

芯海科技产品选型表

F0系列32位MCU

Part No.	Core	Max Freq. MHz	Memory(Bytes)		I/O	Timer							Connectivity							Analog Interface				Security	Oper. Temp. (°C)	VDD	Package
			Flash	SRAM		Adv.	16bit	32bit	SysTick	FWDT/WWDT	RTC	PWM	UART	SPI	I2C	PD	CC	USB	CAN	12bit ADC Units(Chs)	DAC Units(Bits)	Temp. Sensor	VBAT				
CS32F030FP6P	M0	48	32K	4K	15	1	4	-	1	1/1	1	11	2	1	-	1	-	-	-	1(9)	-	±2°C	-	CRC-32 96B UNID	-40~105	2.0~5.5	TSSOP20
CS32F030K6T6	M0	48	32K	4K	25	1	4	-	1	1/1	1	11	1	1	-	1	-	-	-	1(10)	-	±2°C	-	CRC-32 96B UNID	-40~105	2.0~5.5	LQFP32
CS32F030C8T6	M0	48	64K	8K	39	1	6	-	1	1/1	1	13	2	2	-	2	-	-	-	1(10)	-	±2°C	-	CRC-32 96B UNID	-40~105	2.0~5.5	LQFP48
CS32F031G6U6	M0	48	32K	4K	23	1	4	1	1	1/1	1	15	4	1	1	1	-	-	-	1(10)	-	±2°C	-	CRC-32 96B UNID	-40~105	2.0~5.5	QFN28L
CS32F031K8U6	M0	48	64K	8K	27	1	6	1	1	1/1	1	17	5	2	1	2	-	-	-	1(10)	-	±2°C	-	CRC-32 96B UNID	-40~105	2.0~5.5	QFN32L
CS32F031C8T6	M0	48	64K	8K	39	1	6	1	1	1/1	1	17	5	2	1	2	-	-	-	1(10)	-	±2°C	Y	CRC-32 96B UNID	-40~105	2.0~5.5	LQFP48

G0系列32位PD MCU

Part No.	Core	Max Freq. MHz	Memory(Bytes)		I/O	Timer							Connectivity							Dead Bat	Analog Interface					Security	HDM	HMUL	Oper. Temp. (°C)	VDD	Package	
			Flash	SRAM		Adv.	16bit	32bit	TySTick	FWDT/WWDT	LPWDT	RTC	PWM	UART	SPI	I2C	PD	CC	QC		VO OC	12bit ADC Units(Chs)	DAC Units(Bits)	Temp. Sensor	VBAT							Comp./OPA
CS32G020K8U6	M0	48	64K	8K	27	-	3	-	-	1/1	1	0	3	1	1	1	2	2组	2	-	Y	1(24)	1(11)	-	-	-	CRC-32	1	1	-40~85	2.5~5.5	QFN32
CS32G020E8U6	M0	48	64K	8K	19	-	3	-	-	1/1	1	0	3	1	1	1	2	2组	2	-	N	1(20)	1(11)	-	-	-	CRC-32	1	1	-40~85	2.5~5.5	QFN24
CS32G021K8U6	M0	48	64K	8K	27	-	3	-	-	1/1	1	0	3	1	1	1	2	2组	2	2	Y	1(24)	1(11)	-	-	-	CRC-32	1	1	-40~85	2.5~5.5	QFN32
CS32G021E8U6	M0	48	64K	8K	19	-	3	-	-	1/1	1	0	3	1	1	1	2	2组	2	2	N	1(20)	1(11)	-	-	-	CRC-32	1	1	-40~85	2.5~5.5	QFN24

8位Flash MCU

Part No.	Memory				I/O	Timer Modules					Connectivity					Analog Interface					OSC Mode	大驱动 IO	Special Function	VDD (V)	Package
	Type	ROM	RAM	EEPROM		8-Bit	12-Bit	16-Bit	PWM	互补 PWM	UART	SPI	I2C	PD	CC	LCD /LED	Temp Sensor	LVD (V)	ADC (Ch*Bit)	Comp. /OPA					
CSU32M10	MTP	2K*16	104	128	8	1	2	0	2	1	-	-	-	-	-	-	-	2.4/3.6	4*12	1/0	IRC	2	OCF/恒流源	2.35~5.5	MSOP10
	MTP	2K*16	104	128	14	1	2	0	2	2	-	-	-	-	-	5*8	-	2.4/3.6	7*12	1/0	IRC	4	OCF/恒流源	2.35~5.5	SOP16/QFN16
CSU32M11	MTP	2K*16	104	128	14	1	2	0	2	2	-	-	-	-	-	5*8	-	2.4/3.6	7*12	1/0	IRC	4	-	2.35~5.5	SOP16
CSU38M20	MTP	8K*16	1024	256	14	1	2	1	3	2	1	1	1	-	-	5*9	-	2.42.53.03.6	14*12	-	IRC/XT	6	-	2.3~5.5	SOP16
	MTP	8K*16	1024	256	18	1	2	1	3	1	1	1	1	-	-	5*13	-		18*12	-	IRC/XT	5	-	2.3~5.5	TSSOP20
	MTP	8K*16	1024	256	18	1	2	1	3	3	1	1	1	-	-	5*13	-		18*12	-	IRC/XT	8	-	2.3~5.5	SOP20
	MTP	8K*16	1024	256	22	1	2	1	3	3	1	1	1	-	-	5*17	-		22*12	1/1	IRC/XT	8	-	2.3~5.5	QFN24/SSOP24
	MTP	8K*16	1024	256	26	1	2	1	3	3	1	1	1	-	-	5*21	-		26*12	1/1	IRC/XT	8	-	2.3~5.5	SOP28/QFN28
CSU38F20	Flash	8K*16	488	-	19	1	3	-	3	1	1	-	1	-	-	7*8	-	2.0/2.3	8*12	-	IRC	2	恒流驱动	1.8~5.5	QFN24

8位 OTP MCU

Part No.	Memory				I/O	Timer Modules					Connectivity					Analog Interface					OSC Mode	大驱动 IO	Special Function	VDD (V)	Package
	Type	ROM	RAM	EEPROM		8-Bit	12-Bit	16-Bit	PWM	互补 PWM	UART	SPI	I2C	PD	CC	LCD	Temp Sensor	LVD (V)	ADC (Ch*Bit)	Comp. /OPA					
CSU8RP2113	OTP	1K*14	32	-	6	2	-	-	1	-	-	-	-	-	-	-	-	2.4/3.6	-	-	IRC	-	-	2.2~5.5	SOP8/DIP8
CSU8RP2116	OTP	1K*14	64	-	12	1	2	-	2	-	-	-	-	-	-	-	-	2.4	-	-	IRC	-	-	2.2~5.5	SOP14/DIP14
CSU8RP3115B	OTP	1K*14	64	-	6	1	2	0	1	-	-	-	-	-	-	-	-	2.4	3*12	-	IRC	1	-	2.2~5.5	SOP8/DIP8
CSU8RP3117B	OTP	1K*14	64	-	8	1	2	0	2	1	-	-	-	-	-	-	-	2.4	4*12	-	IRC	2	-	2.2~5.5	MSOP10
CSU8RP3119B	OTP	1K*14	64	-	12	1	2	0	2	1	-	-	-	-	-	-	-	2.4	5*12	-	IRC	2	-	2.2~5.5	SOP14/DIP14
CSU8RP3215	OTP	2K*16	128	-	14	1	3	0	3	1	1	-	-	-	-	-	-	2.4/3.6	7*12	1/0	IRC/XT/ERC	3	-	2.2~5.5	SOP16/TSSOP16
CSU8RP3216	OTP	2K*16			18	1	3	0	3	1	1	-	-	-	-	-	-	2.4/3.6	9*12	1/0	IRC/XT/ERC	3	-	2.2~5.5	SOP20/QFN20
CSU32P10	OTP	2K*14	64	-	6	1	2	0	1	-	-	-	-	-	-	-	-	2.4/3.6	3*12	-	IRC	1	-	2.4~5.5	SOP8
	OTP	2K*14	64	-	8	1	2	0	2	1	-	-	-	-	-	-	-	2.4/3.6	4*12	-	IRC	2	-	2.4~5.5	MSOP10
	OTP	2K*14	64	-	12	1	2	0	2	1	-	-	-	-	-	-	-	2.4/3.6	5*12	-	IRC	2	-	2.4~5.5	SOP14
CSU32P20	OTP	2K*16	104	-	6	1	2	0	1	-	-	-	-	-	-	-	-	2.4	3*12	-	IRC	1	-	2.35~5.5	SOP8
	OTP	2K*16	104	-	8	1	2	0	2	1	-	-	-	-	-	-	-	2.4	4*12	-	IRC	2	-	2.35~5.5	MSOP10
	OTP	2K*16	104	-	12	1	2	0	2	1	-	-	-	-	-	-	-	2.4	6*12	-	IRC	2	-	2.35~5.5	SOP14/TSSOP14
	OTP	2K*16	104	-	14	1	2	0	2	2	-	-	-	-	-	5*8	-	2.4	7*12	-	IRC	2	-	2.35~5.5	SOP16/TSSOP16

8位 PD MCU

Part No.	Memory				I/O	Timer Modules					Connectivity					Analog Interface					OSC Mode	大驱动 IO	Special Function	VDD (V)	Package
	Type	ROM	RAM	EEPROM		8-Bit	12-Bit	16-Bit	PWM	互补 PWM	UART	SPI	I2C	PD	CC	LCD	Temp Sensor	LVD (V)	ADC (Ch*Bit)	Comp. /OPA					
CSS34P16	OTP	4K*16	232	-	6	-	3	-	2	1	-	-	-	PD2.0	2组	-	-	2.4	-	1/0	IRC	-	-	2.7~5.5	SOP8
	OTP	4K*16	232	-	14	-	3	-	3	1	-	-	-	PD2.0	2组	-	-	2.4	-	1/0	IRC	-	-	2.7~5.5	SSOP16

压力触控

Part No.	Force Touch Channels	TK	Interface	Oper. Temp (°C)	VDD (V)	Package
CSU18M63	1	-	I2C / UART	-40~85°C	2.6~3.6	QFN16/QFN20/WLCSP16
CSA37F60	15	-	I2C / UART	-40~85°C	2.0~5.5	QFN40/WLCSP40
CSA37F61	8	-	I2C / UART	-40~85°C	2.6~5.5	WLCSP42
CSU18M65	2	-	I2C/UART	-40~85°C	2.6~3.6	QFN16/WLCSP16
CSA37F70L	8	14	I2C/UART	-40~85°C	2.4~5.5	WLCSP56
CSA37F70	18	24	I2C/UART	-40~85°C	2.4~5.5	WLCSP56

AFE—智能称重

C Part No.	Resolution(Bits)	AD Rate (Hz)	ADC Input	PGA	DAC(Bits)	Tetra-Polar	Dynamic Range	Interface	Special Function	VDD(V)	Package
CS1270	24	30	-	64	-	4	0~2.8Ω	SPI/I2C/UART	-	2.4~3.6	SOP16

AFE模组

IC Part No.	Size	BIA	HRI	Interface	VDD(V)	Pin Num
CSM37F58	2.65cmX2.25cm	4/8电极算法	无	I2C	3.0~3.6	16
CSM37F59	2.3cmX1.95cm	4/8电极算法	有	I2C	3.0~3.6	16
CSM37F01	5.0cmX3.3cm	4/8电极算法	有	UART	4.2~5	32

8位高精度 SoC

Part No.	Memory				I/O	Timer Modules					Connectivity			Analog Interface						Oscillation Mode	Special Function	VDD (V)	Package
	Type	ROM	RAM	EEPROM		Pins	8-Bit	12-Bit	16-Bit	RTC	PWM	UART	SPI	I2C	LCD	LED	Temp. Sensor	LVD	ADC (Ch*Bit)				
CSU8RP1186	OTP	4K*16	256	-	14	1	-	-	-	-	1	-	-	4*14	-	Y	Y	1*24	0/1	IRC	-	2.4~3.6	Die38
CSU8RP1186B	OTP	4K*16	256	-	14	1	-	-	-	-	1	-	-	4*14	-	Y	Y	1*24	0/1	IRC/XT		2.4~3.6	Die38
CSU8RP1001	OTP	4K*16	256	-	15/14	1	-	-	-	-	-	-	-	4*14	-	Y	Y	2*24	0/1	IRC/XT	-	2.4~3.6	Die52
CSU1181B	OTP	4K*16	256	-	16	1	-	-	-	-	-	-	-	4*18	-	Y	Y	2*24	0/1	IRC/XT	-	2.4~3.6	Die46
CSU1182B	OTP	2.5K*16	256	-	16	1	-	-	-	-	-	-	-	4*18	-	Y	Y	2*24	0/1	IRC/XT	-	2.4~3.6	Die46
CSU8RP1391	OTP	8K*16	384	-	16	2	-	2	-	3	1	-	-	4*32 6*30	-	Y	Y	2*24	0/2	IRC/XT	-	2.4~3.6	Die68
CSU8RP1381	OTP	8K*16	384	-	16	2	-	2	-	3	1	-	-	4*32 6*30	-	Y	Y	2*24	0/1	IRC/XT	-	2.4~3.6	Die68
CSU8RP1382	OTP	4K*16	384	-	12	2	-	2	-	3	1	-	-	4*20 6*18	-	Y	Y	2*24	0/1	IRC/XT	-	2.4~3.6	Die68
CSU18MB86	MTP	8K*16	488	128	10	2	-	-	-	-	-	-	-	-	7*8	Y	Y	1*24 1*10	0/1	IRC	-	2.4~3.6	SOP16L
	MTP	8K*16	488	128	11	2	-	-	-	-	1	-	-	-	7*8	Y	Y	1*24 1*10	0/1	IRC	-	2.4~3.6	SSOP20
	MTP	8K*16	488	128	15	2	-	-	Y	1	1	-	-	-	7*8	Y	Y	1*24 1*10	0/1	IRC/XT	-	2.4~3.6	SSOP24
CSU18M88	MTP	8K*16	896	128	37	4	-	-	Y	3	2	1 M/S	1 (S)	4*20 6*18	-	Y	Y	1*24 8*10	0/1	IRC/XT	-	2.4~3.6	LQFP48
CSU18M91	MTP	8K*16	896	128	21	4	-	-	Y	1	1	1 M/S	1 (S)	4*18 6*16	4*14	Y	Y	1*24 3*10	0/1	IRC/XT	BIM MDU HRI	2.4~3.6	LQFP48
	MTP	8K*16	896	128	31	4	-	-	Y	3	2	1 M/S	1 (S)	4*24 6*22	4*14	Y	Y	1*24 6*10	0/1	IRC/XT	BIM MDU HRI	2.4~3.6	LQFP64
CSU18M92	MTP	8K*16	896	128	21	4	-	-	Y	1	1	1 M/S	1 (S)	4*18 6*16	4*14	Y	Y	1*24 3*10	0/1	IRC/XT	BIM MDU	2.4~3.6	LQFP48
	MTP	8K*16	896	128	31	4	-	-	Y	3	2	1 M/S	1 (S)	4*24 6*22	4*14	Y	Y	1*24 6*10	0/1	IRC/XT	BIM MDU	2.4~3.6	Die68
CSU18P88	OTP	8K*16	488	-	24	1	1	-	Y	1	1	-	-	4*16	7*8	Y	Y	1*24	0/0	IRC/XT	-	2.4~5	SOP16, SSOP24, QFN32

高精度BLE SoC

Part No.	Memory				I/O	Timer Modules				Connectivity			Analog Interface						RF Feature				Power Consume				OSC Mode	Special Function	VDD (V)	Package
	Type	ROM	RAM	EEPROM	Pins	8-Bit	12-Bit	16-Bit	RTC	PWM	UART	SPI	I2C	LCD	LED	Temp Sensor	LVD (V)	ADC (Ch*Bit)	Comp./OPA	BLE	RX Sensl.	TX Power	Max. Speed	TX (mA)	RX (mA)	Sleep (μA)				
CST34M96	MTP	8K*16	488	128	17	1	-	-	Y	1	1	-	-	-	7*8	1	Y	1*24 1*10	0/1	5	-93dBm	-5~5dBm	1Mbps	18	17	<2	IRC/XT	-	2.4~3.6	LQFP48
CST34M98	MTP	8K*16	896	128	33	4	-	-	Y	3	2	1 M/S	1 (S)	4*20 6*18	-	1	Y	1*24 6*10	0/1	4.1	-93dBm	-5~5dBm	1Mbps	18	17	<2	IRC/XT	-	2.4~3.6	QFN68

BLE SoC

Part No.	内核	Max Freq. MHz	Memory(Bytes)		I/O	Timer					Connectivity				Analog Interface			RF Feature				Power Consume			Security	Temp. (°C)	VDD	Package		
			Flash	SRAM		Adv.	16bit	32bit (24bit)	TysTick (SysTick)	FWDT/ WWDT	RTC	PWM	UART	SPI	I2S	I2C	ADC Chs*bits	Comp./OPA	Temp. Sensor	BLE	RX Sensi.	TX Power	Max. Speed	TX (mA)					RX (mA)	Sleep (μA)
CST92P12	-	-	-	16K+12K	10	-	2	-	-	-	-	2	1	1	-	1	8*10	-	-	4.2	-93dBm	-5~5dBm	1Mbps	18	17	<2	-	-40~85	1.8~3.6	SSOP24
CST92P23	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-88dBm	-18~0dBm (-16~0dBm)	1Mbps	18.5	19.5	<4	-	-40~85	1.8~3.6	SOP8 SOP14
CST92F30	M0	48	512K	138K	20	-	-	8	1	1/0	1	6	1	2	1	2	3*12	0/1	Y(N)	5	-103dBm	-20~10dBm	1Mbps (2Mbps)	8	8	<2	AES-128	-40~85	1.8~3.6	QFN32
	M0	48	512K	138K	34	-	-	8	1	1/0	1	6	1	2	1	2	6*12	0/1	Y(N)	5	-103dBm	-20~10dBm	1Mbps (2Mbps)	8	8	<2	AES-128	-40~85	1.8~3.6	QFN48
CST92P23B	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	30~12dBm	-	17mA @0dBm	3uA	-	-40~85	1.9V~3.6V	SOP8	

ADC

IC Part No.	Resolution(Bits)	AD Rate (Hz)	ADC Input	PGA	INL(ppm)	ENOB(Bits)	Power(mA)	Interface	VDD(V)	Package
CS1242	24	1.875/3.75/7.5/15/30	2	1/2/4/8/16/32/64/128	±15	22	2.4	5 lineSPI	2.7~5.25	SSOP24
CS1243	24	1.875/3.75/7.5/15/30	4	1/2/4/8/16/32/64/128	±15	22	2.4	5 lineSPI	2.7~5.25	SSOP28
CS1231	24	10/80	1	64/128	±6	21.2	3.4	2 lineSPI	2.8~5.5	SOP16/TSSOP16
CS1232	24	10/80	2	1/2/64/128	±6	23.5	3.4	2 lineSPI	2.8~5.5	TSSOP24
CS1237	24	10/40/640/1280	1	1/2/64/128	±15	20	2.5	2 line SerialIO	2.7~5.5	SOP8
CS1238	24	10/40/640/1280	2	1/2/64/128	±15	20.7	2.5	2 line SerialIO	2.7~5.5	SOP14
CS1233	24	10Hz~1.28kHz	3	1/2/4/8/16/32/64/128	±15	19.5	1.5	3 line SerialIO	2.4~3.6	SOP14
CS1239	24	10Hz~1.28kHz	5	1/2/4/8/16/32/64/128	±15	19.5	1.5	3 line SerialIO	2.4~3.6	SOP16

AFE—健康测量

IC Part No.	Resolution(Bits)	AD Rate (Hz)	ADC Input	PGA	DAC(Bits)	Tetra-Polar	Dynamic Range	Interface	Special Function	VDD(V)	Package
CS1251	24	10Hz~1.28kHz	-	1/2/4/8/16/32/64/128/256	6	4	0~2*限流电阻	3 line SerialIO	HRI	2.4~3.6	SOP16
CS1256	24	10Hz~1.28kHz	-	1/2/4/8/16/32/64/128/256	6	4	0~2*限流电阻	3 line SerialIO	-	2.4~3.6	SOP16 DFN16
CS1257	24	10Hz~1.28kHz	2	1/2/4/8/16/32/64/128/256	6	4	0~2*限流电阻	3 line SerialIO	-	2.4~3.6	SSOP20
CS1258	24	10Hz~1.28kHz	5	1/2/4/8/16/32/64/128/256	6	8	0~2*限流电阻	3 line SerialIO	-	2.4~3.6	LQFP32
CS1259	24	10Hz~1.28kHz	5	1/2/4/8/16/32/64/128/256	6	8	0~2*限流电阻	3 line SerialIO	HRI	2.4~3.6	QFN32

AFE—节能环保

C Part No.	Dynamic Range	Power				Voltage			Current			Interface	Special Function	VDD(V)	Package
		Channels	Active Power	Apparent Power	Power Factor	Channels	Valid Value	Istantaneous Value	Channels	Valid Value	Instantaneous Value				
CSE7759B	1000:1	1	√	-	-	1	√	-	1	√	-	UART	-	4.5~5.5	SSOP8
CSE7761	5000:1	2	√	√	√	1	√	√	2	√	√	UART/SPI	Earth Leakage Detect	3.0~3.6 4.5~5.5	SSOP16 SOP8

