晶华微
精芯铸精华

股票名称：晶华微
股票代码：688130

晶华微产品选型表

SDIC Product Selection Table

杭州晶华微电子股份有限公司

-工控及仪表芯片-

HART调制解调器芯片 | HART Modem IC

型号 Part Number	工作电压 Operating Voltage	工作电流@3.3V Operating Current	时钟频率 Clock Frequency	兼容 Compatible	封装 Package
SD2015A	3.0~5.5V	150μA (晶振时钟) (晶振时钟 with crystal oscillator)	460.8kHz	A5191HRT/HT2015	PLCC28
SD2017B	2.7~5.5V	150μA (晶振时钟 with crystal oscillator)	3.6864MHz	A5191HRT/HT2015/SD2015	LQFP32
SD2057	2.7~5.5V	97μA (外灌时钟 with External clock input)	3.6864MHz	AD5700	QFN24
SD2085	2.7~3.6V	97μA (外灌时钟 with External clock input)	3.6864MHz	DS8500	QFN20

4-20mA DAC芯片 | 4-20mA DAC IC

型号 Part Number	工作电压 Operating Voltage	工作电流@5V Operating Current	分辨率 Resolution	积分非线性(INL) Integral Nonlinearity (INL)	兼容 Compatible	封装 Package
SD24A421-CET	3.0~5.0V	520μA (max)	16bits	±0.01%FS (max)	AD421	SOP16L
SD2421G	3.0~5.0V	520μA (max)	16bits	±0.01%FS (max)	AD421	SOP16L

信号调理及变送芯片 | Signal Processing and Transducing IC

型号 Part Number	工作电压 Operating Voltage	工作电流 Operating Current	MTP/OTP (Bytes)	SRAM (Bytes)	PADC ENOB	TADC ENOB	DAC	通信接口 Communication Port	JTAG	封装 Package
SD23P202	2.4~3.6V	1.2mA	16k OTP	512	17.8bits@4sps Gain = 128	/	/	UART, PWM	-	QFN40
SD25F201	2.7~5.5V	2.0mA	16k Flash	4k	20.4bits@10sps Gain = 128	22.1bits@10sps Gain = 1	分辨率 (Resolution): 16bits INL: 0.01% FSR	UART, I^2C, SPI, OWI	√	QFN32 LQFP32
SD25F101	2.7~5.5V	2.0mA	16k Flash	4k	20.4bits@10sps Gain = 128	22.1bits@10sps Gain = 1	分辨率 (Resolution): 16bits INL: 0.01% FSR	UART, OWI	√	QFN20

计量仪表及万用表的SoC | Digital Multimeter SoC

型号 Part Number	自动/手动 Auto or Manual	Counts	LCD	电压 Voltage	电流 Current	电阻 Resistor	二/三极管 Diode/Transistor	电容 Capacitor	频率 Frequency	占空比 Duty Cycle	温度 Temperature	NCV	电感 Inductor	功率 Power	峰值保持/浪涌测量 Peak Hold/Inrush Current	封装 Package
SD7830M	手动Manual	2000	4x12	√	√	√	√	-	-	-	√	√	-	-	-	裸片DIE
SD7208		2000	4x12	√	√	√	√	√	√	-	√	√	-	-	-	裸片DIE
SD7830A	自动Auto	2000	4x12	√	√	√	√	-	-	-	√	√	-	-	-	裸片DIE
SD7835		4000	4x12	√	√	√	√	√	√	-	√	√	-	-	-	裸片DIE
SD7821		4000	4x18	√	√	√	√	√	√	√	√	√	-	-	-	裸片DIE
SD7890		6000	4x18	√	√	√	√	√	√	-	√	√	-	-	-	裸片DIE
SD7500		4000	4x18	√	√	√	√	√	√	-	√	√	-	-	-	LQFP44
SD7501		6000	4x18	√	√	√	√	√	√	√	√	√	-	-	-	LQFP64
SD7502		9999	4x18	√	√	√	√	√	√	√	√	√	-	-	√	LQFP64
SD78P952		9999	4x42	√	√	√	√	√	√	√	√	√	√	-	√	DIE/LQFP48/LQFP64/LQFP100
SD78P953		9999	4x42	√	√	√	√	√	√	√	√	√	√	√	√	LQFP100

8051 MCU内置高精度ADC | 8051 MCU with High Precision ADC

型号	电压	电流	ROM	SRAM	主频	ADC ENOB	ADC 输入通道	I/O	显示	触摸按键	外设(Peripherals)										封装
Part Number	Voltage	Current	(Bytes)	(Bytes)	Main Clock		ADC Channels		Display	Touch Keys	定时器 Timer	OP	DAC	PWM	PFD	BUZ	RTC	INTERFACE	BIA	Voice	Package
SD82P153-CER	2.0~3.6V	2.2mA	16K OTP	256	2MHz	19.5bits@8sps Gain = 100	4	10	LED 7*6点阵(Pixels)	1	T0、T2	-	√	-	√	-	-	-	-	-	SOP16
SD82P153-IJR	2.0~3.6V	2.2mA	16K OTP	256	2MHz	19.5bits@8sps Gain = 100	8	22	LED 10*9点阵(Pixels)	4	T0、T2	-	√	-	√	-	-	UART	-	-	QFN32
SD82P253-CER	2.0~3.6V	2.2mA	16K OTP	256	2MHz	19.1bits@8sps Gain = 100	6	10	/	3	T0、T2	-	√	-	√	-	-	UART	-	-	SOP16
SD82P253-IJR	2.0~3.6V	2.2mA	16K OTP	256	2MHz	19.1bits@8sps Gain = 100	9	26	LCD 20SEG*4COM	5	T0、T2	-	√	-	√	-	-	UART	-	-	QFN32
SD82F255-CER*	2.0~5.5V	2.2mA	16K Flash	256	4MHz	19.6bits@8sps Gain = 128	3	10	LCD 5SEG*4COM/ LED 7*6点阵(Pixels)	/	T0、T2	√	√	√	√	-	√	UART	-	-	SOP16
SD82F255-IJR*	2.0~5.5V	2.2mA	16K Flash	256	4MHz	19.6bits@8sps Gain = 128	8	26	LCD 20SEG*4COM/ LED 10*9点阵(Pixels)	5	T0、T2	√	√	√	√	-	√	UART	-	-	QFN32
SD82F352-IJR*	2.4~5.5V	2.5mA	32K Flash	1K	16MHz	19.9bits@8sps Gain = 128	9	25	LCD 20SEG*4COM/ LED 8*7点阵(Pixels)	6	T0、T1、T2、T3	√	√	√	√	√	√	UART	√	-	QFN32
SD82F352-IMR	2.4~5.5V	2.5mA	32K Flash	1K	16MHz	19.9bits@8sps Gain = 128	9	41	LCD 36SEG*4COM/ LED 8*7点阵(Pixels)	10	T0、T1、T2、T3	√	√	√	√	√	√	UART, I^2C, SPI	√	-	QFN48
SD82F354-IMR	2.4~5.5V	2.5mA	32K Flash	1K	16MHz	19.9bits@8sps Gain = 128	13	41	LCD 36SEG*4COM/ LED 8*7点阵(Pixels)	10	T0、T1、T2、T3	√	√	√	√	√	√	UART, I^2C, SPI	√	-	QFN48
SD82F465-IMR	2.2~5.5V	3mA	128K Flash	8K	32MHz	19.3bits@15sps Gain = 8	14	40	LCD 30SEG*4COM	/	T0、T2、T3	√	√	√	√	√	√	UARTx2, I^2C, SPI	-	-	QFN48
SD82F465-JBS	2.2~5.5V	3mA	128K Flash	8K	32MHz	19.3bits@15sps Gain = 8	16	56	LCD 46SEG*4COM	/	T0、T2、T3	√	√	√	√	√	√	UARTx2, I^2C, SPI	-	-	LQFP64
SD82F466-JBS	2.2~5.5V	3mA	128K Flash	8K	32MHz	19.3bits@15sps Gain = 8	16	56	LCD 46SEG*4COM	/	T0、T2、T3	√	√	√	√	√	√	UARTx2, I^2C, SPI	√	-	LQFP64
SD82F466-JSS	2.2~5.5V	3mA	128K Flash	8K	32MHz	19.3bits@15sps Gain = 8	16	58	LCD 46SEG*4COM	/	T0、T2、T3	√	√	√	√	√	√	UARTx2, I^2C, SPI	√	-	LQFP80
SD82F479-IJR*	2.0~5.5V	3mA	128K +256K Flash	4K	32MHz	19.9bits@8sps Gain = 128	7	23	/	/	T0、T2、T3	√	√	√	√	√	√	UARTx2, I^2C, SPI	-	√	QFN32
SD82F479-IMR*	2.0~5.5V	3mA	128K +256K Flash	4K	32MHz	19.9bits@8sps Gain = 128	7	38	LCD 32SEG*4COM	/	T0、T1、T2	√	√	√	√	√	√	UARTx2, I^2C, SPI	-	√	QFN48
SD82F479-JBS*	2.0~5.5V	3mA	128K +256K Flash	4K	32MHz	19.9bits@8sps Gain = 128	8	54	LCD 48SEG*4COM	/	T0、T1、T2	√	√	√	√	√	√	UARTx2, I^2C, SPI	-	√	LQFP64

8位RISC MCU内置高精度ADC | 8bit RISC MCU with High Precision ADC

型号	电压	电流	OTP	SRAM	ADC ENOB	ADC输入通道	I/O	显示	外设(Peripherals)							封装
Part Number	Voltage	Current	(Bytes)	(Bytes)		ADC Channels		Display	定时器 Timer	DAC	PWM	PFD	BUZ	RTC	INTERFACE	Package
SD8000T	2.4~3.6V	850μA	8K	256	18.3bits@8sps Gain = 100	3	22	LCD 14SEG*4COM	T0	-	-	-	√	-	-	裸片DIE
SD8000U	2.4~3.6V	1mA	8K	256	18.6bits@8sps Gain = 100	3	22	LCD 14SEG*4COM	T0	-	-	-	√	-	-	裸片DIE
SD8020	2.4~3.6V	1mA	8K	256	18.5bits@8sps Gain = 100	3	25	LCD 17SEG*4COM	T0	-	-	-	√	-	UART	裸片DIE
SD8000S	2.4~3.6V	650μA	16K	256	18.3bits@8sps Gain = 100	3	24	LCD 14SEG*4COM	T0、T2	-	-	√	√	√	-	裸片DIE
SD8000V	2.4~3.6V	1.1mA	16K	256	19.2bits@8sps Gain = 100	3	26	LCD 18SEG*4COM	T0、T2	-	-	√	√	√	UART	裸片DIE
SD8000W	2.4~3.6V	1.1mA	16K	256	19.5bits@8sps Gain = 100	3	29	LCD 20SEG*4COM	T0、T2	-	-	√	√	√	UART	裸片DIE
SD8005B	2.4~3.6V	1.5mA	16K	512	18.8bits@8sps Gain = 100	5	36	LCD 24SEG*4COM	T0、T1、T2	-	√	√	√	√	I^2C, UART, SPI	裸片DIE
SD8016B	2.4~3.6V	1.5mA	16K	512	18.7bits@8sps Gain = 128	8	53	LCD 40SEG*4COM	T0、T1、T2	√	√	√	√	√	UART	裸片DIE
SD8107	2.4~3.6V	850μA	8K	256	18.3bits@8sps Gain = 100	3	9	/	T0	-	-	-	√	-	-	SOP16
SD8113	2.4~3.6V	850μA	8K	256	18.3bits@8sps Gain = 100	3	22	LCD 14SEG*4COM	T0	-	-	-	√	-	-	QFN32
SD8114	2.4~3.6V	1mA	8K	256	18.5bits@8sps Gain = 100	3	25	LCD 17SEG*4COM	T0	-	-	-	√	-	UART	QFN32
SD8302	2.4~3.6V	1.1mA	16K	256	19.5bits@8sps Gain = 100	3	17	LCD 10SEG*4COM	T0、T2	-	-	√	√	√	UART	SSOP24
SD8115	2.4~3.6V	1.1mA	16K	256	19.2bits@8sps Gain = 100	3	24	LCD 16SEG*4COM	T0、T2	-	-	√	√	√	UART	QFN32
SD8305	2.4~3.6V	1.1mA	16K	256	19.2bits@8sps Gain = 100	3	29	LCD 20SEG*4COM	T0、T2	-	-	√	√	√	UART	QFN40
SD8708	2.4~3.6V	1.5mA	16K	512	18.8bits@8sps Gain = 100	3	23	LCD 16SEG*4COM	T0、T1、T2	-	√	√	√	-	I^2C, UART, SPI	QFN32
SD8709	2.4~3.6V	1.5mA	16K	512	18.8bits@8sps Gain = 100	5	36	LCD 24SEG*4COM	T0、T1、T2	-	√	√	√	√	I^2C, UART, SPI	QFN48
SD80P202 -IJR	2.4~5.5V	1mA	24K	256	18.5bits@8sps Gain = 100	3	25	LCD 17SEG*4COM LED 8x7点阵	T0、T2	-	√	√	√	√	UART	QFN32

8位RISC MCU内置高精度ADC | 8bit RISC MCU with High Precision ADC

型号 Part Number	电压 Voltage	电流 Current	OTP (Bytes)	SRAM (Bytes)	ADC ENOB	ADC输入通道 ADC Channels	I/O	显示 Display	外设(Peripherals) 定时器 Timer	DAC	PWM	PFD	BUZ	RTC	INTERFACE	封装 Package
SD80P202-D	2.4~5.5V	1mA	24K	256	18.5bits@8sps Gain = 100	3	26	LCD 18SEG*4COM LED 8x7点阵	T0、T2	-	√	√	√	√	UART	裸片DIE
SD8108X	2.4~3.6V	850μA	16K	256	18.3bits@8sps Gain = 100	3	10	LED 8x7点阵(Pixels)	T0	-	-	-	-	-	-	SOP16
SD8303X	2.4~3.6V	850μA	16K	256	18.3bits@8sps Gain = 100	3	14	LED 9x8点阵(Pixels)	T0	-	√	-	√	-	UART	SSOP20

32位MCU内置高精度ADC | 32 bits MCU with High Precision ADC

型号 Part Number	电压 Voltage	电流 Current	Flash (Bytes)	SRAM (Bytes)	主频 Main Clock	ADC ENOB	SAR ADC	ADC输入通道 ADC Channels	I/O	LCD	外设(Peripherals) 定时器 Timer	OP	DAC	PWM	PFD	BUZ	RTC	INTERFACE	封装 Package
SD93F302-CET	2.4~5.5V	2mA	64K	2K	24MHz	19.7bits@8sps Gain = 128	/	11	11	/	T0、T1、T2	√	√	√	√	-	√	UART, I²C, SPI	SOP16
SD93F302-EPT	2.4~5.5V	2mA	64K	2K	24MHz	19.7bits@8sps Gain = 128	/	13	15	/	T0、T1、T2	√	√	√	√	-	√	UART, I²C, SPI	SSOP20
SD93F302-IPR	2.4~5.5V	2mA	64K	2K	24MHz	19.7bits@8sps Gain = 128	/	13	15	/	T0、T1、T2	√	√	√	√	-	√	UART, I²C, SPI	QFN20
SD93F115B-JBS	2.4~5.5V	3.5mA	120K	8K	24MHz	18bits@8sps Gain = 256	10bit	8	50	33SEG*4COM	T0、T1、T2	√	√	√	√	√	√	UART, I²C, SPI	LQFP64
SD93F115B-IFS	2.4~5.5V	3.5mA	120K	8K	24MHz	18bits@8sps Gain = 256	10bit	8	67	44SEG*4COM	T0、T1、T2	√	√	√	√	√	√	UARTx2, I²C, SPI	QFN88
SD93F115B-JQS	2.4~5.5V	3.5mA	120K	8K	24MHz	18bits@8sps Gain = 256	10bit	8	67	44SEG*4COM	T0、T1、T2	√	√	√	√	√	√	UARTx2, I²C, SPI	LQFP100

8051 MCU内置触控按键控制 | 8051 MCU with Touch Key MCU

型号	工作电压	Flash	SRAM	MCU	主频	SAR ADC	显示	外设(Peripherals)						应用领域	封装
Part Number	Operating Voltage	(Bytes)	(Bytes)		Main Clock		Display	触摸按键/Tonch Keys	I/O	定时器/Timer	DAC	PWM	Peripherals	Application Area	Package
SD81F233-CET	2.4~5.5V	32k	2k	8051	16MHz	12bits×1	LED 42点阵(Pixels)	14	14	T0、T1、T2、T3	√	√	RTC, I²C, SPI, UARTx2	家电 Home Applicant	SOP16
SD81F233-CPT	2.4~5.5V	32k	2k	8051	16MHz	12bits×1	LED 56点阵(Pixels)	18	18	T0、T1、T2、T3	√	√	RTC, I²C, SPI, UARTx2		SOP20
SD81F233-CIT	2.4~5.5V	32k	2k	8051	16MHz	12bits×1	LCD 22SEG*4COM/18SEG*8COM LED 56点阵(Pixels)	26	26	T0、T1、T2、T3	√	√	RTC, I²C, SPI, UARTx2		SOP28

ADC/AFE

型号 Part Number	工作电压 Operating Voltage	ADC采样速率 ADC Sampling Rate	可选增益 Selectable Gain	SAR ADC	ADC输入通道 ADC Channels	显示 Display	外设 Peripherals	应用领域 Application Area	封装 Package
SD6500	2.4~3.6V	512kHz	1、4、8、16、32、64、128、256	19.3bits@8sps Gain = 128	4	/	DAC,OP	高精度电子秤、血压计等 High-precision electronic scale, Blood pressure monitor etc	MSOP10
SD6505	2.4~3.6V	512kHz	1、4、8、16、32、64、128、256	19.3bits@8sps Gain = 128	8	LED 8x7点阵 (Pixels)	DAC,OPx2,BIA	四电极交流脂肪秤 Four electrodes AC body fat scale	SSOP24

数字温度传感器芯片 | Digital Temperature Sensor IC

型号 Part Number	工作电压 Operating Voltage	工作电流 Operating Current	休眠电流 Sleeping Current	温度测量范围 Temperature Measurement Range	典型误差@3.0V Typical Error @3.0V	兼容 Compatible	封装 Package
SD5020A	2.7~5.5V	170μA	<1μA	-55~+125°C	±0.8°C@-10~+85°C ±1.5°C@-55~+125°C	DS18B20	TO-92
SD5003A/B	2.7~5.5V	170μA	<1μA	-55~+125°C	±1.5°C@-40~+100°C ±2.0°C@-55~+125°C	TMP03	TO-92/SOP8
SD5075	2.7~5.5V	170μA	<1μA	-55~+125°C	±0.5°C@-40~+100°C ±1.0°C@-55~+125°C	ADT75,LM75A,TMP75	SOP8
SD5820A	2.7~5.5V	170μA	<1μA	-55~+125°C	±0.5°C@-10~+85°C ±0.8°C@-55~+125°C	DS18B20	TO-92

运算放大器 | Operational Amplifier

型号	特征	通道	电源	轨至轨输入/输出	失调电压	温漂	输入偏置电流	功耗	公模抑制比	大信号电压增益	电源纹波抑制比	压摆率	增益带宽积	建立时间	电压噪声	封装
Part Number	Features	Channel	Power Supply	Rail-to-Rail I/O	VOS Max@25°C	TC of Typ (uV/°C)	IB Typ	IQ/Amp Typ	CMRR Typ	Avo	PSRR	Slew Rate Typ	GBP (KHz)	ts(μS)	enpp(μVpp) f=0.1Hz~10Hz	Package
SDA8101	低温漂、高精度运放	1	1.8~5.5V	√	15uV	0.035	20pA	23uA	135dB	120dB	125dB	0.09V/us	220	100	1.2	SOT23-5/SC70-5
SDA8102		2	1.8~5.5	√	15uV	0.035	20pA	46uA	135dB	120dB	125dB	0.09V/us	220	100	1.2	SOP8/MSOP8
SDA8104		4	1.8~5.5	√	15uV	0.035	20pA	69uA	135dB	120dB	125dB	0.09V/us	220	100	1.2	SOP14/TSSOP14
SDA358	高压运放	2	3.0~36	√	3000uV	5	450pA	230uA	120dB	115dB	130dB	1V/us	1400	4	5	SOP8/MSOP8
SDA8301	低失调电压、低温漂、低功耗通用运放	1	1.8~5.5	√	2uV	1	/	70uA	100dB	/	100dB	1.5V/us	1000	/	4	SOT23-5
SDA8302		2	1.8~5.5	√	2uV	1	/	140uA	100dB	/	100dB	1.5V/us	1000	/	4	MSOP8/SOIC8
SDA8304		4	1.8~5.5	√	2uV	1	/	280uA	100dB	/	100dB	1.5V/us	1000	/	4	SOIC14/TSSOP4

低压差线性稳压器(LDO) | Low Dropout Linear Regulator

型号	特征	最大输出电压	输出电流	最小输出电压	跌落电压	无负载电流	电源纹波抑制比	输出电压	封装
Part Number	Features	Vin Max	Output Current	Vin min	Dropout Voltage	Groud current (No Load)	PSRR@1KHz	VOUT	Package
SDA6004	高输入耐压、输出电压可调、输出电压监控	40V	150mA	4V	0.56V	8uA	50dB	3.3V/5.0V/Adjustable	SOT23-5/SOT23-6/SOT23-3/SOT89-3

BMS-电池保护芯片|Battery Protection Chip

型号 Part Number	类型 Type	电池节数 Number of batteries	一级硬件保护 Primary hardware protection	温度保护 Temperatrue protection	内置ADC特性 Internal ADC characteristics	LDO输出特性 LDO Output Characteristics	通信接口 Communication interface	CELL电压保护精度 Voltage protection accuracy	温度保护精度 Temperature protection accuracy	封装 Package
SDM91117	AFE	10~17	过压、欠压、放电过流、放电短路、充电过流、温度	支持4个温度点，3+4（GPIO复用）共7路NTC	1路14-bit SAR ADC：电压/温度检测；1路16-bit Sigma-Delta ADC 电流检测&库仑计	2路可配置 1.8V/3.3V/5V	I²C	25℃：±6mV -40~85℃：±15mV	≤±3℃ @103AT B=3435	LQFP48
SDM91110		6~10	过压、欠压、放电过流、放电短路、充电过流、温度	支持4个温度点，3+1（GPIO复用）共4路NTC	1路14-bit SAR ADC：电压/温度检测；1路16-bit Sigma-Delta ADC 电流检测&库仑计	1路可配置 1.8V/3.3V/5V	I²C	25℃：±6mV -40~85℃：±15mV	≤±3℃ @103AT B=3435	LQFP32
SDM9017		3~7	过压	-	-	1路3.3V	-	±30mV	-	TSSOP20
SDM9025		5	过压、欠压、温度	支持4个温度点	-	1路可选3.3V/5V	I²C	±25mV	±3℃	SOP16
SDM9027		5~7	过压、欠压、温度	支持4个温度点	-	1路可选3.3V/5V	I²C	±25mV	±3℃	TSSOP20
SDM9028		5~8	过压、欠压、温度	支持4个温度点	-	1路可选3.3V/5V	I²C	±25mV	±3℃	TSSOP20
SDM91217		7~17	过压、欠压、温度、放电过流、放电短路、充电过流	支持4个温度点	1路14-bit SAR ADC：电压检测和温度检测；1路16-bit Sigma-Delta ADC 电流检测&库仑计	1路可配置 3.3V/5V	I²C	25℃：±5mV -40~85℃：±10mV	TS1~TS4引脚电压：±5mV@NTC=100K B=3950	LQFP48
SDM5110	库伦计	-	短路	-	16-bit Sigma-Delta CADC	-	I²C	-10mV to +10mV：50uV -100mV to +100mV :1%	-	MSOP10

型号 Part Number	类型 Type	电池节数 Number of batteries	过充电保护 Over voltage protection	过充电滞后电压 Overcharged and delayed voltage	过充电检测延时 Overcharge detection delay	功耗 Power consumption	输出方式 Output method	输出逻辑 Output logic	级联 Series connection	封装 Package
SDM6224	次级保护	2~4	3.60V~4.80V	0.10V~0.40V	1S,2S,4S,6S	<5uA	CMOS输出	动态“H”、动态“L”	√	MSOP8
SDM6225		3~5	3.60V~4.80V	0.10V~0.40V	1S,2S,4S,6S	<5uA	CMOS输出	动态“H”、动态“L”	√	MSOP8
SDM6227		5~7	3.60V~4.80V	0.10V~0.40V	1S,2S,4S,6S	<5uA	CMOS输出	动态“H”、动态“L”	√	MSOP10

BMS-电池保护芯片|Battery Protection Chip

型号 Part Number	类型 Type	电池节数 Number of batteries	过充电保护 Over voltage protection	过放电保护 Under voltage protection	放电过流保护 Discharging over current	充电过流保护 Charging over current	温度保护 Temperature protection	断线保护 Disconnection protection	0V电池充电 0V battery charging	封装 Package
SDM6011	一次保护	1	4.490V~4.615V	2.10V~2.60V	√	√	-	-	√	DFN-6L
SDM6115		3~5	3.65V~4.25V	2.00V~2.70V	√	√	√	√	√	SOP16/SSOP16

型号 Part Number	类型 Type	电池节数 Number of batteries	过充电保护 Over voltage protection	过放电保护 Under voltage protection	温度保护 Temperature protection	功耗 Power consump-tion	断线保护 Disconnection protection	输出逻辑 Output logic	级联 Series connection	封装 Package
SDM6215	次级保护	3~5	3.50V~4.50V	2.00V~3.00V	√	＜5uA	√	常态"L"、动态"Hi-Z"	√	MSOP10
SDM6218		5~8	4.15V~4.40V	2.00V~3.00V	√	5uA Typ.	√	CHG常态"L"、动态"Hi-Z" DSG常态"H"、动态"L"	√	SOP16

血压计/血糖仪SoC芯片 | Blood Pressure Monitor / Blood Glucose Meter SoC

型号 Part Number	Flash (Bytes)	SRAM (Bytes)	MCU	主频 Main Clock	ADC ENOB	阻抗测量 Impedance Measurement	语音 Voice	I/O	显示 Display	通信接口 Communication Port	外设 Peripherals	应用领域 Application Area	封装 Package
SD82P465-JBS	128K	8K	8051	32MHz	19.3bits@15sps Gain = 8	N	/	40	LCD 46SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWM/PFDx3, OPx4, DACx2	血压计 Blood Pressure Monitor 血糖仪 HCT Blood Glucose Meter	LQFP64
SD82P465-IMR	128K	8K	8051	32MHz	19.3bits@15sps Gain = 8	N	/	56	LCD 30SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWM/PFDx3, OPx4, DACx2		QFN48
SD82P466-JBS	128K	8K	8051	32MHz	19.3bits@15sps Gain = 8	Y	/	56	LCD 46SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWM/PFDx3, OPx4, DACx2	HCT血糖仪 HCT Blood Glucose Meter	LQFP64
SD82P466-JSS	128K	8K	8051	32MHz	19.3bits@15sps Gain = 8	Y	/	58	LCD 46SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWM/PFDx3, OPx4, DACx2		LQFP80
SD82F479-IJR*	128K+256K	4K	8051	32MHz	19.9bits@8sps Gain = 128	N	85S 语音 @6kHz ADPCM	23	/	UARTx2, I²C, SPI	RTC, BUZ, PWMx2, PFD, OP, DAC	血压计 Blood Pressure Monitor	QFN32
SD82F479-IMR*	128K+256K	4K	8051	32MHz	19.9bits@8sps Gain = 128	N	85S 语音 @6kHz ADPCM	38	LCD 32SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWMx2, PFD, OP, DAC		QFN48
SD82F479-JBS*	128K+256K	4K	8051	32MHz	19.9bits@8sps Gain = 128	N	85S 语音 @6kHz ADPCM	54	LCD 48SEG*4COM	UARTx2, I²C, SPI	RTC, BUZ, PWMx2, PFD, OP, DAC		LQFP64

红外感应(PIR)芯片 | Pyroelectric Infrared Sensing Controller IC

型号 Part Number	工作电压 Operating Voltage	工作电流 Operating Current	OTP	SRAM	ADC ENOB	ADC输入通道 ADC Channels	外设 Peripherals	应用领域 Application Area	封装 Package
SD4101	2.4~3.6V	500μA	4K Bytes	256 Bytes	20.6bits@250sps Gain = 1	4	PWM	PIR	SOP8
SD10A410	2.0~5.5V	12μA	/	/	14.8bits@15.6sps Gain = 1	3	内置温度测量， VDD电压测量	数字PIR传感器	裸片DIE/晶圆 WAFER
SD10A411*	2.0~5.5V	10μA	/	/	14.8bits@15.6sps Gain = 1	1	/	数字PIR传感器	裸片DIE/晶圆 WAFER

液位变送器仪表方案 | Liquid Transmitter Instrument

型号 Scheme No.	传感器类型 Sensor Type	变送输出与通信 Transmission and Communication	显示 Display	主推应用 Application	封装 Package	DEMO型号 DEMO No.	配套工具 Tools
SD93F302D	磁阻条液位传感器 干簧管液位传感器	4-20mA+HART	LCD	4-20mA液位变送器模块	SSOP20 QFN20	M1527(F302D-HART)	1. 手操器 2. HARTMode
				4-20mA+HART液位变送器模块			
				4-20mA+LCD显示液位变送器表头		M1520(F302D-HART-LCD)	
				4-20mA+HART+LCD显示液位变送器表头			

压力变送器仪表方案 | Pressure Transmitter Instrument

型号 Scheme No.	传感器类型 Sensor Type	变送输出与通信 Transmission and Communication	显示 Display	主推应用 Application	封装 Package	DEMO型号 DEMO No.	配套工具 Tools
SD25F101	扩散硅、单晶硅、应变、陶瓷等	4-20mA/0-10V/0-5V RS485	/	赫斯曼压力变送器板卡	QFN20	M1523(F101P420)	1. 手操器 2. EasyHART 3. 自动化温补与标定系统 4. HARTMode
						M1524(F101P005)	
						M1525(F101P010-OP)	
						M1526(F101P010)	
SD25F201H		4-20mA/0-10V/0-5V HART	LCD	4-20mA+HART压力变送器模块	QFN32	M1529(F202P-HART)	
SD25F201P				4-20mA+LCD显示压力变送器表头		M1535(F201P-LCD-HART)	
				4-20mA+HART+LCD显示压力变送器表头			
SD93F302P		4-20mA	LED	4-20mA压力变送板--廉价版	SSOP20 QFN20	M1539(F302P420)	手操器
				4-20mA压力变送器2088 LED表头		M1540(F302P420-LED)	
SD8709P1		/	LCD	电池供电数显压力表	QFN40	M1538(SD8709P1)	V8串口调试工具+软件

数显仪表方案 | Digital Display Instrument

型号 Scheme No.	方案名称 Scenario Name	供电 Power Supply	采样率 Sample Rate	通道 Channel	增益 Gain	ENOB	交流带宽 AC Bandwidth	功能 Function	封装 Package	其他 Others	DEMO型号 DEMO No.	工具支持 Tools
SD81F233-CET	表头ADC芯片	2.4~3.6V/1.2mA	1.05MHz	3 | 5	1、4、8、16	19.5bits @60sps Gain = 1	40-400Hz	PWM/IO	SSOP24	1,4-20mA 2,0-5V 3,AC0-200mV	SD3101F1_DEMO	/

型号 Scheme No.	方案名称 Scenario Name	供电 Power Supply	采样率 Sample Rate	分辨率 Resolution	测量类型 Type of Measurement	通信方式 Communication Mode	交流带宽 AC Bandwidth	校准 Calibration	封装 Package	DEMO型号 DEMO No.	工具支持 Tools
SD81F233-CET	万用表前端	2.4~3.6V	3次/秒	6000 count	交直流电压 交直流电流 电阻 电容 二极管 通断 频率	UART	40-400Hz	支持重复 校准	LQFP64	/	PC端组态软件

型号 Scheme No.	方案名称 Scenario Name	显示 Display	信号 Signal	位数 Number	按键 Button	编程菜单 Programming Menu	通信 Communication	报警 Alarms	变送 Teansmitter	开关量 Switching Value	工作电压 Operating Voltage	封装 Package	DEMO型号 DEMO No.	工具支持 Tools
SD3302F1	单相通信表	LED	交流/直流	5	4	√	Modbus_RTU	2	0	0	2.4~3.6V	LQFP32	M1606-SD3302F1_DEMO	PC端组态软件
SD3501F1	多功能数显表								1	6		LQFP64	/	/

型号 Scheme No.	方案名称 Scheme Name	显示 Display	信号 Signal	位数 Bit	按键 Keypad	编程菜单 Programming menu	通信 Communication	报警 Alarms	工作电压 Operating Voltage	封装 Package	DEMO型号 DEMO No.	工具支持 Tools
SD3102T4	LED环路表	LED	DC 4-20mA	4位	2	√	-	2	2.4~3.6V	SSOP28	M1603-SD3102T4_DEMO	/
SD23P202T4	LCD环路表	LCD	DC 4-20mA	4/5位	3	√	√	2	2.4~3.6V	QFN40	M1607-SD23P202T4_DEMO	PC端组态软件

数显仪表方案 | Digital Display Instrument

型号 Scheme No.	方案名称 Scheme Name	显示 Display	信号 Signal	位数 Bit	按键 Keypad	编程菜单 Programming menu	工作电压 Operating Voltage	封装 Package	DEMO型号 DEMO No.	工具支持 Tools
SD3102F1	LCD数显表头	LCD	交流/直流	4/5位	4	√	2.4~3.6V	SSOP28	SD3102F1_DEMO	M1707-USB2ANY 离线菜单编程器
SD3102F2	LED数显表头	LED	交流/直流	4/5位	4	√	2.4~3.6V	SSOP28	M1602-SD3102F2_DEMO	
SD3102F3	老化用电流表	LED	交流/直流	4/5位	4	√	2.4~3.6V	SSOP28	M1602-SD3102F2_DEMO	
SD8307F1	低成本LED表头	LED	直流	4位	0	-	2.4~3.6V	SSOP28	SD8307F1_DEMO	/
SD8114F1	多显示表头	LED	直流	4位*2	0	-	2.4~3.6V	QFN32	M1609-SD8114F1_DEMO	/

体脂秤专用芯片 | Body Fat Scale SoC

型号 Part Number	电压 Voltage	电流 Current	MCU	ROM (Bytes)	SRAM (Bytes)	ADC ENOB	I/O	显示 Display	外设/Peripherals 定时器/Timer	OP	DAC	PWM	PFD	BUZ	RTC	正弦波输出/SO	INTERFACE	测脂方式 Fat Measurement Method	封装 Package
SD82F352-IMR	2.4~5.5V	2.5mA	8051	32K Flash	1K	19.9bits@8sps Gain = 128	41	LCD 36SEG*4COM LED 8*7点阵(Pixels)	T0、T1、T2、T3	√	√	√	√	√	√	√	UART,I²C ,SPI	交流四电极 Four AC Electrodes 心率测量 Heart Rate Measurement	QFN48
SD82F352-IJR	2.4~5.5V	2.5mA	8051	32K Flash	1K	19.9bits@8sps Gain = 128	25	LCD 20SEG*4COM LED 8*7点阵(Pixels)	T0、T1、T2、T3	√	√	√	√	√	√	√	UART,I²C ,SPI		QFN32
SD82F354-IMR	2.4~5.5V	2.5mA	8051	32K Flash	1K	19.9bits@8sps Gain = 128	41	LCD 36SEG*4COM LED 8*7点阵(Pixels)	T0、T1、T2、T3	√	√	√	√	√	√	√	UART,I²C ,SPI	交流八电极 Eight AC Electrodes 心率测量 Heart Rate Measurement	QFN48
SD8017B	2.4~3.6V	1.5mA	8bits RISC	16K OTP	512	18.7bits@8sps Gain = 128	37	LCD 24SEG*4COM	T0、T1、T2	√	√	√	√	√	√	√	UART,PWM	交流四电极 Four AC Electrodes	裸片DIE
SD8018B	2.4~3.6V	1.5mA	8bits RISC	16K OTP	512	18.7bits@8sps Gain = 128	53	LCD 40SEG*4COM	T0、T1、T2	√	√	√	√	√	√	√	UART		裸片DIE
SD8318	2.4~3.6V	1.5mA	8bits RISC	16K OTP	512	18.7bits@8sps Gain = 128	40	LCD 27SEG*4COM	T0、T1、T2	√	√	√	√	√	√	√	UART		LQFP48
SD8518S	2.4~3.6V	1.5mA	8bits RISC	16K OTP	512	18.7bits@8sps Gain = 128	53	LCD 40SEG*4COM	T0、T1、T2	√	√	√	√	√	√	√	UART		LQFP64
SD6505	2.4~3.6V	1.6mA	/	/	/	19.3bits@8sps Gain = 128	/	LED 8*7点阵(Pixels)	/	√	√	-	-	-	-	√	二线制通信		SSOP24

温度变送器仪表方案 | Temperature Transmitter Instrument

型号 Scheme No.	传感器类型 Sensor Type	变送输出与通信 Transmission and Communication	显示 Display	主推应用 Application	封装 Package	DEMO型号 DEMO No.	配套工具 Tools
SD23M01T	热电阻：PT100/PT1000/Cu50 热电偶：K/E/B/-J/T/R/N 热敏电阻：NTC 其他：电阻、mV	4-20mA/0-10V/0-5V RS485	/	赫斯曼压力变送器板卡	QFN32	M1511(M101T010)	1. 手操器 2. EasyHART 3. 自动标定工装
						M1512(M101T420)	
				一体式温度变送器模块		M1513(M101T005)	
						M1518(M101T420-I)	V9/V10串口调试线+软件
SD93F302T		4-20mA	LED LCD	4-20mA一体式温度变送器模块	SSOP20 QFN20	M1521(F302T420)	1. V8/V9串口调试线+软件 2. 安卓端APP 3. 自动标定工装
				4-20mA温度变送器2088 LED表头		M1528(F302T420-LED)	
				4-20mA温度变送器2088 LCD表头			
SD25F101		4-20mA/0-10V/0-5V RS485	/	赫斯曼压力变送器板卡	QFN20	M1531(F101T420)	1. 手操器 2. EasyHART 3. 自动标定工装
						M1532(F101T005)	
				一体式温度变送器模块		M1533(F101T010-OP)	
						M1534(F101T420-I)	1. 手操器 2. EasyHART 3. 自动标定工装 4. HARTMode
SD25F201H		4-20mA/0-10V/0-5V HART	/	4-20mA+HART温度变送器模块	QFN32	M1530(F203T-HART)	
SD25F201T			LCD	4-20mA+LCD显示温度变送器表头		M1536(F201T-LCD-HART)	
				4-20mA+HART+LCD显示温度变送器表头			

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