12-bit×3	10-bit CTM×3 10-bit PTM×1	1A	3	I²C×1	10	16NSOP		
* Under development, available in 2Q, 2025.														

Wireless Charger MCU															
Wireless Charger Flash MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	Max. VIN	Function Mode	Pout(max)	Comm. Protocol	Interface	I/O	Package
BP66FW1242	16MHz	1.8V~5.5V	4K×16	256×8	128×8	√	12-bit×6	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	7V	Receiver	5W	Qi 1.2.4	UART×1 SPI/I ² C×1	18	32QFN

Power Inverter MCU															
Power Inverter Flash MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	Position	Directional	Phase	Pout(max)	Interface	I/O	Package
HT45F7550	20MHz	4.5V~5.5V	8K×16	512×8	512×8	√	12-bit×7	10-bit CTM×2 16-bit STM×1	AC Side	Uni-	1φ	1000W	UART×1	22	24SSOP 28SSOP
Power Inverter OTP MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	ORPP	ADC	Timer	Position	Directional	Phase	Pout(max)	HVO	Interface	I/O	Package
HT45R7130	16MHz	2.2V~5.5V	2K×16	128×8	√	12-bit×6	10-bit CTM×1 10-bit PTM×1	DC Side	Uni-	1φ	1000W	2×LS 12V	UART×1 SPI×1	9	16NSOP

BMS MCU														
32-Bit M0+ BMS MCU														
Part No.	Max. Freq.	VDD	Flash	SRAM	ADC	Timer	Cell #	V _{CELL} Accuracy	HVO	Interface	Max. I/O	Package		
HT32F61630	16MHz	2.5V~5.5V	32KB	2KB	500ksps 12-bit×6	BFTM×1 SCTM×3	3~8	4.2V±5mV	2×LS 12V 1×HS 12V	UART×2 SPI×2, I ² C×1	22	48LQFP-EP		
HT32F61641	20MHz		64KB	8KB	1Msps 12-bit×6	BFTM×2, PWM×2 GPTM×1, MCTM×1				USART×1, UART×1 SPI×2, I ² C×2				
HT32F61730	16MHz	2.5V~5.5V	32KB	2KB	500ksps 12-bit×7	BFTM×1 SCTM×3	3~8	4.2V±5mV	2×LS 12V 1×HS 12V	UART×2 SPI×2, I ² C×1	23	64LQFP		
HT32F61741	20MHz		64KB	8KB	1Msps 12-bit×7	BFTM×2, PWM×2 GPTM×1, MCTM×1				USART×1, UART×1 SPI×2, I ² C×2				
BMS Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	IAP	ADC	Timer	Cell #	V _{CELL} Accuracy	HVO	Interface	I/O	Package
HT45F8640	16MHz	1.8V~5.5V	4K×16	256×8	128×8	√	12-bit ×5	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	√	±0.5%	1×LS 1×HS	I ² C×1	11	28SSOP
HT45F8650			8K×16	512×8			12-bit ×8	10-bit PTM×2 16-bit CTM×1 16-bit STM×1			2×LS 1×HS	UART×1 SPI/I ² C×1	21	28SSOP 48LQFP-EP
HT45F8662			16K×16	1024×8	1024×8			10-bit PTM×2 16-bit CTM×1 16-bit STM×1				UART×2 SPI/I ² C×1	25	48LQFP-EP
HT45F8750	16MHz	1.8V~5.5V	8K×16	512×8	128×8	√	12-bit ×8	10-bit PTM×1 16-bit CTM×1 16-bit STM×1	3~8	4.2V±5mV	2×LS 12V 1×HS 12V	UART×1 SPI/I ² C×1	21	48LQFP-EP
HT45F8762			16K×16	1024×8	1024×8			10-bit PTM×2 16-bit CTM×1 16-bit STM×1						

Li-Battery BMS Peripheral												
Battery Protection AFE												
Part No.	Cell #	Input Voltage	Control Interface	V _{MON} Voltage Monitor Type	V _{MON} Accuracy	I _{MON} Gain Accuracy	V _{REF}	Cell Balance	Gate Driver	LDO	HV Wake Up	Package
HT7Q1521	3~8	7.5V~36V	I/O	Accumulative	1/n±0.5% (Ratio)	—	—	—	—	5V±1%	1CH	16NSOP 24SSOP
HT7Q1531	3~8	7.5V~36V	I ² C	Accumulative	1/n±0.5% (Ratio)	—	—	120Ω/CH	L/S×2CH H/S×1CH	5V±1%	1CH	24SSOP 24SSOP-EP 24QFN
HT7Q2552	3~8	7.5V~36V	I ² C	Cell Voltage	4.2V±15mV	±5%	2.5V±8mV	120Ω/CH	L/S×2CH H/S×1CH	5V/3.3V	2CH	32QFN
HT7Q2651*	8~13	20V~48V	I ² C	Cell Voltage	4.2V±15mV	±5%	2.5V±8mV	120Ω/CH	H/S or L/S×2CH	5V/3.3V	1CH	48LQFP-EP
HT7Q2752*	13~16	32.5V~72V	I ² C	Cell Voltage	4.2V±15mV	±5%	2.5V±8mV	120Ω/CH	H/S or L/S×2CH	5V/3.3V	1CH	48LQFP-EP
HT7Q2952*	16~24	40V~108V	I ² C	Cell Voltage	4.2V±15mV	±5%	2.5V±8mV	120Ω/CH	H/S or L/S×2CH	5V/3.3V	1CH	48LQFP-EP
* Under development, available in 2Q, 2025.												
Battery Protection DFE												
Part No.	Cell #	Input Voltage	Control Interface	V _{MON} Accuracy	I _{MON} Gain Accuracy	Cell Balance	Gate Driver	LDO	HV Wake Up	Package		
HT7Q5551*	3~8	7.5V~36V	I ² C	4.2V±3mV	±2%	120Ω/CH	L/S×2CH H/S×1CH	5V	2CH	24SSOP 28SSOP		
HT7Q5651*	8~13	20V~48V	I ² C	4.2V±3mV	±2%	120Ω/CH	H/S or L/S×2CH	5V	1CH	28SSOP 48LQFP-EP		
HT7Q5751*	13~16	32.5V~72V	I ² C	4.2V±3mV	±2%	120Ω/CH	H/S or L/S×2CH	5V	1CH	48LQFP-EP		
HT7Q5951*	16~24	40V~108V	I ² C	4.2V±3mV	±2%	120Ω/CH	H/S or L/S×2CH	5V	1CH	64LQFP		
* Under development, available in 4Q, 2025.												

32-Bit Cortex®-M0+ MCU

32-Bit M0+ 5V Touch MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDMA	ADC	CMP	Timer	RTC	Touch Key	Interface	Others	Max. I/O	Package
HT32F54231	60MHz	2.5V~5.5V	32KB	4KB	—	1Msps 12-bit×10	—	BFTM×2, SCTM×2 GPTM×1, MCTM×1	√	24	USART×1, UART×2 SPI×2, I²C×2	CRC, DIV LEDC	40	28SSOP, 32/46QFN 48LQFP
HT32F54241			64KB	8KB										
HT32F54243	60MHz	2.5V~5.5V	64KB	8KB	6CH	1Msps 12-bit×10	2	BFTM×2, SCTM×4 GPTM×1, MCTM×1	√	28	USART×2, UART×4 SPI×2, I²C×3	CRC, DIV LEDC	54	32/46QFN 48/64LQFP
HT32F54253			128KB	16KB										

Note:

BFTM: Basic Function Timer
GPTM: General Purpose Timer

SCTM: Single Channel Timer
MCTM: Motor Control Timer

LEDC: LED controller
DIV: Hardware Divider

Touch OTP MCU

Touch I/O OTP MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	Touch Key	Interface	Package
BS23A02CA	8MHz	2.0V~5.5V	1K×14	64×8	2	6	—	2	—	8SOP, SOT23-6
BS23B04CA	8MHz	2.0V~5.5V	2K×15	128×8	4	8	8-bit×2	4	I²C×1	8SOP, 10MSOP
BS23B08CA	8MHz	2.0V~5.5V	2K×15	256×8	6	14	8-bit×4	8	I²C×1	16NSOP
BS23B16CA	16MHz	1.8V~5.5V	2K×16	512×8	6	22	10-bit PTM×1 8-bit PWM×3 8-bit×1	16	I²C×1	20SSOP 24SSOP

Touch A/D OTP MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	Touch Key	Interface	Package
BS24B04CA	16MHz	2.0V~5.5V	2K×16	256×8	6	14	10-bit CTM×4	12-bit ×8	4	I²C×1	8SOP 16NSOP
BS24C08CA	16MHz	2.0V~5.5V	4K×16	384×8	6	22	10-bit CTM×3 10-bit PTM×1	12-bit ×8	8	SPI/I²C×1	16NSOP, 20SSOP 24SOP/SSOP

Touch Flash MCU

Touch I/O Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	Touch Key	High Current LED Driver	RTC	Interface	Package
BS83A01C	8MHz	1.8V~5.5V	512×14	32×8	—	2	4	—	1	—	—	—	8SOP SOT23-6
BS83A02C	8MHz	2.2V~5.5V	1K×16	96×8	—	4	4	8-bit×1	2	4	—	—	6DFN, 8SOP SOT23-6
BS83A04C	8MHz	1.8V~5.5V	1K×16	128×8	32×16	4	8	10-bit CTM×1	4	8	—	I²C×1	8SOP, 10DFN 10MSOP
BS83B04C	8MHz	1.8V~5.5V	2K×16	128×8	32×8	4	8	10-bit CTM×1	4	8	—	I²C×1	8SOP 10MSOP/DFN
BS83B08C	16MHz	2.2V~5.5V	2K×16	288×8	64×8	6	14	10-bit PTM×1	8	14	—	SPI/I²C×1	16NSOP/SSOP 16QFN
BS83B12C	16MHz	2.2V~5.5V	2K×16	512×8	64×8	6	18	10-bit PTM×1	12	18	—	SPI/I²C×1	20SOP/SSOP 20QFN
BS83B16C	16MHz	2.2V~5.5V	2K×16	512×8	64×8	6	22	10-bit PTM×1	16	22	—	SPI/I²C×1	24SOP/SSOP 24QFN
BS83B24C	16MHz	2.2V~5.5V	3K×16	512×8	128×8	6	26	10-bit PTM×1	24	26	√	UART/SPI/I²C×1	28SSOP

Touch Flash MCU																
Touch A/D Flash MCU																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Touch Key	High Current LED Driver	Interface	Package		
BS84B04C	16MHz	1.8V~5.5V	2K×16	256×8	32×8	4	—	14	10-bit CTM×4	12-bit ×8	4	14	I ² C×1	8SOP, 10MSOP/DFN 16NSOP/WLCSP		
BS84C12CA	16MHz	1.8V~5.5V	4K×16	512×8	512×8	6	√	26	10-bit CTM×1 10-bit PTM×1	12-bit ×8	12	26	UART×1 SPI/I ² C×1	16NSOP 20/24/28SOP/SSOP		
BS45F2345	16MHz	2.0V~5.5V	4K×16	256×8	128×8	8	√	26	16-bit CTM×1 10-bit PTM×1 16-bit STM×1	12-bit ×7	8	18	UART×1 SPI/I ² C×1	28SOP/SSOP		
BS84D20CA	16MHz	1.8V~5.5V	8K×16	768×8	512×8	8	√	46	10-bit CTM×1 10-bit PTM×1 16-bit STM×1	12-bit ×12	20	46	UART×1 SPI/I ² C×1	28SOP/SSOP 48LQFP		
Touch I/O Flash MCU with LED/LCD Driver																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	LCD	Touch Key	RTC	High Current LED Driver	LVD	Interface	Package	
BS82C16CA	16MHz	1.8V~5.5V	4K×16	512×8	512×8	6	26	10-bit CTM×2 10-bit PTM×1	(SCOM/ SSEG) ×26	16	√	26	√	UART×1 I ² C×1	24/28SOP/SSOP	
BS82D20CA	16MHz	1.8V~5.5V	8K×16	768×8	512×8	8	42	10-bit CTM×2 10-bit PTM×2	(SCOM/ SSEG) ×34	20	√	42	√	UART×1 I ² C×1	28SOP/SSOP 48LQFP	
Touch A/D Flash MCU with LED Driver																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Touch Key	High Current LED Driver	RTC	LVD	Interface	Package
BS86C12CA	16MHz	1.8V~5.5V	4K×16	512×8	512×8	6	√	26	10-bit CTM×4 10-bit PTM×1	12-bit ×8	12	26	√	√	UART×1 I ² C×1	24/28 SOP/SSOP
BS86D20CA	16MHz	1.8V~5.5V	8K×16	768×8	512×8	8	√	26	10-bit CTM×1 10-bit PTM×2	12-bit ×8	20	26	√	√	UART×1 SPI/I ² C×1	24/28 SOP/SSOP
BS86E20CA	16MHz	1.8V~5.5V	16K×16	1024×8	1024×8	12	√	46	10-bit CTM×2 10-bit PTM×2	12-bit ×8	20	46	√	√	UART×1 UART/SPI/I ² C×1	28SOP/SSOP 44/48LQFP
Touch A/D Flash MCU with LCD Driver																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Touch Key	LCD	RTC	LVD	Interface	Package
BS67F2432	4MHz	1.8V~5.5V	2K×16	128×8	32×16	6	—	21	9-bit×1 10-bit CTM×1	10-bit ×4	8	15×4	√	—	UART×1	28SSOP 32QFN
BS67F350C	16MHz	2.2V~5.5V	8K×16	768×8	128×8	8	√	43	10-bit CTM×2 16-bit STM×1 10-bit PTM×1	12-bit ×8	24	32×4	√	√	UART×1 SPI/I ² C×1	48LQFP 64LQFP
BS67F360	16MHz	2.2V~5.5V	16K×16	1024×8	128×8	12	√	43	10-bit CTM×2 16-bit STM×1 10-bit PTM×1	12-bit ×8	28	40×4	√	√	UART×1 SPI/I ² C×1	48LQFP 64LQFP
BS67F360CA*	16MHz	1.8V~5.5V	16K×16	1024×8	1024×8	16	√	59	10-bit CTM×3 16-bit STM×1 10-bit PTM×3	12-bit ×8	24	43×4	√	√	UART×3 SPI/I ² C×1 I ² C×1	48LQFP 64LQFP
* Under development, available in 2Q, 2025.																
Touch 24-bit A/D Flash MCU																
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	Touch Key	Temperature Sensor	LVD	Interface	Package	
BS45F6052	8MHz	1.8V~5.5V	8K×16	512×8	512×8	12	√	11	10-bit CTM×2	24-bit ×6	4	√	√	UART×1 I ² C×1	16QFN 18WLCSP	

Touch Ultrasonic Atomiser Flash MCU															
Touch Ultrasonic Atomiser Flash MCU															
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	Touch Key	Atomiser Processor	LVD	Interface	Package	
BS45F3833	12MHz	2.2V~5.5V	2K×16	128×8	32×8	4	18	10-bit CTM×3 10-bit STM×1 10-bit PTM×1	12-bit ×4	4	√	√	—	16/20NSOP	
BS45F3843	8MHz	2.2V~5.5V	4K×16	256×8	32×8	8	26	10-bit CTM×3 10-bit STM×1 10-bit PTM×1	12-bit ×8	8	√	√	UART×1	16NSOP 24/28SSOP	

Proximity Sensing Flash MCU														
Proximity Sensing Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	IR Driver & Receiver	DC Motor Driver	Interface	Package	
BS45F3232	8MHz	2.2V~5.5V	2K×14	64×8	32×8	4	11	10-bit STM×1	12-bit ×8	IR×1 OPA×2	—	UART/SPI/I ² C×1	8SOP 16NSOP/QFN	
BS45F3235											V _M =7.5V		24SSOP	
Touch Proximity Sensing Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	Touch Key	IR Driver & Receiver	DC Motor Driver	Interface	Package
BS45F3332	8MHz	1.8V~5.5V	2K×15	128×8	32×8	4	13	10-bit CTM×1	10-bit ×4	2	IR×2 OPA×1	—	—	8SOP 16NSOP
BS45F3335							11					V _M =7.5V		24SSOP
BS45F3340	8MHz	1.8V~5.5V	4K×16	192×8	32×8	6	20	10-bit CTM×1 10-bit STM×1	12-bit ×8	4	IR×2 OPA×2	—	UART×1	16NSOP/QFN 24SSOP
BS45F3345							17					V _M =7.5V		16NSOP 24/28SSOP

Touch Wireless Flash MCU														
NFC Reader Touch Flash MCU														
Part No.	VDD	Max. Freq.	Program Memory	Data Memory	Data EEPROM	NFC System Clock	NFC Standards	RF Data Rate	RF Output Current	NFC FIFO-buffer	I/O	Touch Key	Interface	Package
BS65F2042	2.3V~5.5V	16MHz	4K×16	512×8	512×8	27.12MHz	ISO14443A/B (13.56MHz)	106/212/424/848Kbps @ISO14443A/B	230mA	64×8	26	16	UART×1 I ² C×1	46QFN

Touch Key IC					
Touch Key					
Part No.	Touch Key	VDD	Standby Current at 3V	Output Type	Package
BS211C-1	1-Key	2.2V~5.5V	2.5μA	Active Low	SOT23-6
BS212C-1	2-Key	2.2V~5.5V	3.5μA	Active Low	SOT23-6
BS213C-1	3-Key	2.2V~5.5V	4.0μA	Active Low	8SOP
BS214C-1	4-Key	2.2V~5.5V	5.0μA	Active Low	10MSOP
BS214C-2	4-Key	2.2V~5.5V	5.0μA	2-Wire Series Interface Mode	8SOP
BS216C-1	6-Key	2.2V~5.5V	7.5μA/3.5μA	Active Low / Active High	16NSOP
BS218C-2	8-Key	2.2V~5.5V	8.5μA/3.5μA	2-Wire Series Interface Mode / 4-Wire Binary Parallel Mode	16NSOP
BS218C-3	8-Key	2.2V~5.5V	3.5μA/2.5μA	I ² C	16NSOP
BS2112C-3*	12-Key	2.2V~5.5V	4.0μA/2.5μA	I ² C	16NSOP, 20SSOP
BS2116C-3*	16-Key	2.2V~5.5V	4.0μA/2.5μA	I ² C	20/24SSOP

* Under development, available in 1Q, 2025.

LED Lighting Touch						
Part No.	Touch Key	VDD	Standby Current at 3V	Optional Modes	PWM Output	Package
BS45B2210	1-Key	2.2V~5.5V	2.5μA	7	2ch	8SOP

Music/Voice Flash MCU

Cortex®-M0+ 32-Bit Music/Voice Flash MCU

Part No.	Max. Freq.	VDD	Flash	Data Flash	SRAM	I/O	Timer	ADC	PDMA	RTC	Echo	Sub-Band Coding	MIDI Engine	Audio DAC	Interface	Package
HT32F61244	48MHz	2.3V~3.6V	64KB	16Mbit	8KB	49	BFTM×2 SCTM×2 GPTM×1 LSTM×1	1Msps 12-bit×16	6CH	—	√	√	16CH	16-bit×2	UART×1, SPI×1 QSPI×1, I²C×1	48LQFP 64LQFP
HT32F61245				32Mbit												
HT32F61355	48MHz	2.3V~3.6V	128KB	32Mbit	16KB	43	BFTM×2 SCTM×4 GPTM×1	1Msps 12-bit×16	6CH	√	√	√	32CH	16-bit×2	USART×1, UART×1 SPI×1, QSPI×1 I²S×1, USB×1 I²C×1	48LQFP 64LQFP
HT32F61356				64Mbit												
HT32F61357				128Mbit												

Note: BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer, LSTM: Low Speed Timer.

Music Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	MIDI Engine	Audio DAC	Interface	Package
HT37F290	12MHz	2.2V~5.5V	64K×16	1024×8	4096×8	12	√	22	10-bit CTM×2 16-bit CTM×1	16CH	16-bit×2	UART×1 SPI×1	16NSOP 28SSOP

Voice MCU

A/D Voice Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	ADC	RTC	Audio DAC	Power Amp.	Inter- face	Package
HT66FV140	16MHz	2.2V~5.5V	4K×16	256×8	64×8	8	√	19	10-bit CTM×1 10-bit PTM×2	12-bit ×8	√	16-bit ×1	1.5W	SPI/I²C×1 SPI×1	24SOP 24SSOP 28SOP
HT66FV150	16MHz	2.2V~5.5V	8K×16	512×8	128×8	8	√	27	10-bit CTM×2 10-bit PTM×2	12-bit ×8	√	16-bit ×1	1.5W	UART×1 SPI/I²C×1 SPI×1	28SOP 44LQFP

I/O Voice Flash MCU

Part No.	VDD	Voice Flash Memory	Control Mode	Speech	Voice Output	PWM Output Power	Support Sentence	Max Voice Capacity	Package
HT68FV024	2.3V~5.5V	32Mbit	One Wire Two Wire, Direct	ADPCM μ-Law, PCM	PWM	0.5W	√	800 sec	8SOP 16NSOP

I/O Voice OTP MCU

Part No.	VDD	Voice Flash Memory	Control Mode	Speech	Voice Output	PWM Output Power	Support Sentence	Max Voice Capacity	Package
HT68RV032	2.3V~5.5V	2Mbit	SPI, I²C, One Wire Two Wire, Direct	ADPCM μ-Law, PCM	Delta Sigma PWM	0.5W	√	85 sec	8SOP 16NSOP
HT68RV033		4Mbit						170 sec	
HT68RV034		8Mbit						340 sec	
HT68RV035		16Mbit						680 sec	

32-Bit ASSP Flash MCU

Cortex®-M0+ 32-Bit USB Data Logger LCD MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	PDF Create LIB	PDMA	I/O	Timer ¹	ADC	DAC CH	Cap. ² or PWM	RTC	SCI ³	LCD	Interface	Others	Package
HT32F5828	60MHz	1.65V~3.60V	128KB	16KB	√	6CH	67	BFTM×2 SCTM×2 PWM×2 GPTM×1	1Mps 12-bit×10	500kps 12-bit×2	14	√	2	37×4~33×8	USART×1 UART×2 SPI×2, I ² C×2 I ² S×1, USB×1	AES CRC DIV	48LQFP 64LQFP 80LQFP

Cortex®-M0+ 32-Bit 5V USB Smart Card Reader MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	I/O	Timer ¹	RTC	SCI ³	Card LDO	USB ⁴	Interface	Others	Package
HT32F61141	48MHz	2.5V~5.5V	64KB	16KB	36	BFTM×2 SCTM×2 GPTM×1	√	2	1.8V 3.0V 5.0V	√	UART×2 SPI×1 I ² C×1	CRC	32QFN 46QFN 48LQFP
HT32F61152*			128KB										

* Under development, available in 2Q, 2025.

Note: 1. BFTM: Basic Function Timer, SCTM: Single-Channel Timer, GPTM: General-Purpose Timer.

2. Cap.: Input Capture.

3. SCI: ISO7816-3 Smart Card Interface.

4. USB 2.0 Full Speed device.

8-Bit ASSP MCU

Induction Cooker Flash MCU

Part No.	Max. Freq.	VCC (HV)	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	PPG	CMP	OVP	OPA	LDO	HVO	Interface	Package
HT45F0004	8MHz	—	2.2V~5.5V	4K×16	208×8	32×8	8	17	8-bit×3	12-bit×12	9-bit×1	4	—	1	—	—	I ² C×1	16NSOP 20SOP
HT45F0058	16MHz	—	3.3V~5.5V	4K×16	256×8	32×8	8	13	8-bit×3	12-bit×10	9-bit×1	4	1	1	—	—	—	16NSOP
HT45F0006	16MHz	—	3.3V~5.5V	8K×16	512×8	512×8	8	17	8-bit×4	12-bit×14	9-bit×1	1	5	1	—	—	I ² C×1 UART×1	16NSOP 20SOP
HT45F0059	16MHz	16V~20V	3.3V~5.5V	4K×16	256×8	32×8	8	12	8-bit×3	12-bit×9	9-bit×1	4	1	1	5V	1	I ² C×1	16NSOP
HT45F0036	16MHz	16V~20V	3.3V~5.5V	8K×16	512×8	512×8	8	16	8-bit×4	12-bit×13	9-bit×1	1	5	1	—	1	I ² C×1 UART×1	16NSOP 20SOP

Induction Cooker OTP MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	PPG	CMP	OVP	OPA	Package
HT45R1005	16MHz	3.3V~5.5V	4K×16	256×8	8	13	8-bit×4	12-bit×9	9-bit×1	1	4	1	16NSOP

Half-bridge Induction Cooker Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	MDU	Stack	I/O	Timer	ADC	PWM	OVP	OPA	CRC	Interface	Package
HT45F0075	16MHz	4.5V~5.5V	16K×16	1024×8	1024×8	√	8	24	10-bit CTM×4 10-bit PTM×1	12-bit×11	12-bit×1	9	1	√	UART/SPI/I ² C×1	16NSOP 20/24/28SOP

LED Lighting with TRIAC Dimming OTP MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Stack	I/O	Timer	ADC	PWM	VCC	Topology	PF	Standby Power	Max. Output Power (110V _{AC} /220V _{AC})	Protection	Package
HT45R5530	8MHz	2.0V~5.5V	2K×15	96×8	4	6	8-bit×1 16-bit×1	8-bit×3	8-bit×1	10V~40V	Flyback (PSR)	>0.9	< 500mW	75W / 150W	OVP, OCP, OSP, In-OTP, Ex-OTP	16NSOP

Bluetooth Low Energy (BLE)

Cortex®-M33/M0+ Dual Core 32-Bit BLE MCU

Part No.	Max. Freq.	VDD	Flash	SRAM	DMA	ADC	Timer ¹	QCB	Data Rate	Output Power	Sensitivity	Interface ²	Others ³	I/O	Package
HT32F67595	64MHz	1.8V~3.6V	1024KB	256KB	4CH×1	14-bit×2	STIM×2 GPTM×4	5.3	125/500Kbps 1/2Mbps	+10dBm	-96dBm	UART×3, QSPI×2, I ² C×2, SCI×1, I ² S×1	AES128×1, TRNG×1 QEI×1, TSEN×1	16	28LGA

Note: 1. STIM: System Tick Timer, GPTM: General-Purpose Timer.
2. SCI: ISO7816-3 Smart Card Interface.
3. QEI: Quadrature Encoder Interface, TSEN: Temperature Sensor.

BLE Beacon IC

Part No.	VDD	Frequency	Beacon Packet Handler	Output Power	Sensitivity	Oscillator	QCB	Interface	Package
BC7161	2.0V~3.6V	2402/2426/2480MHz	Transmitter	-10~+8dBm	—	32MHz	5.0	I ² C×1	8SOP-EP, 10MSOP-EP

2.4GHz RF

2.4GHz Transceiver IC

Part No.	VDD	Frequency	Modulation	Data Rate	Output Power	Sensitivity	Oscillator	Interface	Package
BC5602	1.9V~3.6V	2402~2480MHz	GFSK	125/250/500kbps	-10~+6dBm	-97dBm@250kbps	16MHz	SPI	16QFN

NFC

NFC Reader

Part No.	VDD	System Clock	RF Frequency	NFC Standards	RF Data Rate	RF Output Current	NFC FIFO-buffer	CRC	Receiver AGC	Interface	Package
BC45B4523	2.7V~5.5V	27.12MHz	13.56MHz	ISO14443A/B ISO15693	106/212/424/848kbps @ISO14443A/B	250mA	64×8	√	√	SPI×1	24QFN
BC45B4522	2.3V~5.5V	27.12MHz	13.56MHz	ISO14443A/B	106/212/424/848kbps @ISO14443A/B	230mA	64×8	√	√	UART/SPI/I ² C×1	32QFN

Sub-1GHz RF

Sub-1GHz Transceiver IC

Part No.	VDD	Band	OOK/GFSK	Low Current	External Inductor	Data Rate	Max. Output Power	Sensitivity	Package
BC3602	1.9V~3.6V	315/433/470/868/915MHz	GFSK	√	√	2~250kbps	13dBm	-120dBm@2kbps	24QFN
BC3603	1.8V~3.6V	315/433/470/868/915MHz	√	√	—	OOK: 0.5~20kbps GFSK: 2~250kbps	20dBm	-120dBm@2kbps	16QFN

Sub-1GHz Transmitter Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	IAP	I/O	Timer	Band	OOK/FSK	OOK Symbol Rate	Output Power	Package
BC68F2123	8MHz	2.2V~3.6V	1K×14	64×8	32×8	2	—	9	10-bit STM×1 10-bit PTM×1	315/433/ 868/915MHz	√	0.5~25ksp/s	0/5/10/13 dBm	16NSOP-EP
BC68F2130	16MHz	2.0V~3.6V	2K×16	256×8	—	8	√	8	10-bit CTM×1 10-bit PTM×1	315/433/ 868/915MHz	√	0.5~25ksp/s	0/10/13 dBm	16NSOP-EP 16QFN
BC68F2140	16MHz	2.0V~3.6V	4K×16	256×8	—	8	√	14	10-bit CTM×1 10-bit PTM×1	315/433/ 868/915MHz	√	0.5~25ksp/s	0/10/13 dBm	24SSOP-EP 24QFN
BC68F2150	16MHz	2.0V~3.6V	8K×16	256×8	—	8	√	14	10-bit CTM×1 10-bit PTM×1	315/433/ 868/915MHz	√	0.5~25ksp/s	0/10/13 dBm	24SSOP-EP 24QFN

Sub-1GHz Transmitter Hopping Code Flash MCU

Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	Band	OOK/FSK	OOK Symbol Rate	Output Power	Package
BC68F3132	12MHz	2.2V~3.6V	2K×15	128×8	64×8	6	9	10-bit CTM×2	315/433/868/915MHz	√	0.5~25ksp/s	0/5/10/13 dBm	16NSOP-EP 16QFN

Sub-1GHz RF														
Sub-1GHz Transmitter IC														
Part No.	VDD	Band	Modulation	OOK Symbol Rate	FSK Data Rate	Output Power	Oscillator	Package						
BC2102	2.2V~3.6V	315/433/868/915MHz	OOK/FSK	0.5~25ksps	0.5~50kbps	0/5/10/13dBm	16MHz	8SOP-EP						
Sub-1GHz Transmitter IC with Encoder														
Part No.	VDD	Band	Modulation	OOK Symbol Rate	Output Power	Oscillator	Package							
BC2161	2.2V~3.6V	315/433/868/915MHz	OOK	1.5~24ksps	0/5/10/13dBm	16MHz	8SOP-EP 16NSOP-EP/QFN							
Sub-1GHz Receiver Flash MCU														
Part No.	Max. Freq.	VDD	Program Memory	Data Memory	Data EEPROM	Stack	I/O	Timer	ADC	Band	Demod.	Symbol Rate	Sensitivity	Package
BC66F2332-1	8MHz	2.4V~5.5V	2K×14	64×8	32×8	4	8	10-bit STM×1	12-bit ×4	315/433/868/915MHz	OOK	20ksps (Max.)	-106dBm @10ksps	16NSOP-EP
BC66F2342-1	8MHz	2.4V~5.5V	4K×15	128×8	32×15	6	13	10-bit STM×1 10-bit PTM×1	10-bit ×6	315/433/868/915MHz	OOK	20ksps (Max.)	-106dBm @10ksps	24SSOP-EP
Sub-1GHz Receiver IC														
Part No.	VDD	Band	Demod.	OOK Symbol Rate	FSK Symbol Rate	Current Consumption	Sensitivity	Package						
BC2302C	2.4V~5.5V	315/433MHz	OOK	0.5~40ksps	—	4.0mA@433MHz	-108dBm@10ksps	8SOP-EP						
BC2302D		315/433/868/915MHz				5.5mA@868MHz								
BC2502C	2.4V~5.5V	315/433MHz	OOK/FSK	0.5~40ksps	1~50ksps	4.5mA@433MHz	-110dBm@10ksps	10SOP-EP						
BC2502D		315/433/868/915MHz				5.8mA@868MHz								

LDO & Detector								
General LDO								
Part No.	Max. Input Voltage	Output Voltage	Max. Output Current	Current Consumption	Chip Enable	Tolerance	Protection	Package
HT71xx-1	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	30mA	2.5μA	—	±3%	Soft-Start	SOT23-5 SOT89
HT75xx-1	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V	100mA	2.5μA	—	±3%	Soft-Start	SOT23-5 SOT89
		4.15V	100mA					SOT89
		5.0V/6.0V/7.0V/8.0V/9.0V/10.0V/12.0V	150mA					SOT23-5 SOT89
HT75xx-7	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V	100mA	2.5μA	√	±2%	Soft-Start OCP, OTP	SOT23-5 SOT89
		5.0V/6.0V/7.0V/8.0V/9.0V/10.0V/12.0V	150mA					
HT73xx	12V	1.8V	150mA	3.5μA	—	±3%	—	SOT89
		2.5V	180mA					
		2.7V	200mA					
		3.0V/3.3V/3.5V/4.15V/5.0V	250mA					
HT73xx-1	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	250mA	2.5μA	—	±3%	Soft-Start	8SOP-EP SOT89
HT73xx-7	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	250mA	2.5μA	√	±2%	Soft-Start OCP, OTP	8SOP-EP SOT89
HT72xx	8V	1.8V/2.5V/2.7V/3.0V/3.3V/4.5V/5.0V	300mA	4.0μA	√	±2%	OCP, OTP	SOT23 SOT23-5, SOT89
HT78xx	8V	1.8V/2.5V/2.7V/3.0V/3.3V/5.0V	500mA	4.0μA	√	±2%	OCP, OTP	SOT23-5 SOT89
HT75Hxx	40V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	150mA	2.5μA	√	±1.5%	Soft-Start OCP, OTP	SOT23-5 SOT89
HT73Hxx	40V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	250mA	2.5μA	√	±1.5%	Soft-Start OCP, OTP	SOT23-5 SOT89
HT78Rxx	20V	1.5V/3.0V/3.3V/3.5V/5.0V	500mA	2.2μA	√	±2%	OCP, OTP	SOT23-5 SOT89
High Accuracy LDO								
Part No.	Max. Input Voltage	Output Voltage	Max. Output Current	Current Consumption	Chip Enable	Tolerance	Protection	Package
HT71xx-2	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.4V/5.0V	30mA	2.5μA	—	±1%	Soft-Start	SOT23-5 SOT89
HT75xx-2	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V	100mA	2.5μA	—	±1%	Soft-Start	SOT23-5 SOT89
		5.0V/6.0V/7.0V/8.0V/9.0V/10.0V/12.0V	150mA					
HT73xx-2	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	250mA	2.5μA	—	±1%	Soft-Start	SOT89 8SOP-EP
Low Power LDO								
Part No.	Max. Input Voltage	Output Voltage	Max. Output Current	Current Consumption	Chip Enable	Tolerance	Protection	Package
HT71xx-3	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.4V/5.0V	30mA	1.0μA	—	±2%	Soft-Start	SOT23-5 SOT89
HT75xx-3	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V	100mA	1.0μA	—	±2%	Soft-Start	SOT23-5 SOT89
		5.0V/6.0V/7.0V/8.0V/9.0V/10.0V/12.0V	150mA					
HT73xx-3	30V	2.1V/2.3V/2.5V/2.7V/3.0V 3.3V/3.6V/4.0V/4.4V/5.0V	250mA	1.0μA	—	±2%	Soft-Start	SOT89 8SOP-EP
HT73Lxx	6.6V	0.9V/1.05V/1.2V/1.5V/1.8V 2.5V/2.7V/3.0V/3.3V/3.6V	250mA	1.35μA	√	±2%	Soft-Start OCP, OTP	4DFN SOT89, SOT23-5
Voltage Detector								
Part No.	Max. Input Voltage	Detector Voltage (V _{DET})	Hysteresis Width	Current Consumption	Tolerance		Package	
HT70xxA-1	30V	2.2V/2.4V/2.7V/3.3V 3.9V/4.4V/5.0V/8.2V	0.05V×V _{DET}	3.0μA	±3%		SOT23, SOT23-5 SOT89	
HT70xxA-2	30V	2.2V/2.4V/2.7V/3.3V 3.9V/4.4V/5.0V/8.2V	0.05V×V _{DET}	2.5μA	±1%		SOT23-5 SOT89	
HT70xxA-3	30V	2.2V/2.4V/2.7V/3.3V 3.9V/4.4V/5.0V/8.2V	0.05V×V _{DET}	1.0μA	±2%		SOT23-5 SOT89	

DC to DC											
Asynchronous Step-Down DC to DC Converter											
Part No.	Max. Input Voltage	Output Voltage	Output Current	Switching Frequency	Current Limit	Accuracy	Shutdown Current	Operation Current	Efficiency	Mode	Package
HT7463C	60V	0.8V~36V	0.6A	1250kHz	1.2A	0.794V±2.0%	0.1μA	0.5mA	95%	PWM/PSM	SOT23-6
HT7463D				550kHz							
Synchronous Step-Down DC to DC Converter											
Part No.	Max. Input Voltage	Output Voltage	Output Current	Switching Frequency	Current Limit	Accuracy	Shutdown Current	Operation Current	Efficiency	Mode	Package
HT74153	6V	0.6V~6V	2.0A	1200kHz	3.2A	0.6V±1.5%	0.1μA	50μA	95%	PWM/PFM	8SOP-EP SOT23-5
HT74173	6V	0.6V~6V	3.0A	1200kHz	5.0A	0.6V±1.5%	0.1μA	50μA	95%	PWM/PFM	8SOP-EP SOT23-5 SOT89-5
HT74U26L**	60V	0.8V~36V	0.6A	400kHz	1.5A	0.8V±1.5%	0.1μA	5μA	95%	PWM/PFM	8SOP-EP SOT23-6
HT74436*	42V	0.8V~42V	0.6A	1000kHz	1.5A	0.8V±1.5%	0.1μA	200μA	95%	PWM/PSM	SOT23-6
* Under development, available in 1Q, 2025.											
** Under development, available in 4Q, 2025.											
Asynchronous Step-Up DC to DC Converter											
Part No.	Input Voltage	Output Voltage	Output Current	Switching Frequency	Accuracy	Shutdown Current	Operation Current	Efficiency	Mode	Package	
HT77xxB	0.7V~6.0V	1.8V/2.2V	0.1A	115kHz	V _{OUT} ±2.5%	0.1μA	5μA	80%	PFM	SOT23, SOT23-5 SOT89	
		2.7V/3.0V/3.3V/3.7V/5.0V						85%			
HT77xxC	0.7V~6.0V	1.8V/2.2V	— (External)	115kHz	V _{OUT} ±2.5%	0.1μA	5μA	80%	PFM	SOT23-5 SOT89	
		2.7V/3.0V/3.3V/3.7V/5.0V						85%			
Synchronous Step-Up DC to DC Converter											
Part No.	Input Voltage	Output Voltage	Output Current	Switching Frequency	Current Limit	Accuracy	Shutdown Current	Operation Current	Efficiency	Mode	Package
HT77xxFA	0.85V~6.0V	2.7V/3.0V/3.3V/3.7V/5.0V	0.2A	—	—	V _{OUT} ±2%	0.1μA	4μA	95%	PFM	SOT23, SOT23-5 SOT89
HT79171	2.2V~5.0V	2.6V~5.5V	2.0A	500kHz	5.0A	0.6V±1.5%	0.1μA	65μA	95%	PWM/PSM	8SOP-EP, 10QFN
HT79181	2.2V~5.0V	2.6V~5.5V	3.0A	500kHz	6.0A	0.6V±1.5%	0.1μA	65μA	95%	PWM/PSM	10QFN
HT79121-xx*	0.85V~6.0V	1.8V/2.2V/2.7V/3.0V/3.3V/3.7V/5.0V	0.2A	—	—	V _{OUT} ±2%	0.1μA	1μA	95%	PFM	SOT23, SOT23-5 SOT89
* Under development, available in 1Q, 2025.											
Charge Pump DC to DC Converter											
Part No.	Input Voltage	Output Voltage	Output Current	Switching Frequency	Accuracy	Operation Current		Efficiency	Package		
HT7660	3V~12V	−V _{DD} ~V _{DD}	20mA	10kHz	V _{OUT} ±4.0%	0.08mA		98%	8SOP		

AC to DC							
AC/DC Converter							
Part No.	Topology	PF	Standby Power	Max. Output Power (110V _{AC} / 220V _{AC})	Power MOSFET Maximum Voltage	Protection	Package
HT7A6312	Flyback (SSR), Buck, Buck-Boost	< 0.9	< 100mW	8W / 13W	730V	OVP, OCP, In-OTP	8SOP
HT7A6322	Flyback (SSR), Buck, Buck-Boost	< 0.9	< 100mW	12W / 20W	730V	OVP, OCP, In-OTP	8SOP
AC/DC Controller							
Part No.	Topology	PF	Standby Power	Max. Output Power (110V _{AC} / 220V _{AC})	Gate Driver Type	Protection	Package
HT7A8006	Flyback (PSR)	> 0.9	< 500mW	75W / 150W	N-MOSFET	OVP, OCP, OSP In-OTP, Ex-OTP	8SOP

LED Lighting							
AC/DC LED Lighting Controller							
Part No.	Topology	PF	Standby Power	Max. Output Power (110V _{AC} / 220V _{AC})	Dimming Type	Protection	Package
HT7L5502	Flyback (PSR)	> 0.9	< 500mW	75W / 150W	Secondary Side (PWM)	OVP, OCP, OSP, In-OTP, Ex-OTP	8SOP
HT7L5503	Flyback (PSR)	> 0.9	< 500mW	75W / 150W	Primary Side (PWM or Analog)	OVP, OCP, OSP, In-OTP, Ex-OTP	8SOP

LCD Controller & Driver

LCD Controller & Driver (I²C)

Part No.	VDD	Segment × Common	LCD Voltage	Bias	Built-in OSC.	Key-scan	Interface	Package
HT16C21A	2.4V~5.5V	20×4, 16×8	≤ V _{DD}	1/3, 1/4	√	—	I ² C	24SSOP, 28SSOP
HT16C22A	2.4V~5.5V	44×4	≤ V _{DD}	1/2, 1/3	√	—	I ² C	48LQFP, 52LQFP
HT16C22AG								Gold Bump
HT16C23A	2.4V~5.5V	56×4, 52×8	2.4V~5.5V	1/3, 1/4	√	—	I ² C	48LQFP, 64LQFP
HT16C23AG								Gold Bump
HT16C24A	2.4V~5.5V	72×4, 68×8, 60×16	2.4V~5.5V	1/3, 1/4, 1/5	√	—	I ² C	64LQFP, 80LQFP
HT16C24AG								Gold Bump
HT16K23A	2.4V~5.5V	20×4, 16×8	= V _{DD}	1/3, 1/4	√	20×1	I ² C	28SSOP

LCD Controller & Driver (4-Wire)

Part No.	VDD	Segment × Common	LCD Voltage	Bias	Built-in OSC.	Ext. Crystal	Interface	Package
HT1620	2.4V~3.3V	32×2, 32×3, 32×4	3/2×V _{DD}	1/2, 1/3	—	√	4-Wire	64LQFP
HT1621	2.4V~5.2V	32×2, 32×3, 32×4	≤ V _{DD}	1/2, 1/3	√	√	4-Wire	44LQFP, 48SSOP, 48LQFP
HT1621G	2.4V~5.2V							Gold Bump
HT1622	2.7V~5.2V	32×8	≤ V _{DD}	1/4	√	—	4-Wire	44LQFP, 64LQFP
HT16220	2.7V~5.2V	32×8	≤ V _{DD}	1/4	—	√	4-Wire	64LQFP
HT1623	2.7V~5.2V	48×8	≤ V _{DD}	1/4	√	√	4-Wire	100LQFP
HT1625	2.7V~5.2V	64×8	≤ V _{DD}	1/4	√	√	4-Wire	100LQFP

Low Voltage LCD Controller & Driver

Part No.	VDD	Segment × Common	LCD Voltage	Bias	LED Driver	Interface	Package
HT16L21	1.8V~5.5V	32×4	2.4V~6.0V	1/2, 1/3	8×1	3-Wire SPI, I ² C	44LQFP
HT16L23	1.8V~5.5V	52×4, 48×8	2.4V~6.0V	1/3, 1/4	8×1	3-Wire SPI, I ² C	64LQFP

LED Controller & Driver

LED Controller & Driver

Part No.	VDD	Row × Common	Row Source Current	Row Sink Current	Com Source Current	Com Sink Current	PWM Gray	Key-scan	Interface	Package
HT1632D	4.5V~5.5V	32×8, 24×16	50mA	12mA	45mA	250mA	16 Level for Global	—	4-Wire	48LQFP, 52LQFP
HT1632D-2		28×8								48LQFP
HT1635C	4.5V~5.5V	44×8	50mA	10mA	45mA	250mA	16 Level for Global	—	4-Wire	64LQFP
HT1635D									I ² C	
HT16K33A	4.5V~5.5V	16×8, 12×8	20mA±5%	6mA	20mA	160mA	16 Level for Global	13×3, 10×3	I ² C	20SSOP, 24SSOP, 28SSOP

Advanced LED Controller & Driver

Part No.	VDD	Row × Common	Com Source Current	Com Sink Current	Constant Current	PWM Gray	Fade	Auto Scrolling	Over Temp. Detection	Open/Short Detection	Interface	Package
HT16D31A	2.7V~5.5V	8×9	270mA	—	33mA±3% Max. 48mA	256 Level for each dot	√	√	√	√	3-Wire SPI	16NSOP-EP, 16QFN
HT16D31B											I ² C	
HT16D33A	2.7V~5.5V	9×10 + 9×10, 12×12, 16×16	315mA	—	33mA±3% Max. 48mA	256 Level for each dot	√	√	√	√	3-Wire SPI	28SSOP, 32QFN
HT16D33B											I ² C	
HT16D35A	2.7V~5.5V	28×8	250mA	45mA	30mA±3% Max. 45mA	64 Level for each dot	√	√	√	—	3-Wire SPI	48LQFP-EP
HT16D35B											I ² C	

RF Module

Sub-1GHz Receiver

Part No.	Supply Voltage	Band	Demod.	Symbol Rate	Current Consumption	Sensitivity	Interface	Dimension
BM2302-64-2	2.4V~5.5V	433MHz	OOK	20Ksps (Max.)	4mA	-108dBm@10ksps	I ² C	16×15×2.6 (mm)
BM2502-64-2	2.5V~5.5V	433MHz	OOK/FSK	40Ksps (OOK Max.) 50Ksps (FSK Max.)	4.5mA	-110dBm@10ksps (OOK) -108dBm@10ksps (FSK)	I ² C	16×15×2.6 (mm)

Sub-1GHz Transceiver

Part No.	Supply Voltage	Band	Data Rate	Output Power	Rx Current Consumption	Sensitivity	Interface	Dimension
BM3602-04-1	2.0V~3.6V	433MHz	2~250Kbps	13dBm (Max.)	4.2mA@50Kbps	-113dBm@10Kbps -110dBm@50Kbps	SPI	15×18.5×2.6 (mm)
BM3603-04-1	1.8V~3.6V	433MHz	2~250Kbps	20dBm (Max.)	6mA@2Kbps	-120dBm@2Kbps -111dBm@50Kbps	SPI	15×18.5×2.6 (mm)

2.4GHz Transceiver

Part No.	Supply Voltage	Band	Data Rate	Output Power	Sensitivity	Interface	Dimension
BM5602-60-1	1.9V~3.6V	2402~2480MHz	125/250/500Kbps	7dBm (Max.)	-98dBm@125Kbps	SPI	17×16×2 (mm)

5.8GHz Microwave Radar

Part No.	Supply Voltage	Sensing Distance	Light Detector	Current Consumption	Parameters Setting	Interface	Dimension
BM22S4422-1*	4V~12V	20m	optional	13mA	√	UART	20×20×3.2 (mm)
BM22S4422-1R*	4V~12V	20m	optional	13mA	—	—	20×20×3.2 (mm)

* Under development, available in 1Q, 2025.

Digital Sensor & Module

Infrared Sensing Module

Part No.	Supply Voltage	Current Consumption	Detection Range	Application	Interface	Dimension
BM32S2031-1	3V~5V	14μA @3.3V/85cm/scanning tiime=0.5s	1~100cm	Proximity Sensing	UART or I/O	12.7×10×7.2(mm)
BM32S3031-1	3V~5V	Operation: <1.8mA @3.3V Standby: <45μA @3.3V/scanning tiime=128ms	1~25cm (Z Axis) ±7.5cm (X Axis) @ Z=25cm	1D Gesture	UART	30×8×10.5(mm)
BM32S4021-1	3V~5V	Operation: <3.8mA @3.3V Standby: <85μA @3.3V/scanning tiime=128ms	1~25cm (Z Axis) ±4cm (X Axis) @ Z=25cm	2D Gesture	UART+INT	20×20×11(mm)

VCSEL Proximity Sensor

Part No.	Supply Voltage	Current Consumption	Detection Range	Operating Temperature	Interface	Package	Dimension
BM32S2122-1	2V~5V	<10μA @3.3V	≤10cm	-20~+85°C	I ² C	OLGA8	4×3×0.9(mm)
BM32S2123-1*	2V~5V	<10μA @3.3V	≤30cm	-20~+85°C	I ² C	OLGA8	4×3×0.9(mm)
BM32S2125-1*	2V~5V	<16.5μA @3.3V	≤90cm	-20~+85°C	I ² C	OLGA8	4×3×0.9(mm)
BM32S2127-1*	2V~5V	<16.9μA @3.3V	≤120cm	-20~+85°C	I ² C	OLGA8	4×3×0.9(mm)

* Under development, available in 1Q, 2025.

Infrared Temperature Sensor

Part No.	Supply Voltage	Current Consumption	Accuracy	Measurement Temperature	Temperature Resolution	Operating Temperature	Interface	Package
BM42S2021-1*	3.3V±10%	1.5mA @3.3V	±1°C (≤100°C) ±2% F.S. (>100°C)	0~300°C	0.01°C	-40~+85°C	I ² C	TO-46

* Under development, available in 1Q, 2025.

Laser Ranging Module

Part No.	Supply Voltage	Current Consumption	Accuracy	Measurement Distance	Distance Resolution	Operating Temperature	Interface	Dimension
BM42S5321-1	3V~5.5V	Operation: <16.3mA @5V Standby: <560μA @5V/scanning time = 0.5s	≤2%	4~400cm	1mm	-20~+85°C	UART/I ² C+INT	23×15×9(mm)

pH Detection Module

Part No.	Supply Voltage	pH Range	pH Resolution	Accuracy	Temperature Compensation	Interface	Dimension
BM25S4421-1	3V~5.5V	0.0~14.0pH	0.01pH	±0.1pH@5~60°C	0~60°C(unfrozen)	UART/I ² C	65.6×27.9×18.3(mm)

Digital Sensor & Module

TDS Detection Module

Part No.	Supply Voltage	TDS Range	TDS Resolution	Accuracy	Temperature Compensation	Interface	Detection channels	Dimension
BM25S4021-1	3.1V~5.5V	0~5000ppm	0.1ppm@0~500ppm 0.5ppm@500~1500ppm 5ppm@1500~2500ppm 10ppm@2500~5000ppm	±6%@5~60°C	0(unfrozen)~60°C	UART	2	35.3×34.3×7.3(mm)

Turbidity Ddetection Module

Part No.	Supply Voltage	Turbidity Range	Turbidity Resolution	Accuracy	Temperature Compensation	Interface	Dimension
BM25S4221-1*	5.0V±5%	0~1000NTU	1NTU	±50NTU@0~800NTU ±75NTU@800~1000NTU	0(unfrozen)~85°C	UART	34.8×30.3× 37.8(mm)

* Under development, available in 1Q, 2025.

Electrochemical Alcohol Detection Module

Part No.	Supply Voltage	Alcohol Range	Alcohol Resolution	Accuracy	Temperature Compensation	Interface	Dimension
BM22S3331-1	3V~5.5V	0~2mg/L (BrAC)	0.001mg/L (BrAC)	0~-0.040mg/L@0~0.4mg/L 0~-10%@0.4~2mg/L (BrAC)	0~40°C	UART	75×30×18.5(mm)

Ultrasonic Oxygen Module

Part No.	Supply Voltage	Oxygen concentration Range	Oxygen concentration Resolution	Oxygen concentration Accuracy	Flow Range	Flow Resolution	Flow Accuracy	Operating Temp.	Interface	Dimension
BM62S5601-1	4.75V~13.2V	21~95.6%	0.1%	±1.8%@5~45°C	0~10L/Min	0.1L/Min	±0.2L/Min or ±5%, whichever is greater @5~45°C	5~50°C	UART	120×29×21(mm)

DALI Module

DALI Control Module

Part No.	Supply Voltage	MCU	Operating Temperature	Operating Current	On-Board Switch	PWM Output	Fault Detection	DALI-2 Protocol	Interface	Dimension
BM82D8011-1	7.0V~30V	8-bit	-25°C~85°C	<10mA	—	1kHz×1	12-bit ADC×1	IEC62386-101/102/207	DALI	40×17×6.5(mm)
BM82D8021-1		8-bit			—	1kHz×2	12-bit ADC×2	IEC62386-101/102/207/209Tc		
BM82D8022-1		32-bit			√	1kHz×2	12-bit ADC×2	IEC62386-101/102/207/209Tc		

Interface Process Module

CAN Interface Module

Part No.	Description	Supply Voltage	Operating Temperature	Operating Current	CAN Protocol	Interface Data Rate	Isolation Voltage	Interface	Dimension
BM42D5601-1	USB to CAN Module	4.5V~5.5V	-40°C~105°C	24mA@5V	CAN 2.0A/B ISO 11898-1	CAN up to 1Mbps	—	USB×1 CAN×1	18×17(mm)
BM42D7611-1	SPI/UART to CAN Module	3.15V~3.6V	-40°C~125°C	13mA@3.3V	CAN 2.0A/B ISO 11898-1	UART up to 128Kbps SPI up to 500KHz CAN up to 1Mbps	—	UART×1 SPI×1 CAN×1	18×21.6(mm)
BM42D7631-1	Isolation SPI/UART to CAN Module	3.0V~3.6V	-40°C~105°C	25mA@3.3V	CAN 2.0A/B ISO 11898-1	UART up to 921.6Kbps SPI up to 1.5MHz CAN up to 1Mbps	3000VDC	UART×1 SPI×1 CAN×1	32.05×20.4×8.2(mm)

Atomization Module									
Atomization Module									
Part No.	Supply Voltage	Operating Current	Atomization Power	Atomization Frequency	Adjustable Atomizing Level	Water Shortage Detection	Piezoelectric Transducer Installation	Interface	Dimension
BM52D5021-1	5V	400mA@5V	2W	100kHz	UART Mode: 3 Levels	—	above water	UART	36.07×32×15.5(mm)
BM52D5121-1	18V~26.5V	420mA@24V	VR Mode: 5W~10W	1.7/2.4MHz	UART Mode: 32 Levels	√	under water	UART	65.3×39.2×14.0(mm)
BM52O5221-1	24V	670mA@24V	VR Mode: 8W~16W	1.7MHz	PWM Mode: 3 Levels	√	under water	PWM	55.0×55.0×38.0(mm)

OP Amplifier								
General Purpose OP Amplifier								
Part No.	VDD	Description	OP No.	BW	Offset Voltage	Slew Rate	Current/OP	Package
HT92232A	2.1V~5.5V	Rail to Rail, Dual OP amplifier	2	300kHz	5mV	150 (V/ms)	16μA @OP	8SOP
HT92252A	2.1V~5.5V	Rail to Rail, Dual OP amplifier	2	1MHz	5mV	500 (V/ms)	40μA @OP	8SOP
Precision OP Amplifier								
Part No.	VDD	Description	OP No.	BW	Offset Voltage	Slew Rate	Current	Package
HT92632	2.0V~5.5V	Rail to Rail, Dual OP amplifier	2	300kHz	0.04mV	150 (V/ms)	30μA @OP	8SOP
HT92652	2.0V~5.5V	Rail to Rail, Dual OP amplifier	2	1.5MHz	0.01mV	500 (V/ms)	500μA @OP	8SOP
Low Power OP Amplifier								
Part No.	VDD	Description	OP No.	BW	Offset Voltage	Slew Rate	Current	Package
HT92112	1.4V~5.5V	Rail to Rail, Dual OP amplifier	2	14kHz	3mV	24 (V/ms)	0.6μA @OP	8SOP
HT92122	1.4V~5.5V	Rail to Rail, Dual OP amplifier	2	100kHz	3mV	3 (V/ms)	0.6μA @OP	8SOP

Audio Amplifier					
Class AB Audio Amplifier					
Part No.	VDD	Description	Output Power	Mute/Shutdown Function	Package
HT82V73A	2.2V~5.5V	1500mW mono audio power amplifier with shutdown	1500mW into 8Ω	√	8SOP-EP

Comparator								
Low Power Comparator								
Part No.	VDD	Description	CMP No.	Output	Offset Voltage	Propagation Delay	Current	Package
HT93111	1.4V~5.5V	Rail to Rail, Single comparator	1	Push Pull	12mV	High to Low: 1.6μs (Max.) Low to High: 5.0μs (Max.)	1.3μA	SOT23-5 8SOP
HT93121				Open-Drain				

Interface Bridge									
USB Bridge IC									
Part No.	Description	VDD	Virtual COM	HID	FIFO/Buffer	Interface Data Rate	VDDIO	Interface	Package
HT42B532-1	USB to I²C Bridge	3.3V~5.5V	√	—	TX: 62 bytes RX: 62 bytes	Up to 400kHz	√	USB×1 I²C×1	8SOP 10MSOP
HT42B533-1	USB to SPI Bridge	3.3V~5.5V	√	—	TX: 128 bytes RX: 128 bytes	Up to 8MHz	√	USB×1 SPI×1	10MSOP 16NSOP
HT42B534-2	USB to UART Bridge	3.3V~5.5V	√	—	TX: 128 bytes RX: 128 bytes	Up to 3Mbps Baud	√	UART×1 USB×1	8SOP, 10SOP 10MSOP, 16NSOP
HT42B564-1	USB to UART Bridge	3.3V~5.5V	—	√	TX: 32 bytes RX: 32 bytes	Up to 115.2kbps Baud	√	UART×1 USB×1	10SOP
CAN Bridge IC									
Part No.	Description	VDD	CAN Protocol	Message Objects	Temperature	Interface Data Rate	Interface	Package	
HT42B536-1	USB to CAN Bridge	3.3V~5.5V	CAN 2.0A/B ISO11898-1	1	-40°C~+105°C	—	USB×1 CAN×1	16NSOP	
HT42B216-1	I²C to CAN Bridge	3.0V~5.5V	CAN 2.0A/B ISO11898-1	30	-40°C~+105°C	Up to 400kHz	I²C×1 CAN×1	16NSOP	
HT42B316-1	SPI to CAN Bridge	3.0V~5.5V	CAN 2.0A/B ISO11898-1	30	-40°C~+105°C	Up to 12MHz	SPI×1 CAN×1	16NSOP	
HT42B416-1	UART to CAN Bridge	3.0V~5.5V	CAN 2.0A/B ISO11898-1	30	-40°C~+105°C	Up to 115.2kbps Baud	UART×1 CAN×1	16NSOP	
Note: Based on BOSCH CAN IP module C_CAN.									
CAN Bus Controller IC									
Part No.	VDD	Max. Freq.	Protocol	Message Objects	Temperature Rage	Interface	Package		
HT45B3305H	3.0V~5.5V	24MHz	CAN 2.0A/B ISO11898-1	32	-40°C~+125°C	CAN×1 SPI/I²C×1	16NSOP 16QFN		
HT45B3315	3.0V~5.5V	24MHz	CAN 2.0A/B ISO11898-1	32	-40°C~+105°C	CAN×1 SPI/I²C×1	16NSOP 16QFN		
Note: Based on BOSCH CAN IP module C_CAN.									

CCD/CIS Analog Signal Processor

CCD/CIS Analog Signal Processor

Part No.	AVDD/VDD	ADC	Input Channel	MSPS	PGA	Offset DAC	Full Scale	Power Consumption	LED Driver	Package
HT82V38	3.15V~3.45V	16-bit	3/2/1	30/30/20	1~5.85V/V	±250mV	1.6V/2V	300mW	—	28SSOP, 32QFN
HT82V39A	3.15V~3.45V	16-bit	3/2/1	40/40/20	1~5.85V/V	±250mV	1.6V/2V	390mW	3CH	40QFN
HT82V42	3.0V~3.6V	16-bit	1	15	0.7~7.84V/V	±315mV	2V	188mW	—	20SSOP
HT82V42A	3.15V~3.45V	16-bit	1	15	0.7~7.84V/V	±315mV	2V	188mW	3CH	32QFN
HT82V48	3.0V~3.6V	16-bit	3×2	60×2	0.65~6.0V/V	±290mV	1.2V/2V	925mW	—	48LQFP-EP

Real-Time Clock

Real-Time Clock (RTC) / Calendar

Part No.	VDD	V _{BAT}	I _{DD} (μA)	I _{BAT} (μA)	I _{STB} (μA)	External X'tal Osc.	Integrated load capacitor (C _L)	Build in Memory (Bytes)	Oscillator Compensation	Package
HT1381A	2.0V~5.5V	—	1.0@5V	—	0.1	32.768kHz	9pF	—	—	8SOP
HT1381B	2.0V~5.5V	—	1.2@5V	—	0.1	32.768kHz	7pF	—	—	8SOP
HT1382	2.7V~5.5V	2.0V~5.5V	15@3V	1.2@3V	0.1	32.768kHz	12.5pF	4	√	8SOP, 10MSOP

Encoder / Decoder

2¹² Encoder/Decoder

Part No.	Encoder/Decoder	VDD	Addr. No.	Addr./Data No.	Data No.	Data Type	Trig.	Check Times	Pair	Package
HT12E	Encoder	2.4V~12V	8	4	0	—	TE	—	HT12D	20SOP
HT12D	Decoder	2.4V~12V	8	0	4	Latch	—	3	HT12E	20SOP

3⁹ Encoder

Part No.	Encoder/Decoder	VDD	Addr. No.	Addr./Data No.	Trig.	Package
HT6026	Encoder	4V~18V	0	9	TE	16NSOP

Telecom IC

Telecom Peripheral

Part No.	Description	VDD	OSC Frequency	Package
HT9200A	DTMF Generator	2.5V~5.5V	3.58MHz	8SOP
HT9200B				14SOP
HT9170D	DTMF Receiver	2.5V~5.5V	3.58MHz	18SOP

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