

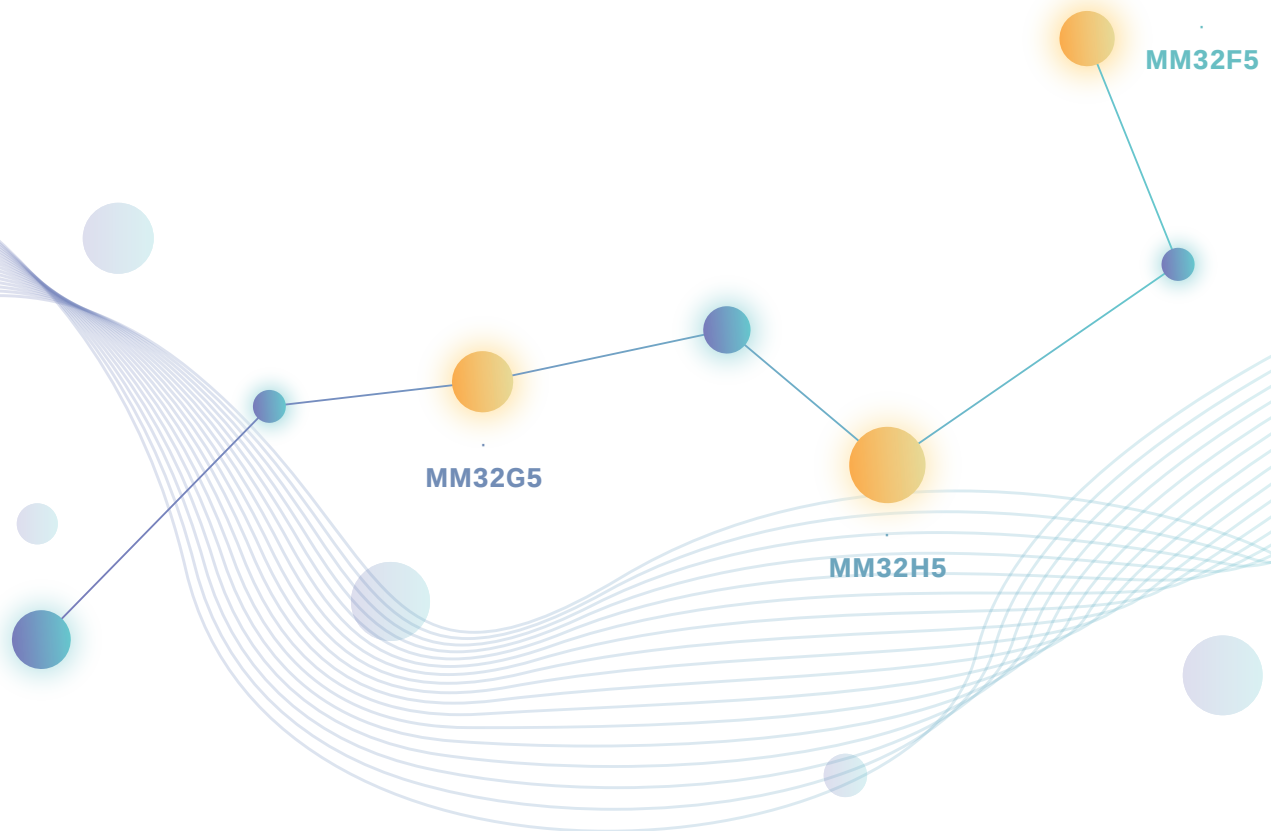


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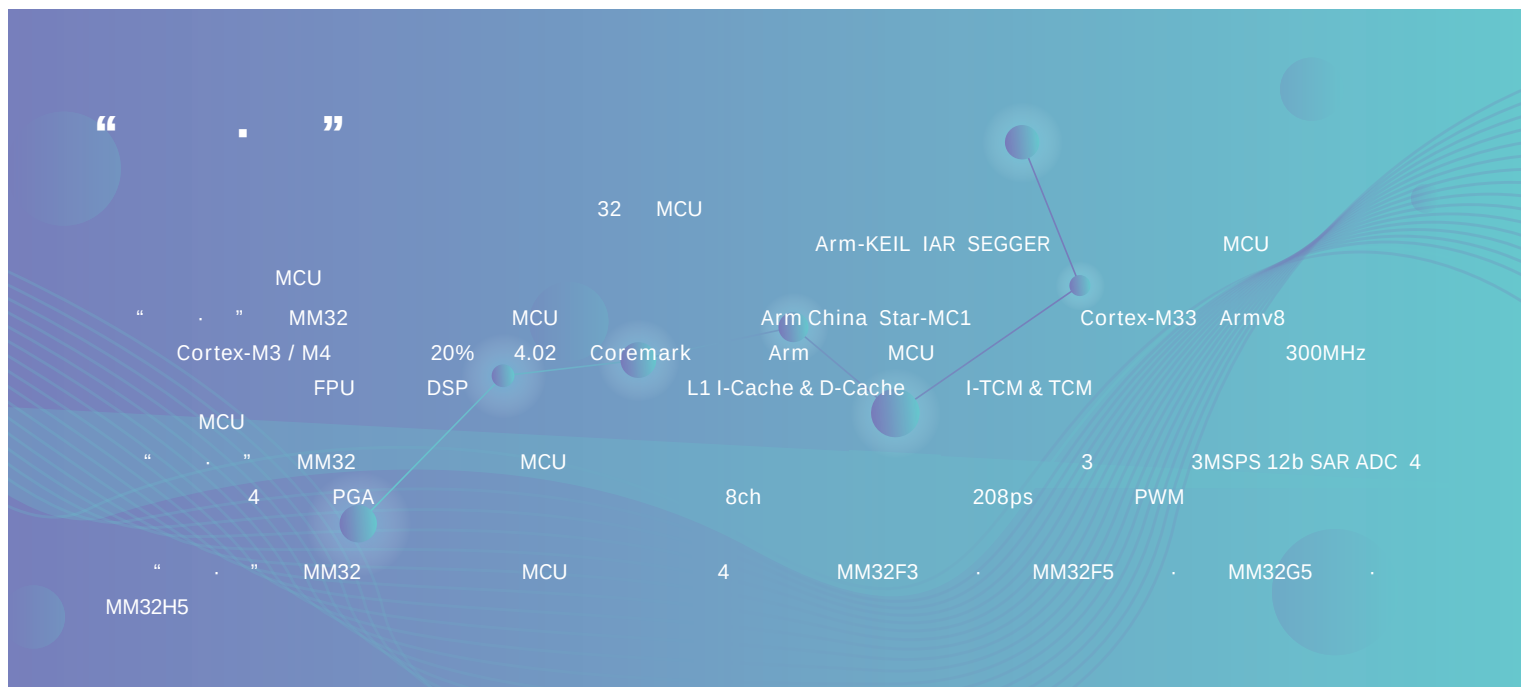
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MM32

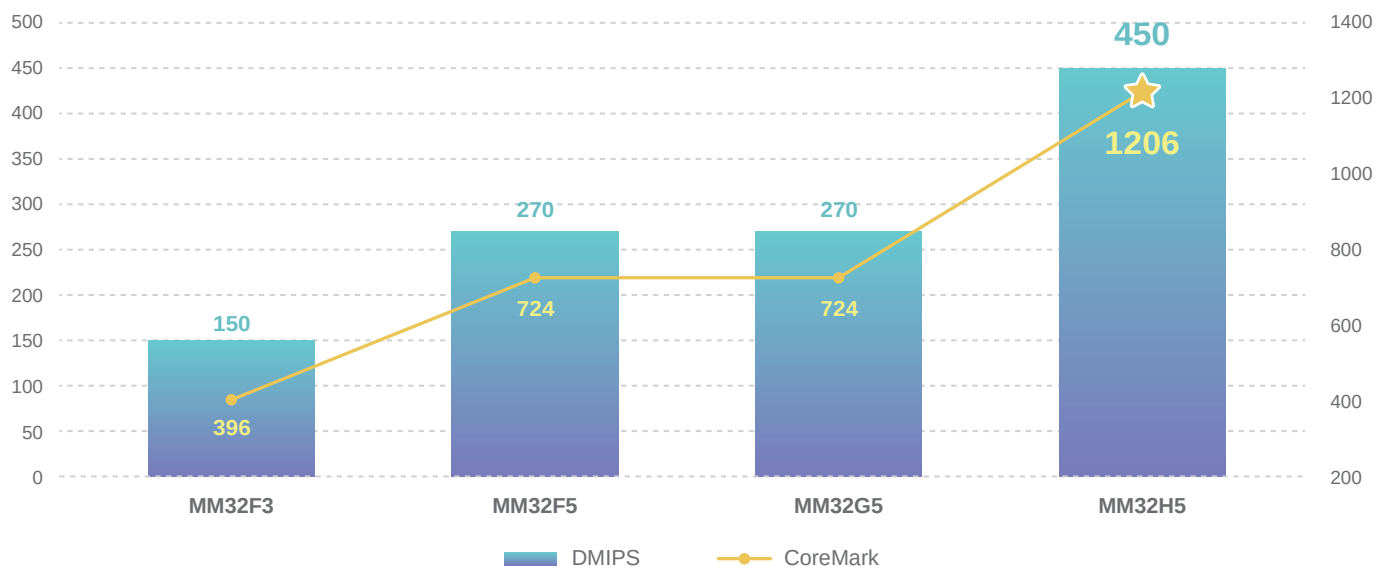
MCU



www.mm32mcu.com



DMIPS & CoreMark



Arm China

Star-MC1

4.02 CoreMark/MHz M3/M4 20%



L1 I/D Cache, TCM



KEIL, IAR, GCC, J-LINK, ULINK2



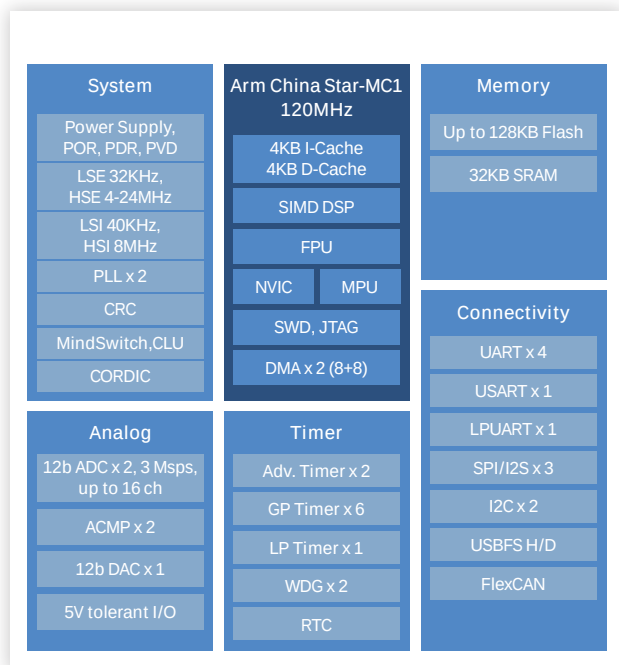
- Star-MC1 FPU DSP
- CORDIC Sin Cos Atan
- L1 Cache TCM
- 2x 3x 3Msps 12b ADC 4x OPA/PGA
- 8ch MindPWM PWM 208ps
- MindSwitch GPIOs EXTI ADC DAC



- SPI XIP QSPI FSMC FMC/SDRAM SDIO
- TFT-LCD
- FreeRTOS
- LVGL GUI
- TensorFlow Lite
- Arm

Product	I-Cache/ D-Cache	TCM	Memory ECC	Flash	SPI	XIP QSPI	FSMC	FMC/ SDRAM	SDIO
F5230	4KB/4KB								
F5240	8KB/4KB								
F5260	4KB/4KB								
F5270	4KB/4KB								
F5280	4KB/4KB								
F5330	4KB/4KB								
F5340	8KB/4KB								
F5370	8KB/4KB								
G5330	4KB/4KB								
G5370	8KB/4KB								
H5420	8KB/8KB		SRAM						
H5480	8KB/8KB		SRAM						

MM32F5

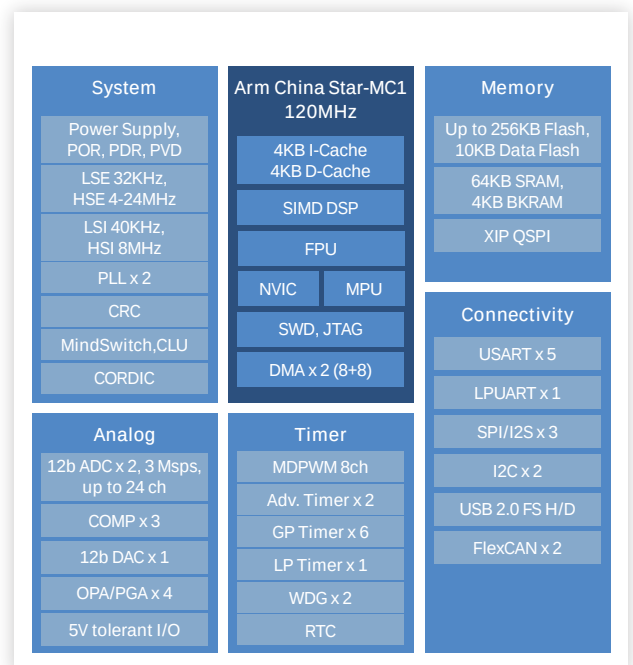


MM32F5230

- QFN28 QFN32 LQFP48 LQFP64
- 120MHz Arm China Star-MC1 DSP+ FPU + CORDIC 4KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- 128KB Flash 32KB RAM
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 1x FlexCAN CAN 2.0B
- 2x 2x 3Msps 12b ADC
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**F103 & S**F407

MM32F5240

- LQFP48 LQFP64 LQFP100
- 120MHz Arm China Star-MC1 DSP+ FPU + CORDIC 8KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- 256KB Flash 10KB Data Flash 64KB RAM 4KB Retention RAM Flash
- QSPI NOR Flash XIP
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 2x FlexCAN CAN 2.0B
- 8ch MindPWM 2x 2x 3Msps 12b ADC 4x OPA/PGA
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**F103 & S**F407



MM32F5260

- LQFP48 LQFP64 LQFP100
- 120MHz Arm China Star-MC1 DSP+ FPU + CORDIC
4KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- 256KB Flash 128KB RAM
- QSPI NOR Flash XIP
- FSMC SRAM/PSRAM/NOR Flash 8080/6800
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 2x FlexCAN CAN 2.0B
- 2x 2x 3Msps 12b ADC
- DeepStop <20uA Standby 0.59uA
- MindSwitch GPIOs EXTI ADC DAC
- 2.0-5.5V IO 5V 105C Ta
- S**F103 & S**F407

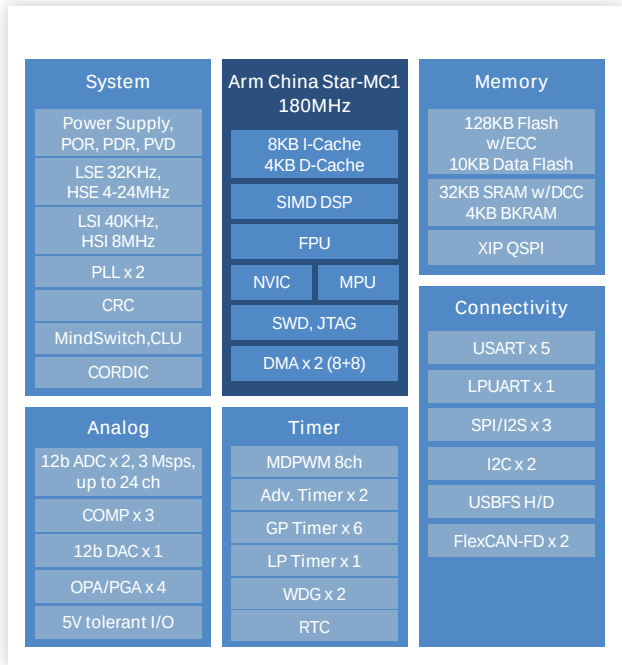
MM32F5330

- QFN28 QFN32 LQFP48 LQFP64
- 180MHz Arm China Star-MC1 DSP+ FPU + CORDIC
4KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- Up to 128KB Flash 32KB RAM
- UART/USART/LPUART x 6 SPI x 3 I2C x 2 I3C Slave x 1
- 1x USB Device & Host
- 1x FlexCAN CAN 2.0B & CAN-FD
- 2x 2x 3Msps 12b ADC
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**F103 & S**F407

System	Arm China Star-MC1 180MHz	Memory
Power Supply, POR, PDR, PVD	4KB I-Cache 4KB D-Cache	Up to 128KB Flash w/ECC
LSE 32KHz, HSE 4-24MHz	SIMD DSP	32KB SRAM w/ECC
LSI 40KHz, HSI 8MHz	FPU	
PLL x 2	NVIC MPU	
CRC	SWD, JTAG	
MindSwitch, CLU	DMA x 2 (8+8)	
CORDIC		
Analog	Timer	Connectivity
12b ADC x 2, 3 Msps, up to 16 ch	Adv. Timer x 2	UART x 4
COMP x 2	GP Timer x 6	USART x 1
12b DAC x 1	LP Timer x 1	LPUART x 1
5V tolerant I/O	WDG x 2	SPI/I2S x 3
	RTC	I2C x 2
		I3C x 1
		USBFS H/D
		FlexCAN-FD x 1

MM32F5

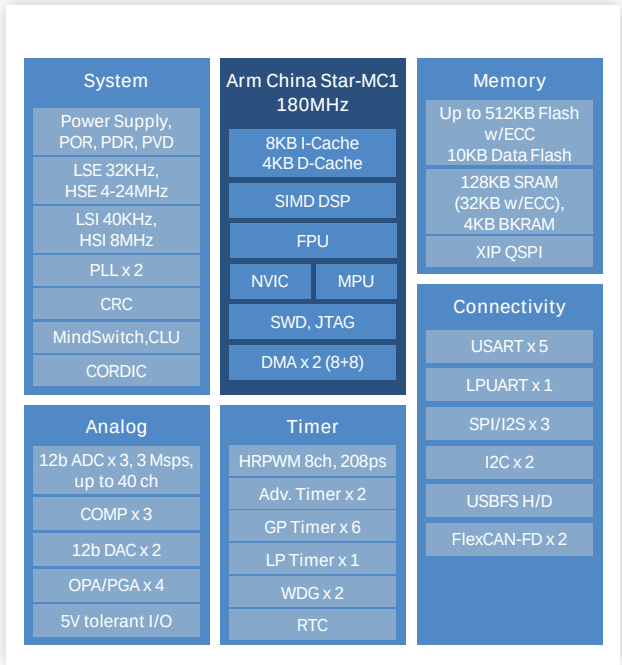
MM32F5340



- QFN32 LQFP48 LQFP64
- 180MHz Arm China Star-MC1 DSP+ FPU + CORDIC 8KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- 128KB Flash 10KB Data Flash 32KB RAM 4KB Retention RAM Flash
- QSPI NOR Flash XIP
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 2x FlexCAN CAN 2.0B & CAN-FD
- 8ch MindPWM 2x 2x 3Msps 12b ADC 4x OPA/PGA
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**F103 & S**F407

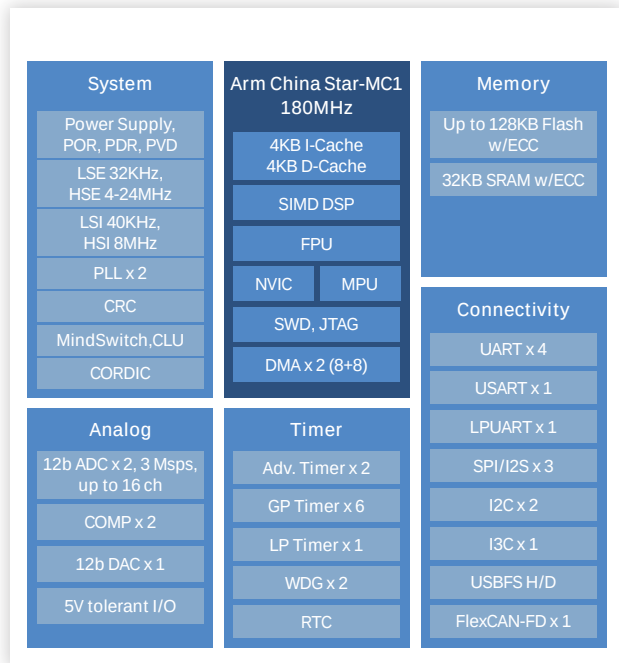
MM32F5370

- LQFP48 LQFP64 LQFP100
- 180MHz Arm China Star-MC1 DSP+ FPU + CORDIC 8KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- Up to 512KB Flash 10KB Data Flash 128KB RAM 4KB Retention RAM Flash
- QSPI NOR Flash XIP
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 2x FlexCAN CAN 2.0B & CAN-FD
- 2x 3x 3Msps 12b ADC 4x OPA/PGA
- 8ch MindPWM 208ps
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**F103 & S**F407





MM32G5

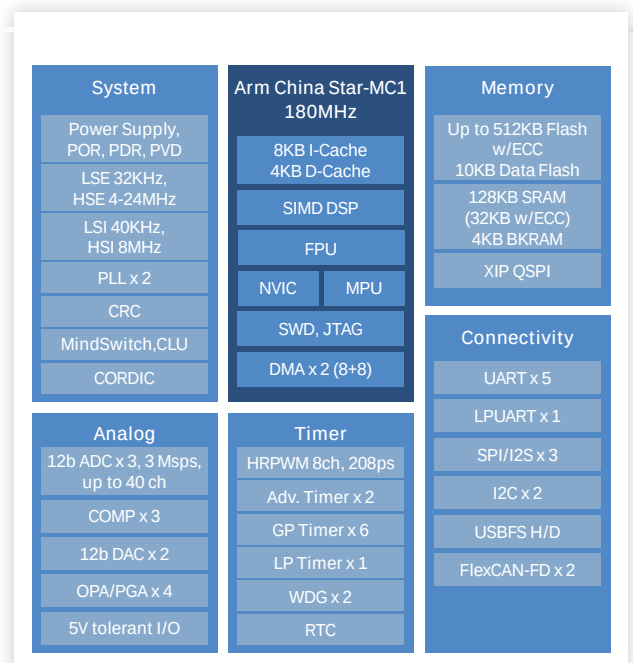


MM32G5330

- QFN48
- 180MHz Arm China Star-MC1 DSP+ FPU + CORDIC 4KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- Up to 128KB Flash 32KB RAM
- UART/USART/LPUART x 6 SPI x 3 I2C x 2 I3C Slave x 1
- 1x USB Device & Host
- 1x FlexCAN CAN 2.0B & CAN-FD
- 2x 2x 3Msps 12b ADC
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**G43x

MM32G5370

- LQFP48 LQFP64 LQFP100
- 180MHz Arm China Star-MC1 DSP+ FPU + CORDIC 8KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- Up to 512KB Flash 10KB Data Flash 128KB RAM 4KB Retention RAM Flash
- QSPI NOR Flash XIP
- USART/LPUART x 6 SPI x 3 I2C x 2
- 1x USB Device & Host
- 2x FlexCAN CAN 2.0B & CAN-FD
- 2x 3x 3Msps 12b ADC 4x OPA/PGA
- 8ch MindPWM 208ps
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 105C Ta
- S**G47x & S**G49x



MM32H5

System	Arm China Star-MC1 200MHz	Memory
Power Supply, POR, PDR, PVD	8KB I-Cache	Up to 2MB Flash
LSE 32KHz, HSE 4-24MHz	8KB D-Cache	256KB SRAM (64KB ECC), 4KB BKRAM
LSI 32KHz, HSI 8MHz HSI 96MHz	SIMD DSP	XIP QSPI
PLL x 2	FPU	FMC (SDRAM)
CRC	NVIC MPU	AES/SHA/TRNG OTFDEC
MindSwitch, CLU	SWD, JTAG	Connectivity
CORDIC	DMAMUX	USART x 7 LPUART x 1
	DMA x 8ch x 2	SPI/I2S x 3
Analog	Timer	I2C x 2
12b ADC x 3, 3 Msps, up to 40 ch	Adv. Timer x 2	Ethernet MAC
COMP x 4	32b Timer x 2	USB 2.0 FS
12b DAC x 2	16b Timer x 8	USB 2.0 HS
SCVREF	LP Timer x 1	FlexCAN-FD x 2
5V tolerant I/O	WDG x 2	DCI
	RTC	KPAD

MM32H5420

- LQFP64 LQFP100 LQFP144
- 200MHz Arm China Star-MC1 DSP+ FPU + CORDIC
- Up to 2MB Flash 256KB RAM 4KB Retention RAM Flash
- USART/LPUART x 8 SPI x 3 I2C x 2
- 1x 10/100Mbps MII/RMII
- 1x USB 1x USB
- 2x FlexCAN CAN 2.0B CAN-FD 8Mbps
- DCI 14 Bayer/YCbCr/RGB/JPEG
- 16 FMC SDRAM 8080
- AES-128 SHA-256 TRNG AES OTFDEC
- 2x 3x 3Msps 12b ADC
- SCVREF HSI 96MHz +/-1%
- 2.7-3.6V IO 5V 105C Ta

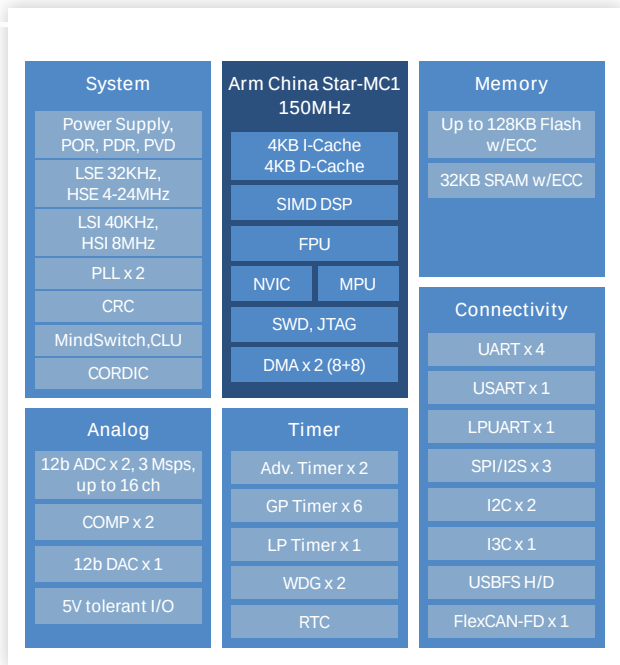
MM32H5480

- LQFP64 LQFP100 LQFP144
- 300MHz Arm China Star-MC1 DSP+ FPU + CORDIC
- Arm China Star-MC1 (& Arm Cortex-M33) MCU
- 2MB Flash 256KB RAM 4KB Retention RAM Flash
- USART/LPUART x 8 SPI x 3 I2C x 2
- 1x 10/100Mbps MII/RMII
- 1x USB 1x USB
- 3x FlexCAN CAN 2.0B CAN-FD 8Mbps
- DCI 14 Bayer/YCbCr/RGB/JPEG
- 16 FMC SDRAM 8080
- AES-128 SHA-256 TRNG AES OTFDEC
- 3x 3x 3Msps 12b ADC
- SCVREF HSI 96MHz +/-1%
- 2.7-3.6V IO 5V 105C Ta

System	Arm China Star-MC1 300MHz	Memory
Power Supply, POR, PDR, PVD	8KB I-Cache	2MB Flash
LSE 32KHz, HSE 4-24MHz	8KB D-Cache	256KB SRAM (64KB ECC), 4KB BKRAM
LSI 32KHz, HSI 8MHz HSI 96MHz	SIMD DSP	XIP QSPI
PLL x 2	FPU	FMC (SDRAM)
CRC	NVIC MPU	AES/SHA/TRNG OTFDEC
MindSwitch, CLU	SWD, JTAG	Connectivity
CORDIC	DMAMUX	USART x 7 LPUART x 1
	DMA x 8ch x 2	SPI/I2S x 3
Analog	Timer	I2C x 2
12b ADC x 3, 3 Msps, up to 40 ch	Adv. Timer x 3	Ethernet MAC
COMP x 4	32b Timer x 2	USB 2.0 FS
12b DAC x 2	16b Timer x 8	USB 2.0 HS
SCVREF	LP Timer x 1	FlexCAN-FD x 3
5V tolerant I/O	WDG x 2	DCI
	RTC	KPAD

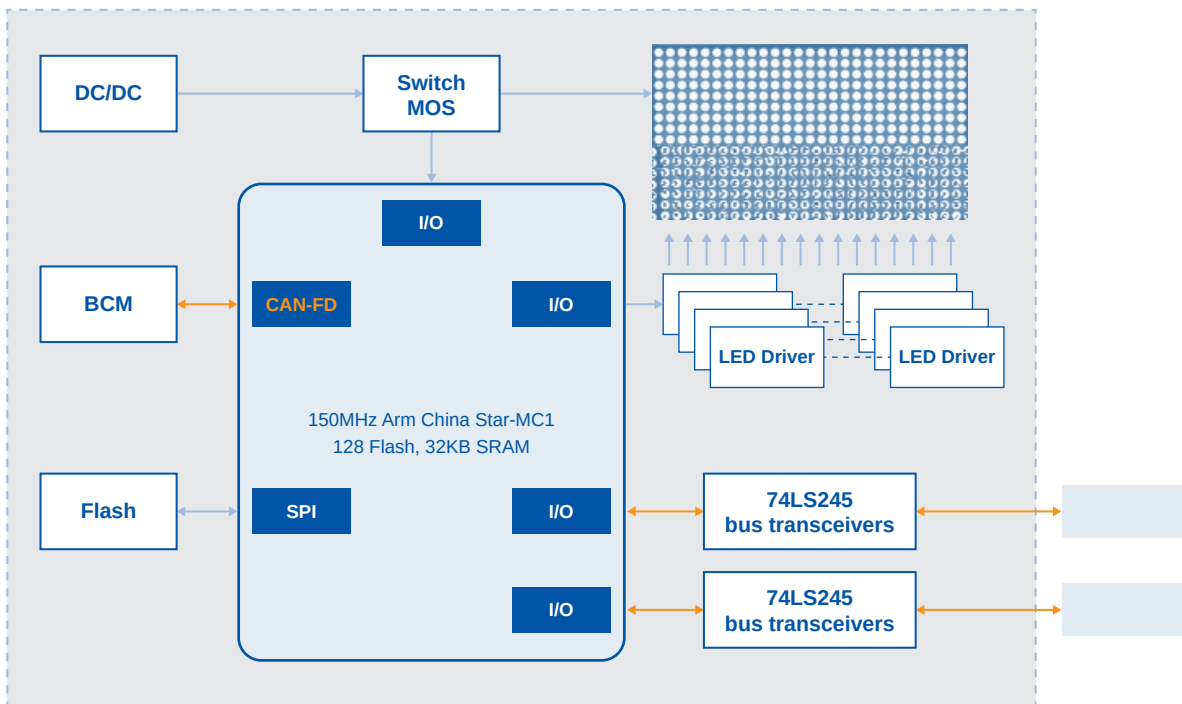
AEC-Q100

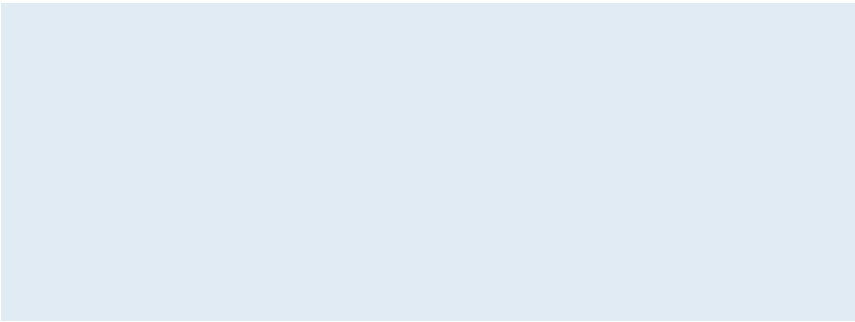
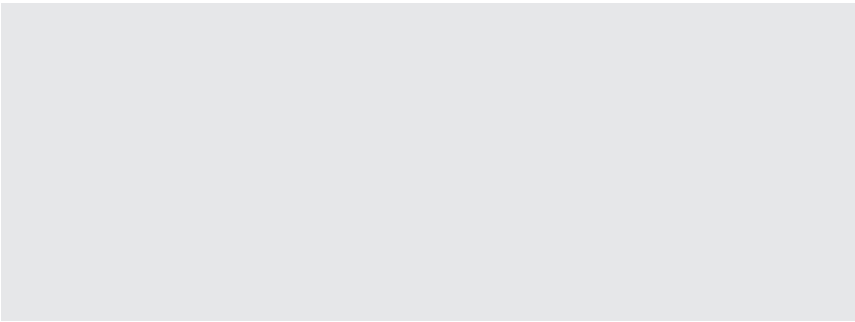
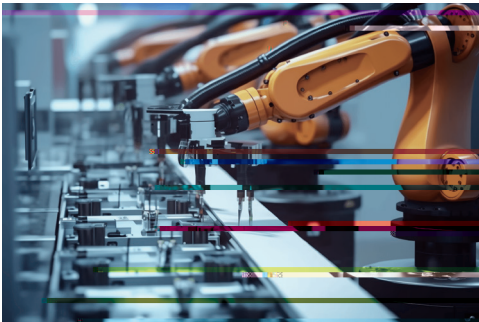
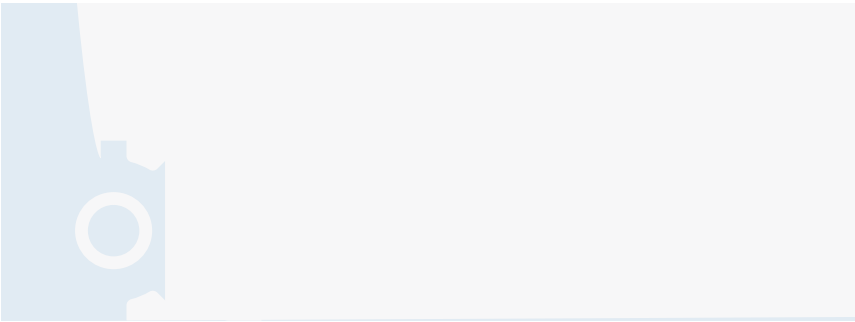
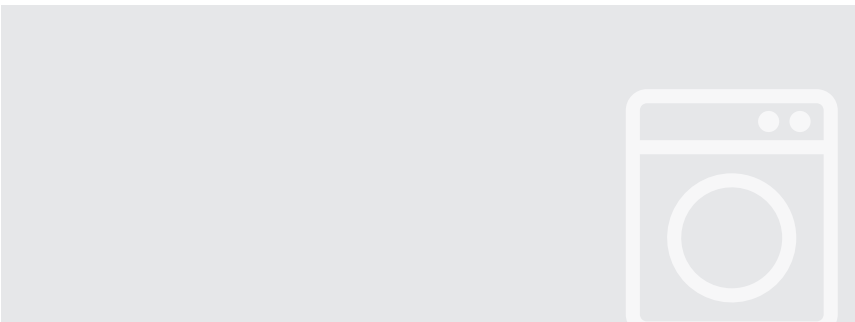
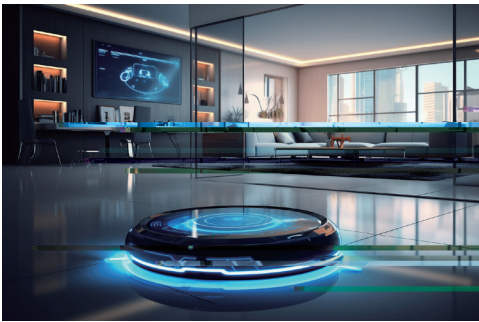
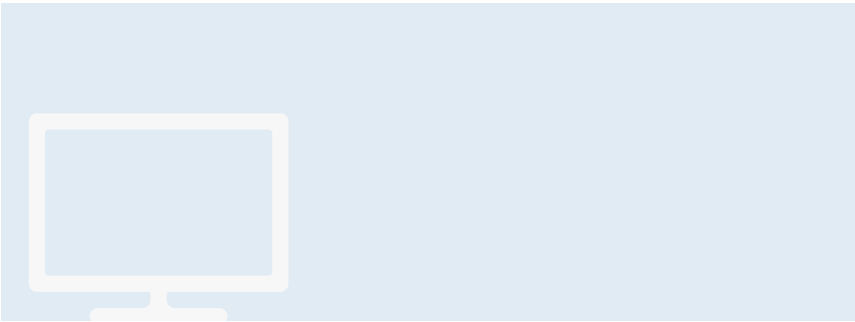
MM32F5330xxM



- QFN32 LQFP48 LQFP64
- 150MHz Arm China Star-MC1 DSP+ FPU + CORDIC
4KB+4KB L1 Cache
- CORDIC Sin Cos Atan
- Up to 128KB Flash 32KB RAM
- UART/USART/LPUART x 6 SPI x 3 I2C x 2 I3C Slave x 1
- 1x USB Device & Host
- 1x FlexCAN CAN 2.0B & CAN-FD
- 2x 2x 3Msps 12b ADC
- MindSwitch GPIOs EXTI ADC DAC
- 1.8-5.5V IO 5V 125C Ta AEC-Q100 Grade 1
- S**F103 & S**F407

Mini-LED

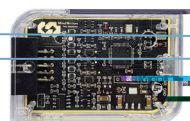




MCU



- MiniBoard, EVBoard



① 排位不分先后, 按首字母顺序排序

arm 中国

GaleComm
长沙高勒康达电子



正点原子

HI-LO SYSTEMS

RXTH
戎象科技

IAF

创芯工坊
ICWORKSHOP



Aneos

RT-Thread
小而美的物联网操作系统



SVAEN



SINO
芯园

西尔特电子
XELTEK

XWOPEN.COM

Series	Part No.	Core	Max Speed (MHz)	Memory				I/O#	Security	Timer Functions					Connectivity									Analog Interface					Pin Info		Operation Temp				
				Flash (KB)	RAM (KB)	Backup RAM (KB)	Ext. Bus I/F			Adv TMR	GP TMR	LP TMR	WDG	RTC	U(S)ART	LP UART	I ² C	I ³ C	SPI	I ² S	USB 2.0 FS	USB 2.0 HS	CAN 2.0B	Ether-net	SDIO	QSPI	ADC (1 Msps, 12bit)	ADC (3 Msps, 12bit)	DAC (12bit)	ACMP		OpAmp	Package	Package Size	
MM32F3																																			
MM32F3270	MM32F3273E6P	Cortex-M3	120	256	128			38		2	6		2	Y	7		2		2	2	D/H/O		1				3, 10ch		2	2		LQFP48	7x7	-40~85C	
	MM32F3273E7P	Cortex-M3	120	256	128			52		2	6		2	Y	7		2		2	2	D/H/O		1		1		3, 16ch		2	2		LQFP64	10x10	-40~85C	
	MM32F3273G6P	Cortex-M3	120	512	128			38		2	6		2	Y	7		2		2	2	D/H/O		1				3, 10ch		2	2		LQFP48	7x7	-40~85C	
	MM32F3273G7P	Cortex-M3	120	512	128			52		2	6		2	Y	7		2		2	2	D/H/O		1		1		3, 16ch		2	2		LQFP64	10x10	-40~85C	
	MM32F3273G8P	Cortex-M3	120	512	128		FSMC	84		2	6		2	Y	8		2		2	2	D/H/O		1		1		3, 16ch		2	2		LQFP100	14x14	-40~85C	
	MM32F3273G9P	Cortex-M3	120	512	128		FSMC	116		2	6		2	Y	8		2		3	3	D/H/O		1		1		3, 21ch		2	2		LQFP144	20x20	-40~85C	
MM32F5																																			
MM32F5230	MM32F5233D4QV	Star-MC1	120	128	32			28		2	6	1	2	Y	4	1	1		2	2	D/H		1					2, 10ch	1	2		QFN32	5x5	-40~105C	
	MM32F5233D6PV	Star-MC1	120	128	32			40		2	6	1	2	Y	5	1	2		3	3	D/H		1					2, 10ch	1	2		LQFP48	7x7	-40~105C	
	MM32F5233D7PV	Star-MC1	120	128	32			54		2	6	1	2	Y	5	1	2		3	3	D/H		1					2, 16ch	1	2		LQFP64	10x10	-40~105C	
MM32F5240	MM32F5245E6PV	Star-MC1	120	256	64	4		40		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		2,13ch	1	3	4	LQFP48	7x7	-40~105C	
	MM32F5245E7PV	Star-MC1	120	256	64	4		54		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		2,19ch	1	3	4	LQFP64	10x10	-40~105C	
MM32F5260	MM32F5245E8PV	Star-MC1	120	256	64	4		88		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		2,24ch	1	3	4	LQFP100	14x14	-40~105C	
	MM32F5265E6PV	Star-MC1	120	256	128		FSMC	41		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		1, 10ch	2	3		LQFP48	7x7	-40~105C	
	MM32F5265E7PV	Star-MC1	120	256	128		FSMC	54		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		2, 16ch	2	3		LQFP64	10x10	-40~105C	
	MM32F5265E8PV	Star-MC1	120	256	128		FSMC	84		2	6	1	2	Y	5	1	2		3	3	D/H		2			1		2, 19ch	2	3		LQFP100	14x14	-40~105C	
MM32F5270	MM32F5277E7PV	Star-MC1	120	256	192		FSMC	54		2	6	1	2	Y	7	1	2		3	3	D/H/O		2	1		1		2, 16ch	2	3		LQFP64	10x10	-40~105C	
	MM32F5277E8PV	Star-MC1	120	256	192		FSMC	86		2	6	1	2	Y	7	1	2		3	3	D/H/O		2	1		1		2, 19ch	2	3		LQFP100	14x14	-40~105C	
	MM32F5277E9PV	Star-MC1	120	256	192		FSMC	118		2	6	1	2	Y	7	1	2		3	3	D/H/O		2	1		1		2, 24ch	2	3		LQFP144	20x20	-40~105C	
MM32F5330	MM32F5331D3NV	Star-MC1	180	128	32			24		2	6	1	2	Y	4	1	1	1	2	2								2, 10ch	1	2		QFN28	4x4	-40~105C	
	MM32F5333D4QV	Star-MC1	180	128	32			28		2	6	1	2	Y	4	1	1	1	2	2	D/H		1(FD)					2, 10ch	1	2		QFN32	5x5	-40~105C	
	MM32F5333D6PV	Star-MC1	180	128	32			40		2	6	1	2	Y	5	1	2	1	3	3	D/H		1(FD)					2, 10ch	1	2		LQFP48	7x7	-40~105C	
	MM32F5333D7BV	Star-MC1	180	128	32			54		2	6	1	2	Y	5	1	2	1	3	3	D/H		1(FD)					2, 16ch	1	2		VFBGA64	4x4	-40~105C	
	MM32F5333D7PV	Star-MC1	180	128	32			54		2	6	1	2	Y	5	1	2	1	3	3	D/H		1(FD)					2, 16ch	1	2		LQFP64	10x10	-40~105C	
MM32F5340	MM32F5345D4QV	Star-MC1	180	128	32	4		28		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		2, 11ch	1	3	4	QFN32	5x5	-40~105C	
	MM32F5345D6PV	Star-MC1	180	128	32	4		40		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		2,13ch	1	3	4	LQFP48	7x7	-40~105C	
	MM32F5345D7PV	Star-MC1	180	128	32	4		54		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		2,19ch	1	3	4	LQFP64	10x10	-40~105C	
MM32F5370	MM32F5375G6PV	Star-MC1	180	512	128	4		40		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 17ch	2	3	4	LQFP48	7x7	-40~105C	
	MM32F5375G7PV	Star-MC1	180	512	128	4		54		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 23ch	2	3	4	LQFP64	10x10	-40~105C	
	MM32F5375G8PV	Star-MC1	180	512	128	4		88		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 40ch	2	3	4	LQFP100	14x14	-40~105C	
MM32F5330M	MM32F5333D4QM*	Star-MC1	150	128	32			28		2	6	1	2	Y	3	1	1	1	2	2	D/H		1(FD)					2,10ch	1	2		QFN32	5x5	-40~125C	
	MM32F5333D6PM*	Star-MC1	150	128	32			40		2	6	1	2	Y	4	1	2	1	3	3	D/H		1(FD)					2,10ch	1	2		LQFP48	7x7	-40~125C	
	MM32F5333D7PM*	Star-MC1	150	128	32			54		2	6	1	2	Y	4	1	2	1	3	3	D/H		1(FD)					2,16ch	1	2		LQFP64	10x10	-40~125C	
MM32G5																																			
MM32G5330	MM32G5333D6QV	Star-MC1	180	128	32			41		2	6	1	2	Y	5	1	2	1	3	3	D/H		1(FD)					2, 16ch	1	2		QFN48	7x7	-40~105C	
	MM32G5375G6PV	Star-MC1	180	512	128	4		37		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 17ch	2	3	4	LQFP48	7x7	-40~105C	
MM32G5370	MM32G5375G7PV	Star-MC1	180	512	128	4		51		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 23ch	2	3	4	LQFP64	10x10	-40~105C	
	MM32G5375G8PV	Star-MC1	180	512	128	4		85		2	6	1	2	Y	5	1	2		3	3	D/H		2(FD)			1		3, 40ch	2	3	4	LQFP100	14x14	-40~105C	
MM32H5																																			
MM32H5420	MM32H5427L7PV	Star-MC1	200	2048	256	4	FMC/SDRAM	54	AES128, SHA256, TRNG, OTFDEC	2	10	1	2	Y	7	1	2		3	3	D/H	D/H	2(FD)	1	1	1		3, 18ch	2	4		LQFP64	10x10	-40~105C	
	MM32H5427L8PV	Star-MC1	200	2048	256	4		85			2	10	1	2	Y	7	1	2		3	3	D/H	D/H	2(FD)	1	1	1		3, 27ch	2	4		LQFP100	14x14	-40~105C
	MM32H5427L9PV	Star-MC1	200	2048	256	4		117			2	10	1	2	Y	7	1	2		3	3	D/H	D/H	2(FD)	1	1	1		3, 40ch	2	4		LQFP144	20x20	-40~105C
	MM32H5487L7PV	Star-MC1	300	2048	256	4		54			3	10	1	2	Y	7	1	2		3	3	D/H	D/H	3(FD)	1	1	1		3, 18ch	2	4		LQFP64	10x10	-40~105C
MM32H5480	MM32H5487L8PV	Star-MC1	300	2048	256	4	FMC/SDRAM	85		3	10	1	2	Y	7	1	2		3	3	D/H	D/H	3(FD)	1	1	1		3, 27ch	2	4		LQFP100	14x14	-40~105C	
	MM32H5487L9PV	Star-MC1	300	2048	256	4		117		3	10	1	2	Y	7	1	2		3	3	D/H	D/H	3(FD)	1	1	1		3, 40ch	2	4		LQFP144	20x20	-40~105C	

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