2014 年夏季产品简介

2014 SUMMER PRODUCT SHORT FORM

圣邦微电子
SGMICRO

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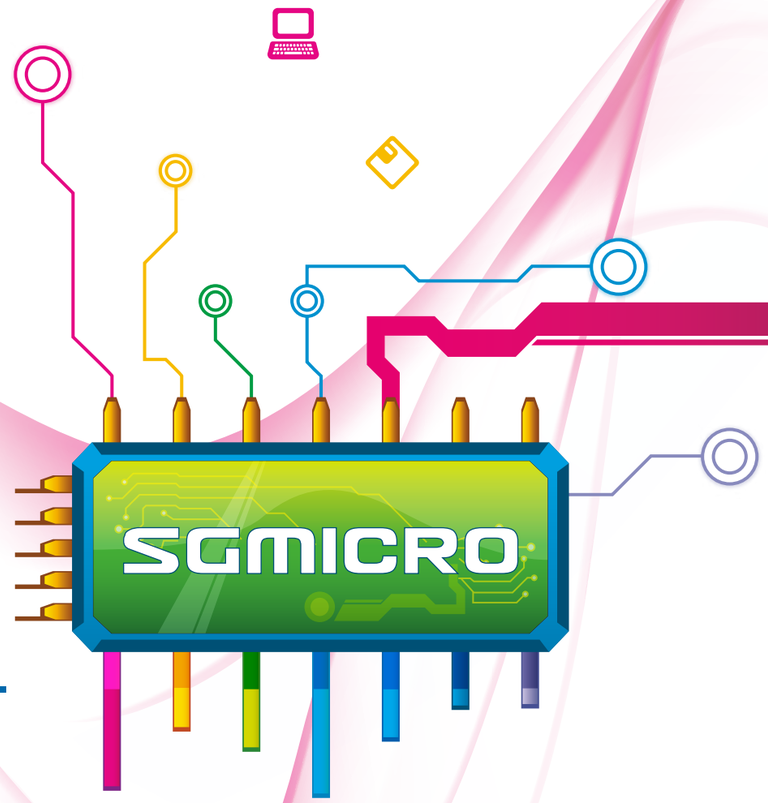

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圣邦微电子

Operational Amplifier 运算放大器
Audio Amplifier 音频放大器
Video Amplifier 视频放大器
V/A Cross-point Switch 音视频交叉开关
Analog Switch 模拟开关
High Performance LDO 高性能低压差线性稳压器
Li^+/poly Battery Charger 聚合物锂离子电池充电器
DC/DC Converter DC/DC电源变换器
WLED Backlight and Flash Light Driver 白光LED背光及闪光灯驱动
Microprocessor Supervisory Circuit 微处理器监控电路
Small Logic Series 小逻辑系列

World Class Consistency and Reliability

世界一流的一致性和可靠性

SGMICRO OVERVIEW

SG Micro Corp (SGMICRO) specializes in high performance, high quality analog IC design, marketing and sales. SGMICRO's products have been widely used in cell phone, television, DVD player, digital camera, notebook computer, consumer electronics, automobile electronics, industrial automation, medical device, LCD display, etc.

SGMICRO's experienced analog IC design team is the key to company's success. The multinational design team consists of analog IC design experts with 20+ years of experience in IC design, layout, process, assembly, test and quality control. Some of the team members have had many years of working experience in the best-known leading analog IC companies in the industry. SGMICRO's design expertise and continuous investments in R&D assure the performance and quality of its products match or exceed those of the world's top analog IC suppliers.

Benefited from years of heavy investments in R&D and superior design expertise and capabilities, SGMICRO has introduced more than 500 analog IC products (all lead-free/RoHS and Green compliant) with high performance, high quality and excellent reliability, including 1.5GHz high-speed OPA, 500MHz low-noise OPA, high precision OPA, 300nA ultra-low power comparator, 50MHz low-noise OPA, 150mA low-power/low-noise LDO, 0.4Ω analog switch, microprocessor supervisory circuits, video buffers, white LED drivers, high-efficiency DC/DC converters, Li-ion battery chargers, etc. SGMICRO is planning to introduce many more high performance IC products for portable devices, communications and consumer electronics to the market in 2014.

Through strict adherence to and stringent execution of its advanced, reliable, and continuously improving QA system and policy, SGMICRO assures each chip it produced of excellent quality and reliability.

SGMICRO pursues the leading position in analog IC industry with advanced design, superior performance and excellent quality.

圣邦微电子简介

圣邦微电子(SG Micro Corp)是一家专注于高性能、高品质模拟集成电路研发和销售的半导体公司。圣邦微电子产品性能优良、品质卓越，可广泛应用于手机、电视、DVD、数码相机、笔记本电脑、其它消费电子产品以及汽车电子、工业自动控制、医疗仪器、液晶显示等众多领域。

圣邦微电子技术团队有来自国际同行业的资深专家组成，在模拟IC领域具备20年以上经验，拥有先进的集成电路设计、工艺、生产、测试技术和质量管理经验；圣邦微电子产品的性能和质量等同国际市场一流厂商的同类产品，部分产品更胜一筹。

圣邦微电子历来重视研发投入。充足的资金实力和雄厚的技术实力使得圣邦微电子自主研发并成功面市的产品迅速增加，目前已达14大类600余款，全部符合欧盟RoHS标准以及绿色环保标准，例如有1.5GHz高速运算放大器、500MHz低噪声运算放大器、高精度运算放大器、300nA超低功耗比较器、50MHz低噪声运算放大器、150mA低功耗低噪声低压差LDO、0.4Ω模拟开关、电源监测电路、视频滤波器、白光LED驱动、高效率DC/DC转换器芯片、锂电池充电管理芯片等。2014年还将继续重锤推出新品。

圣邦微电子建立了先进的品质保证体系，秉承技术先进、质量可靠、持续改进的品质管理方针，圣邦微电子将严格质量管理规范，确保每一片产品均具备完美品质。

圣邦愿以领先的设计、优异的性能、卓越的品质，百尺竿头更进一步，成为模拟IC产业的领跑者。

用“芯”连接模拟世界

Bridge Real World with Analog Chips

PRODUCT LIST
产品列表

High Quality, High Performance Analog IC
高品质、高性能模拟集成电路

Nano Power Operational Amplifiers
微功耗运算放大器

Device	CH	SHDN	Vcc (V)	GBP (kHz)	SR (V/ms)	Voltage Noise Vn, P-P 0.1Hz ~ 10Hz (μV_{PP})	Vos (mV)	Drift (μV/°C)	Ib (pA)	Iq/CH (nA)	Package
SGM8041	1	N	1.4 ~ 5.5	14.5	3.3	3.4	2.5	2.5	1	710	SOT-23-5,SOIC-8,MSOP-8
SGM8042	2	N	1.4 ~ 5.5	14.5	4.2	3.2	2.5	2.5	1	670	SOIC-8,MSOP-8
SGM8044	4	N	1.4 ~ 5.5	15	3.4	3.2	2.5	2.5	1	670	SOIC-14,TSSOP-14
SGM8045	1	N	1.4 ~ 5.5	100	16	3.2	2.5	2.5	1	710	SOT-23-5,SOIC-8,MSOP-8
SGM8046	2	N	1.4 ~ 5.5	100	14.5	3	2.5	2.5	1	670	SOIC-8,MSOP-8
SGM8048	4	N	1.4 ~ 5.5	100	14.5	3.5	2.5	2.5	1	690	SOIC-14,TSSOP-14
SGM8141	1	N	1.4 ~ 5.5	5	1.5	4.9	2.5	2.0	1	380	SOT-23-5,SOIC-8,MSOP-8
SGM8142	2	N	1.4 ~ 5.5	5	1.6	4	2.5	2.0	1	350	SOIC-8,MSOP-8

Micro Power Operational Amplifiers
低功耗运算放大器

Device	CH	SHDN	Vcc (V)	GBP (MHz)	SR (V/μs)	Vn (nV/√Hz) @1kHz	Vos (mV)	Ib (pA)	Iq/CH (μA)	Package
SGM321	1	N	2.1 ~ 5.5	1	0.52	27	5	10	60	SC70-5,SOT-23-5
SGM358	2	N	2.1 ~ 5.5	1	0.52	27	5	10	60	SOIC-8,MSOP-8,DIP-8
SGM324	4	N	2.1 ~ 5.5	1	0.52	27	5	10	60	SOIC-14,TSSOP-14
SGM8271	1	N	4.5~36/±2.25~±18	1.4	5	45	3	20	144	SOT-23-5,SOIC-8,MSOP-8
SGM8272	2	N	4.5~36/±2.25~±18	1.4	5	45	3	20	144	SOIC-8,MSOP-8
SGM8274	4	N	4.5~36/±2.25~±18	1.4	5	45	3	20	144	SOIC-14,TSSOP-14
SGM8521	1	N	2.1 ~ 5.5	0.15	0.05	85	3.5	0.5	5.5	SOT-23-5,SOIC-8
SGM8522	2	N	2.1 ~ 5.5	0.15	0.05	85	3.5	0.5	5.5	SOIC-8,MSOP-8
SGM8524	4	N	2.1 ~ 5.5	0.15	0.05	85	3.5	0.5	5.5	SOIC-14,TSSOP-14
SGM8531	1	N	2.1 ~ 5.5	0.5	0.2	33	3.5	0.5	18	SOT-23-5,SOIC-8
SGM8532	2	N	2.1 ~ 5.5	0.5	0.2	33	3.5	0.5	18	SOIC-8,MSOP-8
SGM8534	4	N	2.1 ~ 5.5	0.5	0.2	33	3.5	0.5	18	SOIC-14,TSSOP-14
SGM8535	1	N	1.8 ~ 5.5	1.5	0.8	30	3.4	3	80	SOT-23-5,SC70-5,SOIC-8,MSOP-8
SGM8536	2	N	1.8 ~ 5.5	1.5	0.8	30	3.4	3	80	SOIC-8,MSOP-8
SGM8537	1	Y	1.8 ~ 5.5	1.5	0.8	30	3.4	3	80	SOT-23-6,SOIC-8,MSOP-8
SGM8538	4	N	1.8 ~ 5.5	1.5	0.8	30	3.4	3	80	SOIC-14,TSSOP-14
SGM8541	1	N	2.1 ~ 5.5	1.1	0.52	27	3.5	0.5	46	SOT-23-5,SOIC-8,SC70-5
SGM8542	2	N	2.1 ~ 5.5	1.1	0.52	27	3.5	0.5	46	SOIC-8,MSOP-8
SGM8543	1	Y	2.1 ~ 5.5	1.1	0.52	27	3.5	0.5	48	SOT-23-6,SOIC-8
SGM8544	4	N	2.1 ~ 5.5	1.1	0.52	27	3.5	0.5	46	SOIC-14,TSSOP-14
SGM8545	1	N	2.1 ~ 5.5	1.1	0.52	27	3.5	0.5	48	SOT-23-5

Application-Specific Operational Amplifiers
专用运算放大器

Device	CH	SHDN	Vcc (V)	GBP (MHz)	SR (V/μs)	Vos (mV)	Drift (μV/°C)	Iq/CH (μA)	Transient Peak Output Current (mA)	Setting Time (μs)	Feature	Package
SGM8422	2	N	4.5~30/±2.25~±15	2.4	2	5.9		660			Vcom Buffer	SOIC-8,MSOP-8
SGM8424	4	N	4.5~30/±2.25~±15	2.4	2	5.9		660			Vcom Buffer	SOIC-14,TSSOP-14
SGM8425	1	N	4.5~30/±2.25~±15	9	14	6.5	4.9	1600	336	0.34	Vcom Buffer	SOT-23-5,SOIC-8,MSOP-8
SGM8426	2	N	4.5~30/±2.25~±15	9	14	6.5	4.9	1600	336	0.34	Vcom Buffer	SOIC-8,MSOP-8
SGM8428	4	N	4.5~30/±2.25~±15	9	14	6.5	4.9	1600	336	0.34	Vcom Buffer	SOIC-14,TSSOP-14
SGM8941	1	N	1.8 ~ 5.5	1.5	0.8	0.9	3	120			Crossover Distortion Free	SOT-23-5,SOIC-8
SGM8942	2	N	1.8 ~ 5.5	1.5	0.8	0.9	3	120			Crossover Distortion Free	SOIC-8,MSOP-8
SGM8600	2	N	2.5 ~ 5.5	10	8.5	4	2.1	970			Offset Positive	TDFN-2×2-8L,SOIC-8

High Precision Operational Amplifiers
高精度运算放大器

Device	CH	SHDN	Vcc (V)	GBP (MHz)	SR (V/μs)	Voltage Noise Density Vn @1kHz (nV/√Hz)	Voltage Noise Vn, P-P 0.1Hz ~ 10Hz (μV_{PP})	Vos (mV)	Drift (μV/°C)	Ib (pA)	Iq/CH (μA)	Package
SGM8551	1	N	2.5 ~ 5.5	1.53	0.9	47.5	0.8	0.02	0.02	10	930	SOT-23-5,SOIC-8,MSOP-8
SGM8552	2	N	2.5 ~ 5.5	1.53	0.9	47.5	0.8	0.02	0.02	10	465	SOIC-8,MSOP-8
SGM8554	4	N	2.5 ~ 5.5	1.5	1.0	63	1.6	0.02	0.07	10	465	SOIC-14,TSSOP-14
SGM8581	1	N	2.5 ~ 5.5	1.45	0.75	47.5	0.85	0.1	0.1	15	445	SOT-23-5,SOIC-8,MSOP-8
SGM8582	2	N	2.5 ~ 5.5	1.5	0.9	49	0.8	0.1	0.1	15	430	SOIC-8,MSOP-8
SGM8584	4	N	2.5 ~ 5.5	1.5	0.9	78	1.4	0.1	0.15	60	430	SOIC-14,TSSOP-14
SGM8922A	2	N	3.0 ~ 5.5	12.7	6.8	6		0.9	1.6		3000	SOIC-8,MSOP-8,TSSOP-8
SGM8924A	2	Y	3.0 ~ 5.5	8.9	5.1	6		1.0	1.5		5500	MSOP-10
SGM8931	1	N	1.8 ~ 5.5	1.5	0.8	30		0.9	1.5	3	80	SOT-23-5,SC70-5,SOIC-8,MSOP-8
SGM8932	2	N	1.8 ~ 5.5	1.5	0.8	30		0.9	1.5	3	80	SOIC-8,MSOP-8
SGM8933	1	Y	1.8 ~ 5.5	1.5	0.8	30		0.9	1.5	3	80	SOT-23-6,SOIC-8,MSOP-8
SGM8934	4	N	1.8 ~ 5.5	1.5	0.8	30		0.9	1.5	3	80	SOIC-14,TSSOP-14
SGM8291	1	N	4.5~36/±2.25~±18	1.4	5	45		1.5	3	20	144	SOT-23-5,SOIC-8,MSOP-8
SGM8292	2	N	4.5~36/±2.25~±18	1.4	5	45		1.5	3	20	144	SOIC-8,MSOP-8
SGM8294	4	N	4.5~36/±2.25~±18	1.4	5	45		1.5	3	20	144	SOIC-14,TSSOP-14
SGM8951	1	N	1.8 ~ 5.5	0.11	0.045	115	3.5	0.8			26	SOT-23-5,SOIC-8
SGM8952	2	N	1.8 ~ 5.5	0.11	0.045	115	3.5	0.8			17	SOIC-8,MSOP-8
SGM8925	1	N	1.6 ~ 5.5	0.11	0.04	105		0.6	2.5	1	6.4	SOT-23-5,SC70-5,SOIC-8,MSOP-8
SGM8926	2	N	1.6 ~ 5.5	0.11	0.04	105		0.9	2.5	1	6.4	SOIC-8,MSOP-8
SGM8927	1	Y	1.6 ~ 5.5	0.11	0.04	105		0.6	2.5	1	6.4	SOT-23-6,SOIC-8,MSOP-8

High Quality, High Performance Analog IC

高品质、高性能模拟集成电路

High Speed Operational Amplifiers

高速运算放大器

Device	CH	SHDN	Vcc (V)	BW @-3dB (MHz)	GBP (MHz)	SR (V/μs)	Vn (nV/√Hz) @1MHz	Vos (mV)	Ib (pA)	Iq/CH (mA)	Package
SGM8051	1	N	2.5 ~ 5.5	250		130	8.1	8	6	2.3	SOT-23-5,SOIC-8
SGM8052	2	N	2.5 ~ 5.5	250		130	8.1	8	6	2.3	SOIC-8,MSOP-8
SGM8053	1	Y	2.5 ~ 5.5	250		130	8.1	8	6	2.3	SOT-23-6,SOIC-8
SGM8054	4	N	2.5 ~ 5.5	250		130	8.1	8	6	2.3	SOIC-14,TSSOP-14
SGM8055	2	Y	2.5 ~ 5.5	250		130	8.1	8	6	2.3	MSOP-10
SGM8061	1	N	2.5 ~ 5.5	500		420	5.6	8	6	8.2	SOT-23-5,SOIC-8
SGM8062	2	N	2.5 ~ 5.5	500		420	5.6	8	6	8.2	SOIC-8
SGM8063	1	Y	2.5 ~ 5.5	500		420	5.6	8	6	8.2	SOT-23-6,SOIC-8
SGM8067	1	Y	2.5 ~ 5.5		1500	500	4	8	6	16	SOIC-8
SGM8091	1	N	2.5 ~ 5.5	350		265	5.9	8	6	4.3	SOT-23-5,SOIC-8
SGM8092	2	N	2.5 ~ 5.5	350		265	5.9	8	6	4.3	SOIC-8,MSOP-8
SGM8093	1	Y	2.5 ~ 5.5	350		265	5.9	8	6	4.3	SOT-23-6,SOIC-8
SGM8094	4	N	2.5 ~ 5.5	350		265	5.9	8	6	4.3	SOIC-14,TSSOP-14
SGM8301	1	N	4.5~12/±2.25~±6	110	57	140		18		7.5	SOT-23-5,SOIC-8,MSOP-8
SGM8302	2	N	4.5~12/±2.25~±6	110	57	140		18		7.5	SOIC-8,MSOP-8
SGM8304	4	N	4.5~12/±2.25~±6	110	57	140		18		7.5	SOIC-14,TSSOP-14

Low Noise Operational Amplifiers

低噪声运算放大器

Device	CH	SHDN	Vcc (V)	GBP (MHz)	SR (V/μs)	Vn (nV/√Hz) @1kHz	Vos (mV)	Ib (pA)	Iq/CH (μA)	Package
SGM721	1	N	2.5 ~ 5.5	10	8.5	8	4	1	970	SOT-23-5,SOIC-8,SC70-5
SGM722	2	N	2.5 ~ 5.5	10	8.5	8	4	1	970	SOIC-8,MSOP-8
SGM723	1	Y	2.5 ~ 5.5	10	8.5	8	4	1	970	SOT-23-6,SOIC-8
SGM724	4	N	2.5 ~ 5.5	10	8.5	8	4	1	970	SOIC-14,TSSOP-14
SGM8621	1	N	2.5 ~ 5.5	3	1.7	12	3	1	250	SOT-23-5,SOIC-8,SC70-5
SGM8622	2	N	2.5 ~ 5.5	3	1.7	12	3	1	250	SOIC-8,MSOP-8
SGM8623	1	Y	2.5 ~ 5.5	3	1.7	12	3	1	250	SOT-23-6,SOIC-8
SGM8624	4	N	2.5 ~ 5.5	3	1.7	12	3	1	250	SOIC-14,TSSOP-14
SGM8631	1	N	2.5 ~ 5.5	6	3.7	12	3.5	1	470	SOT-23-5,SOIC-8,SC70-5
SGM8632	2	N	2.5 ~ 5.5	6	3.7	12	3.5	1	470	MSOP-8,SOIC-8
SGM8633	1	Y	2.5 ~ 5.5	6	3.7	12	3.5	1	470	SOT-23-6,SOIC-8
SGM8634	4	N	2.5 ~ 5.5	6	3.7	12	3.5	1	470	SOIC-14,TSSOP-14
SGM8651	1	N	2.5 ~ 5.5	50	66	8.7@1MHz	8	6	2300	SOT-23-5,SOIC-8
SGM8652	2	N	2.5 ~ 5.5	50	66	8.7@1MHz	8	6	2300	SOIC-8,MSOP-8
SGM8653	1	Y	2.5 ~ 5.5	50	66	8.7@1MHz	8	6	2300	SOT-23-6,SOIC-8
SGM8654	4	N	2.5 ~ 5.5	50	66	8.7@1MHz	8	6	2300	SOIC-14,TSSOP-14
SGM8655	2	Y	2.5 ~ 5.5	50	66	8.7@1MHz	8	6	2300	MSOP-10

Nano Power Comparators

微功耗比较器

Device	CH	Latch Enable	Vcc (V)	Vos (mV)	Propagation Delay (High to Low) @Vcc = 5V	Propagation Delay (Low to High) @Vcc = 5V	Iq/CH (nA) @Vcc = 1.4V/5V	Rise/Fall Time @Vcc = 5V	Output Type	Package
SGM8701	1	N	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/60ns	Push/Pull	SOT-23-5,SC70-5
SGM8702	1	N	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/None	Open Drain (PFET)	SOT-23-5,SC70-5
SGM8703	1	Y	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/60ns	Push/Pull	SOT-23-6
SGM8704	1	Y	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/60ns	Push/Pull & Invert	SOIC-8,MSOP-8
SGM8705	2	N	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/60ns	Push/Pull	SOIC-8,MSOP-8
SGM8706	1	Y	1.8 ~ 5.5	3	5.6μs	30μs	2300 @ Vcc = 5V	40ns/30ns	Push/Pull	SOIC-8,SOT-23-8,SOT-23-6
SGM8707	1	N	1.4 ~ 5.5	3	6μs	33μs	300/350	85ns/60ns	Push/Pull	SOT-23-5,SC70-5
SGM8708	1	Y	1.8 ~ 5.5	3	5.6μs	30μs	2300 @ Vcc = 5V	40ns/30ns	Push/Pull & Invert	SOT-23-8,SOIC-8
SGM8709	1	N	1.4 ~ 5.5	3	5μs		318/366	None/36ns	Open Drain (NFET)	SOT-23-5,SC70-5
SGM8710	1	Y	1.8 ~ 5.5	3	5.6μs		2300 @ Vcc = 5V	None/30ns	Open Drain (NFET)	SOT-23-8,SOT-23-6

High Speed Comparators

高速比较器

Device	CH	Vcc (V)	Vos (mV)	Propagation Delay (High to Low) @Vcc = 3V	Propagation Delay (Low to High) @Vcc = 3V	Iq/CH (μA) @Vcc = 3V/5V	Rise Time/Fall Time @Vcc = 5V	Output Type	Package
SGM8740	1	2.7 ~ 5	5	20ns	25ns	155/164	8ns/5ns	Push/Pull	SOT-23-5,SC70-5
SGM8741	1	2.7 ~ 5	5	20ns	25ns	155/164	8ns/5ns	Push/Pull	SOT-23-5,SC70-5
SGM8742	2	2.7 ~ 5	5	20ns	25ns	155/164	8ns/5ns	Push/Pull	SOIC-8,MSOP-8
SGM8743	1	3 ~ 5	5	5ns	6ns	1300/1400	6ns/5ns	Push/Pull	SOT-23-5,SC70-5
SGM8744	1	3 ~ 5	5	5ns	6ns	1300/1400	6ns/5ns	Push/Pull	SOT-23-5,SC70-5
SGM8745	2	3 ~ 5	5	5ns	6ns	1300/1400	6ns/5ns	Push/Pull	SOIC-8,MSOP-8
SGM8746	1	2.7 ~ 5	5	95ns	120ns	22/25	8ns/6ns	Push/Pull	SOT-23-5,SC70-5
SGM8747	1	2.7 ~ 5	5	95ns	120ns	22/25	8ns/6ns	Push/Pull	SOT-23-5,SC70-5
SGM8748	2	2.7 ~ 5	5	95ns	120ns	22/25	8ns/6ns	Push/Pull	SOIC-8,MSOP-8
SGM8749	1	2.7 ~ 5	5	97ns		22/25	None/6ns	Open Drain	SOT-23-5,SC70-5
SGM8750	2	2.7 ~ 5	5	97ns		22/25	None/6ns	Open Drain	SOIC-8,MSOP-8

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Audio Drivers

音频驱动器

Device	CH	Vcc (V)	Differential Input	Output Power at THD ≤ 0.1%, Vcc = 5.0V R_L = 16Ω	R_L = 32Ω	Output Voltage at R = 600Ω, THD ≤ 0.1%, Vcc = 5.0V	SHDN	Package
SGM4809	Stereo	2.5 ~ 5.5	N	158mW/CH	87mW/CH		L	MSOP-8
SGM4810	Stereo	2.5 ~ 5.5	N	158mW/CH	87mW/CH		H	MSOP-8
SGM4812	Stereo	2.7 ~ 5.5	Y	132mW/CH	82mW/CH		H	MSOP-10
SGM4914	Stereo	2.7 ~ 5.5	N		95mW/CH		L	TQFN-4×4-20L
SGM4915	Stereo	2.5 ~ 5.5	N	145mW/CH	85mW/CH		L	TDFN-2×2-8L
SGM4916	Stereo	2.7 ~ 5.5	N		88mW/CH		L	TQFN-3×3-12L
SGM4917	Stereo	2.7 ~ 5.5	Y		80mW/CH		L	TQFN-3×3-16L
SGM4918	Stereo	2.7 ~ 5.2	N		80mW/CH		L	TDFN-3×3-10L
SGM8902	Stereo	3.0 ~ 5.5	Y			3.05Vrms	L	TSSOP-14
SGM8903	Stereo	3.0 ~ 5.5	Y			3.05Vrms	L	TSSOP-14
SGM8904	Stereo	3.0 ~ 5.5	N			3.05Vrms	L	MSOP-10
SGM8905	Stereo	3.0 ~ 5.5	N			3.05Vrms	L	MSOP-10 (Exposed Pad)
SGM89000	Stereo	3.0 ~ 3.6	Y			2.05Vrms @ Vcc = 3.3V	L	TSSOP-14
SGM89111	Stereo	3.0 ~ 5.5	Y			3.05Vrms	L	TSSOP-20
SGM89112	Stereo	3.0 ~ 5.5	N			3.05Vrms	L	TSSOP-16

Audio Power Amplifiers

音频功率放大器

Device	CH	Vcc (V)	Differential Input	Output Power at THD ≤ 1%, R_L = 8Ω Vcc = 3.6V	Vcc = 5.0V	SHDN	Package
SGM4863	Stereo	2.8 ~ 5.5	N	0.7W/CH	1.3W/CH	H	TSSOP-20 (Exposed Pad),TSSOP-16 (Exposed Pad),TQFN-3×3-20L,SOIC-16,DIP-16
SGM4865	Stereo	2.6 ~ 5.5	N	0.7W/CH	1.3W/CH	L	TQFN-4×4-16L
SGM4866	Stereo	2.6 ~ 5.5	N	0.65W/CH	1.28W/CH	L	TQFN-3×3-16L
SGM4871	Mono	2.5 ~ 5.5	N		1.2W	H	SOIC-8,SOIC-8 (Exposed Pad)
SGM4888	Stereo	2.8 ~ 5.5	N	0.7W/CH	1.3W/CH	L	TQFN-4×4-24L
SGM4890	Mono	2.5 ~ 5.5	N	0.58W	1.1W	L	MSOP-8
SGM4891	Mono	2.5 ~ 5.5	N	0.6W	1.2W	L	TDFN-2×2-8L
SGM4895	Mono	2.5 ~ 5.5	Y	0.65W	1.3W	L	TDFN-3×3-8L,MSOP-8 (Exposed Pad)
SGM4992	Stereo	2.5 ~ 5.5	N	0.58W/CH	1.1W/CH	L	TDFN-4×3-14L
SGM4995	Mono	2.5 ~ 5.5	Y	0.65W	1.3W	L	TDFN-2×2-8L
SGM4996	Mono	2.5 ~ 5.5	Y	0.65W	1.3W	L	MSOP-8,MSOP-10,TDFN-3×3-10L

Video Drivers

视频驱动器

Device	SD CH	HD CH	1080p Support	SHDN	Vcc (V)	Internal Gain (dB)	BW@-3dB (MHz)	Rail-to-Rail Output	Filter	Package
SGM9111	1			N	3.0 ~ 5.5	6	8	Y	Y	SOIC-8,SC70-5
SGM9113	1			N	3.0 ~ 5.5	6	8	Y	Y	SOIC-8,SC70-5
SGM9114	1			Y	3.0 ~ 5.5	6	8	Y	Y	SOT-23-6
SGM9116		3		N	3.3 ~ 5.5	6	35	Y	Y	SOIC-8
SGM9117		3	Y	N	2.5 ~ 5.5	6	200	Y	N	SOIC-8
SGM9119	3			N	3.3 ~ 5.5	6	8	Y	Y	SOIC-8,MSOP-8
SGM9121	1			Y	3.0 ~ 5.5	6	8	Y	Y	SC70-6
SGM9122	2			N	3.0 ~ 5.5	6	15	Y	Y	WSOP-8,TSSOP-8
SGM9124	4			N	3.3 ~ 5.5	6	8	Y	Y	MSOP-10
SGM9125	5			N	3.3 ~ 5.5	6	8	Y	Y	TSSOP-14
SGM9126	6			N	3.3 ~ 5.5	6	8	Y	Y	TSSOP-14
SGM9127	4			N	3.3 ~ 5.5	6	8	Y	Y	TSSOP-14
SGM9128YP	1	3		N	3.1 ~ 5.5	6	8.5/46	Y	Y	MSOP-10 (Exposed Pad)
SGM9131		3		N	3.1 ~ 5.5	6	46	Y	Y	SOIC-8
SGM9132		3	Y	N	3.1 ~ 5.5	6	98	Y	Y	SOIC-8 (Exposed Pad)
SGM9133	1	3	Y	Y	3.1 ~ 5.5	6	8.5/46/98	Y	Y	TSSOP-14
SGM9134	1	3		N	3.1 ~ 5.5	6	8.5/46	Y	Y	TSSOP-14
SGM9135	1	3	Y	N	3.1 ~ 5.5	6	8.5/98	Y	Y	MSOP-10 (Exposed Pad)
SGM9136	1	3	Y	Y	3.1 ~ 5.5	6	8.5/46/98	Y	Y	TSSOP-14
SGM9137	1	3		N	3.1 ~ 5.5	6	8.5/46	Y	Y	TSSOP-14
SGM9140	1			Y	2.8 ~ 5.5	6.4/12.4	26	Y	Y	MSOP-8
SGM9141	1			N	4.5 ~ 13.2	6	25	Y	Y	SOIC-8
SGM9146	1	3	Y	N	3.1 ~ 5.5	6	8.5/46/98	Y	Y	TSSOP-14
SGM9147	1			N	3.0 ~ 5.5	6	13	Y	Y	SC70-5
SGM9148	1			Y	3.0 ~ 5.5	6	13	Y	Y	SOT-23-6
SGM9149	3			N	3.3 ~ 5.5	6	13	Y	Y	SOIC-8,MSOP-8
SGM9203		3	Y	Y	3.3 ~ 5.5	6/0	8/18/38/75	Y	Y	TSSOP-14
SGM9346	3	3		N	3.3 ~ 5.5	6	8/35	Y	Y	TSSOP-20
SGM9347	3	3	Y	Y	3.1 ~ 5.5	6	8.5/43/94	Y	Y	TSSOP-20 (Exposed Pad)
SGM9348	3	3	Y	Y	3.1 ~ 5.5	6	8.5/43/94	Y	Y	TSSOP-20 (Exposed Pad)

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Complex Switches

复杂开关

Device	Feature	Vcc (V)	BW@-3dB (MHz)	Interface	Ron (Ω)	Offisolation (dB)	Crosstalk (dB)	Package
SGM4508	16:1, Multiplexer	3.3 ~ 13.2	26	I/O	6	-70	-70	TQFN-5×5-32L,TSSOP-28
SGM4509	Dual 8:1, Multiplexer	3.3 ~ 13.2	55	I/O	6	-70	-70	TQFN-5×5-32L,TSSOP-28
SGM6501	12×9, Buffered	3.1 ~ 5.5	84	I²C			-74	SSOP-28,TSSOP-28
SGM6502	8×6, Buffered	3.1 ~ 5.5	88	I²C			-77	TSSOP-24
SGM6503	SIM I/F Swap	1.8 ~ 5.5	400	I/O		-75	-80	TQFN-3×3-20L
SGM6504	4-2:2, Passive swap	1.8 ~ 5.5	400	I/O	12	-75	-80	TQFN-3×3-20L
SGM6505	6-Channel 2:1	2.0 ~ 5.0	450	I/O	8.5	-57	-55	TSSOP-24,TQFN-4×4-24L
SGM6510	16×4, Passive	2.7 ~ 5.5	120	I²C	30	-110	-110	TSSOP-28,TQFN-4×4-28L
SGM6512	16:1, Multiplexer	3.3 ~ 13.2	70	I/O	24	-90	-70	TQFN-5×5-32L,TSSOP-28
SGM6513	Dual 8:1, Multiplexer	3.3 ~ 13.2	105	I/O	24	-90	-70	TQFN-5×5-32L,TSSOP-28
SGM6514	16×8, Passive	2.7 ~ 5.5	250	I²C	30	-110	-110	LQFP-7×7-32L
SGM6516	16×8, Passive	4.5 ~ 13.2	45	I/O	42	-100	-100	LQFP-10×10-44L,PLCC-44L,DIP-40
SGM6533	3-Channel 3:1	2.5 ~ 5.5	350	I/O	7	-47	-60	TQFN-3×3-20L,TSSOP-20
SGM7232	2-Channel 3:1	2.7 ~ 4.3	380/400	I/O	4/9	-90	-90	UTQFN-2.2×1.4-12L

Logic Level Shifters

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Device	Feature	CH	Vcc (V)	V_L Range (V)	V_{CCA} (V)	V_{CCB} (V)	Bidirectional	Topology	Data Rate (Mbps)	Package
SGM4551	I²C Level Shifter	2			1.2 ~ 3.3	1.8 ~ 5.5	Y	Open-Drain		SOT-23-8,XTDFN-1.4×1-8L
SGM4552	GPIO Level Shifter	1			1.65 ~ 5.5	2.3 ~ 5.5	Y	Open-Drain/Push-Pull	24/2	UTDFN-1.45×1-6L,SOT-23-6,SC70-6
SGM4553	GPIO Level Shifter	2			1.65 ~ 5.5	2.3 ~ 5.5	Y	Open-Drain/Push-Pull	24/2	SOT-23-8,XTDFN-1.4×1-8L
SGM4554	GPIO Level Shifter	1			1.2 ~ 5.0	1.65 ~ 5.5	Y	Push-Pull	100	SC70-6
SGM4555	Card I/F	3	2.7 ~ 5.5	1.4 ~ 5.5						TQFN-2×2-12L,TQFN-3x3-16L
SGM4556	GPIO Level Shifter	2			1.2 ~ 5.0	1.65 ~ 5.5	Y	Push-Pull	100	SOT-23-8
SGM4558	Dual SIM/Smart Card		2.7 ~ 5.5	1.4 ~ 5.5						TQFN-3×3-20L
SGM4560	CA Card I/F	3	3.3 ~ 5.5	1.6 ~ 5.5						TSSOP-14
SGM4561	HDMI I/F	3	5.0 ~ 5.5	1.6 ~ 5.5						MSOP-10

Analog Switches

模拟信号开关

Device	CH	Mode	Vcc (V)	Iq (μA)	R_{ON} (Ω)	BW@-3dB (MHz)	V_{INH} (V) MIN	V_{INL} (V) MAX	t_{ON} (ns)	t_{OFF} (ns)	Package
SGM2258	2	1:2	1.8 ~ 5.5	<1	4.5	300	1.6	0.5	70	20	TQFN-2.1×1.6-10L
SGM2267	2	1:2	1.8 ~ 4.2	<1	0.4	40	1.6	0.5	96	16	TQFN-2.1×1.6-10L
SGM2268	2	1:2	1.8 ~ 4.2	<1	0.4	40	1.6	0.5	88	16	TQFN-1.8×1.4-10L

Analog Switches

模拟信号开关

Device	CH	Mode	Vcc (V)	Iq (μA)	R_{ON} (Ω)	BW@-3dB (MHz)	V_{INH} (V) MIN	V_{INL} (V) MAX	t_{ON} (ns)	t_{OFF} (ns)	Package
SGM3001	1	1:2	1.8 ~ 5.5	<1	2.5	120	2.4	0.8	11	30	SC70-6
SGM3002	2	1:2	1.8 ~ 5.5	<1	2.5	120	2.4	0.8	11	8	MSOP-10
SGM3003	1	1:2	1.8 ~ 5.5	<1	0.5	30	2.4	0.8	21	9	MSOP-8
SGM3005	2	1:2	1.8 ~ 5.5	<1	0.5	15	2.4	0.8	50	15	TDFN-3×3-10L,MSOP-10
SGM3157	1	1:2	1.8 ~ 5.5	<5	4.5	300	1.5	0.6	20	15	SC70-6
SGM3158	2	1:2	1.8 ~ 5.5	<5	4.5	270	1.5	0.6	20	15	TDFN-3×1-12L
SGM3167	1	1:2	1.8 ~ 5.5	<5	9	600	1.5	0.6	20	15	SC70-6
SGM330A	4	1:2	5	<20	12	500	2	0.6	25	13	SOIC-16,TSSOP-16,SSOP-16
SGM331A	4	1:2	5	<20	12	500	2	0.6	25	13	SOIC-16,TSSOP-16,SSOP-16
SGM3699	4	1:2	1.8 ~ 4.2	<1	0.5	70	1.6	0.5	52	25	TQFN-3×3-16L
SGM3700	4	1:2	2.5 ~ 5.5	<15	4	380	1.5	0.5	15	9	TQFN-3×3-16L
SGM3717	2	1:2	2.5 ~ 5.0	<6	4	400	1.5	0.6	15	11	UTQFN-1.8×1.4-10L,MSOP-10
SGM3719	1	1:2	2.5 ~ 5.0	<6	4	400	1.8	0.4	15	11	SOT-23-6
SGM3799	4	1:2	1.8 ~ 4.2	<1	0.5	70	1.6	0.5	52	25	TQFN-2.6×1.8-16L
SGM4157	1	1:2	1.8 ~ 5.5	<3	0.8	80	1.5	0.6	20	23	TDFN-2×2-6L
SGM4157YC	1	1:2	1.8 ~ 5.5	0.1	0.8	90	1.6	0.4	56	32	SC70-6
SGM44599	4	1:2	1.8 ~ 5.5	<1	4	300	1.6	0.5	31.5	30	TQFN-3×3-16L,TQFN-2.5×2.5-16L
SGM44600	4	1:2	1.8 ~ 5.5	<1	4	300	1.6	0.5	29.5	29.5	TQFN-3×3-16L
SGM44601	4	1:2	1.8 ~ 5.5	<1	4	300	1.6	0.5	36	30	TQFN-2.6×1.8-16L
SGM44602	4	1:2	1.8 ~ 5.5	<1	4	300	1.6	0.5	32	26	TQFN-2.6×1.8-16L
SGM44603	4	1:2	1.8 ~ 5.5	<1	4.5	300	1.6	0.5	40	30	TQFN-2.6×1.8-16L
SGM4581	1	1:8	3.6~11/±1.8~±5.5	<20	36	90	2.4	0.8	60	60	SSOP-16,TSSOP-16,SOIC-16,TQFN-3×3-16L
SGM4582	2	1:4	3.6~11/±1.8~±5.5	<20	36	120	2.4	0.8	60	60	SSOP-16,TSSOP-16,SOIC-16,TQFN-3×3-16L
SGM4583	3	1:2	3.6~11/±1.8~±5.5	<20	36	140	2.4	0.8	60	70	SSOP-16,TSSOP-16,SOIC-16,TQFN-3×3-16L
SGM4684	2	1:2	1.8 ~ 5.5	<1	0.4	13	2.4	0.8	25	28	WLCSP-2.0×1.5-10B
SGM4717	2	1:2	1.8 ~ 5.5	<5	4.5	300	1.5	0.6	26	20	WLCSP-2.0×1.5-10B,MSOP-10,TDFN-3×3-10L,TQFN-1.8×1.4-10L
SGM4782	2	1:4	1.8 ~ 4.2	<1	0.5	30	1.6	0.5	20	20	TQFN-3×3-16L,TSSOP-16
SGM5018	4	1:2	1.8 ~ 5.5	<1	4.5	300	1.6	0.5	40	30	TSSOP-16
SGM5223	2	1:2	1.8 ~ 4.2	<1	0.5	55	1.6	0.5	17	27.5	TQFN-1.8×1.4-10L
SGM7222	2	1:2	1.8 ~ 4.3	<1	4.5	550	1.6	0.5	10	22	TQFN-1.8×1.4-10L,MSOP-10,UTQFN-1.8×1.4-10L
SGM7223	2	1:2	1.8 ~ 4.3	<1	4.5	500	1.6	0.5	11	20	TQFN-2.1×1.6-10L
SGM7226	2	1:2	1.8 ~ 5.5	<25	5	550	1.6	0.5	15	20	TQFN-2.6×1.8-16L
SGM7227	2	1:2	1.8 ~ 4.3	<1	5	550	1.6	0.5	15	20	MSOP-10,UTQFN-1.8×1.4-10L
SGM84782	2	1:4	1.8 ~ 4.2	<1	4	150	1.6	0.5	17	9	TQFN-3×3-16L,TSSOP-16

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Load Switches

负载开关

Device	Vcc (V)	Quiescent Current (μA)	Continuous Output Current (mA)	SHDN Current (μA)	Current Limited (mA)	Soft Start	Package
SGM2551A	2.5 ~ 5.5	76	1500	<1	Programmable (100~1700)	Y	TDFN-2×2-6L,SOT-23-5
SGM2553	2.5 ~ 5.5	78	1500	<1	Programmable (100~1700)	Y	TDFN-2×2-6L
SGM2553D	2.5 ~ 5.5	78	1500	<1	Programmable (100~1700)	Y	TDFN-2×2-6L
SGM2554A	2.2 ~ 5.5	19	1100	<1	1850	Y	SOT-23-5
SGM2554B	2.2 ~ 5.5	19	1100		1750	Y	SOT-23-5
SGM2555	2.2 ~ 5.5	19	1100	<1.2	1850	Y	TDFN-2×2-6L
SGM2556	2.2 ~ 5.5	21	1200	<1	1850	Y	TDFN-2×2-6L
SGM2558	2.7 ~ 5.5	30	500/CH	<1	1000	Y	SOIC-8,TDFN-3×3-8L
SGM2560	2.7 ~ 5.5	30	500/CH	<1	1000	Y	SOIC-8,TDFN-3×3-8L
SGM2578	1.0 ~ 5.0	5	1000	<1	1800		WLCSP-0.9×0.9-4B

Low Power, High Voltage LDOs

低功耗，高压稳压器

Device	V_{OUT} (V)	V_{IN} (V)	I_{OUT} (mA)	I_q (μA) (No Load)	Dropout Voltage@I_{OUT} = 1mA (mV)	PSRR@1kHz (dB)	Package
SGM2200	1.5,1.8,2.5,2.8,3.0,3.3,3.6,4.4,5.0,adj	4 ~ 26.4	50	1.75	35	47	SOT-89-3,TSOT-23-5,SOT-23,SC70-5
SGM2201	adj	4 ~ 32	150	6	8	45	TSOT-23-5,TDFN-2×3-8L
SGM2202	1.0,1.1,1.2,1.5,1.8,2.5,2.8,3.0,3.3,3.6,4.2,5.0,adj	4 ~ 32	150	6	8	45	SOT-23-5,SOT-23-6
SGM2203	1.0,1.1,1.2,1.5,1.8,2.5,2.8,3.0,3.3,3.6,4.2,5.0	4 ~ 32	150	6	8	45	SOT-89-3,SOT-23
SGM2300	1.5,1.8,2.5,2.8,3.0,3.3,3.6,5.0,adj	4 ~ 18	50	1.7	35	47	SOT-23-5,SOT-23

High Accuracy, Low Noise, Low Power LDOs

高精度，低噪声，低功耗，低压差线性稳压器

Device	V_{OUT} (V)	V_{IN} (V)	I_{OUT} (mA)	Dropout Voltage (mV)	I_q (μA) (No Load)	Output Voltage Noise (μV_{RMS})	PSRR @1kHz (dB)	Package
SGM2013	1.2,1.5,1.8,2.5,2.6,2.8,2.85,3.0,3.3	2.5 ~ 5.5	300	270	110		52	SO-89-3
SGM2019	1.2,1.5,1.8,2.5,2.6,2.8,2.85,3.0,3.3,adj	2.5 ~ 5.5	300	270	100	30	74	SOT-23-5,SC70-5
SGM2020	1.2,1.5,1.8,2.5,2.8,2.85,3.0,3.3	2.5 ~ 5.5	300	270	110	30	67	SOT-23-5,SC70-5
SGM2021	0.9,1.2,1.3,1.5,1.8,2.1,2.5,2.8,3.0,3.3,…5.0	2.5 ~ 5.5	300	270	120	120	48	SOT-23-3
SGM2028	2.8,3.3,adj	2.5 ~ 5.5	500	270	115	30	73	SOT-23-5
SGM2030	1.2,1.5,1.8,2.5,2.6,2.8,2.85,3.0,3.3	2.5 ~ 5.5	300	270	95	140	71	UTDFN-1.2×1.6-4L
SGM2031	1.2,1.5,1.8,2.5,2.6,2.8,2.85,3.0,3.3	2.5 ~ 5.5	250	230	95	140	72	UTDFN-1×1-4L
SGM2032	0.9,1.3,2.1,2.7,2.9,3.1,3.2,3.6,4.2,5.0,adj	2.5 ~ 5.5	300	270	120	30	75	SOT-23-5,SC70-5
SGM2035C	2.8,3.3,adj	2.5 ~ 5.5	500	250	115	30	73	TDFN-2×2-6L,UTDFN-1.6×1.6-6L
SGM2036	0.8,0.9,1.0,1.05,1.1,1.2,1.3,1.5,1.8, 1.85,2.1,2.2,2.3,2.5,2.6,2.7,2.8,…adj	1.6 ~ 5.5	300	185	20	30	66	UTDFN-1×1-4L,SOT-23-5,SC70-5

Multi-Channel, High Accuracy, Low Noise, Low Power LDOs

多通道，高精度，低噪声，低功耗，低压差线性稳压器

Device	V_{OUT} (V)	V_{IN} (V)	I_{OUT} (mA)	Dropout Voltage (mV)	I_q (μA) (No Load)	Output Voltage Noise (μV_{RMS})	PSRR @1kHz (dB)	Package
SGM2022	2 channels,2.8/1.8,2.8/1.3,2.8/1.2,2.8/1.5,2.8/2.8,1.5/3.3,2.5/1.8,...	2.5 ~ 5.5	250	250	190	120	54	SOT-23-6
SGM2023	4 channels, 1.8/2.8/3.0/3.3	2.5 ~ 5.5	200	220	350	30	70	TQFN-3×3-16L
SGM2024	4 channels, 1.8/2.8/3.0/3.3	2.5 ~ 5.5	200	220	350	30	70	TQFN-3×3-16L
SGM2025	4 channels, 2.8/2.8/2.8/2.8	3.3 ~ 5.5	200	220	340	30	68	TQFN-3×3-16L
SGM2026	4 channels, 2.8/2.8/2.8/2.8	3.3 ~ 5.5	200	220	360	30	68	TQFN-3×3-16L
SGM2027	2 channels,3.0/3.0,1.2/1.8,1.8/3.0,1.5/2.8,1.8/3.3,1.2/2.8,1.8/2.8,2.8/3.3	2.5 ~ 5.5	250	250	190	120	54	TSOT-23-6
SGM2122	2 channels,2.8/1.8,2.8/1.3,2.8/1.2,2.8/1.5,2.8/2.8,1.5/3.3,2.5/1.8,...	2.5 ~ 5.5	250	250	190	120	54	SOT-23-6

OVP ICs

OVP 过压保护器件

Device	Input Overvoltage Protection Threshold (V)	Battery Overvoltage Protection Threshold (V)	Maximum Strat-Up Output Current (mA)	SHDN Iq (μA)	LDO Mode Output Voltage (V)	Package
SGM4062	6.8	4.35	1500	<2	5.1	TDFN-2×2-8L,MSOP-8 (Exposed Pad)
SGM4064	6.8	4.35	adj (max 1500)	<2	5.1	TDFN-2×2-8L
SGM4065	7.1	4.35	1500	<2	5.1	TDFN-2×2-8L
SGM4066	7.1	4.35	adj (max 1500)	<2	5.1	TDFN-2×2-8L

Standalone Linear Li-Ion Battery Chargers

锂电池充电管理

Device	Vcc (V)	High Accuracy	Maximum Programmable Charger Current (mA)	Shutdown Current (μA)	Overvoltage Protection Threshold (V)	Status Indication	Package
SGM4054	4.3 ~ 5.5	±1%	800	25		Y	TSOT-23-5,TDFN-3×3-8L
SGM4055	4.4 ~ 5.5	±1%	800	25		Y	TDFN-2×2-6L,TSOT-23-6
SGM4056	4.5 ~ 26.5	±1%	900	200	6.8	Y	TDFN-3×3-8L,TDFN-2×3-8L,TDFN-2×2-8L,SOIC-8 (Exposed Pad)

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High Quality, High Performance Analog IC

高品质、高性能模拟集成电路

DC/DC Power Management Units

DC/DC电源管理单元

Device	CH	Vcc (V)	Output (V)	Output Current (mA)	Frequency (kHz)	On/Off Pin	Quiescent Current (mA)	Shutdown Iq (μA)	Package
SGM2100	7	1.1 ~ 5.5	adj	2000/800/800/800...	1000	Y	5	1	TQFN-7×7-48L
SGM2101	5	1.1 ~ 5.5	adj	2000/800/800/800...	1000	Y	5	1	TQFN-7×7-48L

DC/DC Synchronous Rectifier Buck Converters

DC/DC同步整流降压转换器

Device	CH	Vcc (V)	Output (V)	Output Current (mA)	Frequency (kHz)	On/Off Pin	Quiescent Current (mA)	Shutdown Iq (μA)	Package
SGM6010	1	3 ~ 5.5	adj	3000	300~2000	Y	0.41	<1	TDFN-3×3-10L
SGM6011	1	2.5 ~ 5.5	1.2/1.8/3.3/adj	2000	1500	Y	0.3	<1	TDFN-3×3-10L
SGM6012	1	2.5 ~ 5.5	1.2/1.8/3.3/adj	600	1600	Y	0.03	<1	TSOT-23-5
SGM6013	1	2.5 ~ 5.5	1.2/1.8/3.3/adj	600	1600	Y	0.03	<1	TSOT-23-5, TDFN-2×2-6L
SGM6014	1	2.5 ~ 5.5	adj	2000	1400	Y	0.055	<1	TDFN-3×3-10L
SGM6016	1	2.7 ~ 5.5	adj	1200	1600	Y	0.03	<1	TDFN-3×3-10L
SGM6019	1	2.7 ~ 5.5	adj	1200	1600	Y	0.03	<1	TDFN-2×3-8L

DC/DC Non-Synchronous Buck Converters

DC/DC非同步降压转换器

Device	CH	Vcc (V)	Output (V)	Output Current (mA)	Frequency (kHz)	On/Off Pin	Quiescent Current (mA)	Shutdown Iq (μA)	Package
SGM6130	1	4.5 ~ 28.5	adj	3000	385	Y	0.8	<15	SOIC-8 (Exposed Pad)
SGM6230	1	4.5 ~ 38	adj	2000	385	Y	0.8	<15	SOIC-8 (Exposed Pad)
SGM6330	1	4.5 ~ 18	adj	3000	385	Y	0.8	<15	SOIC-8 (Exposed Pad)
SGM6132	1	4.5 ~ 28.5	adj	3000	1400	Y	0.8	<15	SOIC-8 (Exposed Pad)
SGM6232	1	4.5 ~ 38	adj	2000	1400	Y	0.8	<15	SOIC-8 (Exposed Pad)
SGM6332	1	4.5 ~ 18	adj	3000	1400	Y	0.8	<15	SOIC-8 (Exposed Pad)

DC/DC Synchronous Rectifier Boost Converters

DC/DC同步整流升压转换器

Device	CH	Vcc (V)	Output (V)	Output Current (mA)	Frequency (kHz)	On/Off Pin	Quiescent Current (mA)	Shutdown Iq (μA)	Package
SGM6603	1	0.9 ~ 5.5	3.3/5.0/adj	600	1200	Y	0.033	<1	SOT-23-6
SGM6605	1	2.7 ~ 5.5	5.0/adj	600	1200	Y	0.03	<1	SOT-23-6
SGM6606	1	2.7 ~ 5.5	adj (3.0 ~ 5.5)	2500	600	Y	0.055	<1	TDFN-3x3-14L
SGM6608	1	2.7 ~ 5.5	adj (3.0 ~ 5.5)	2500	600	Y	0.065	<1	TDFN-3x3-12L
SGM6609	1	2.4 ~ 5.5	adj (3.0 ~ 5.5)	500 ~ 2500	1200	Y	0.065	<1	TDFN-3x3-12L

DC/DC Non-Synchronous Boost Converters

DC/DC非同步升压转换器

Device	CH	Vcc (V)	Output (V)	On/Off Pin	Quiescent Current (mA)	Shutdown Iq (μA)	Package
SGM6601	1	1.8 ~ 5.5	adj (up to 38V)	Y	0.02	<1	TSOT-23-5,TDFN-2×2-6L
SGM6607	1	3 ~ 20	adj (up to 38V)	Y	0.4	<1	TDFN-2×2-6L,TSOT-23-6

Charge Pump DC/DC Converters

电荷泵DC/DC转换器

Device	CH	Vcc (V)	Output (V)	Output Current (mA)	Frequency (kHz)	On/Off Pin	Quiescent Current (μA)	Shutdown Iq (μA)	Package
SGM3110	1	2.7 ~ 5.0	5	100	750	Y	60	<1	SOT-23-6
SGM3200	2	2.7 ~ 5.0	5	500	1700	Y	70	<2	TDFN-3×3-8L
SGM3204	1	1.4 ~ 5.5	$-V_{IN}$	200	950	Y	1500	<1	SOT-23-6
SGM3206	1	1.4 ~ 5.5	$-V_{IN}$	60	47	N	115		SOT-23-5
SGM3207	1	1.4 ~ 5.5	$-V_{IN}$	60	19	N	72		SOT-23-5

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Flash LED Drivers
LED闪光灯驱动器

Device	X1/X1.5/X2	Output Current (mA)	SHDN Iq (μA)	Operation Frequency (MHz)	Package
SGM3140	×1/×2	500	<1	2.2	TDFN-3×3-10L
SGM3140B	×1/×2	500	<1	2.2	TDFN-3×3-10L
SGM3141	×1/×2	700	<1	2.2	TDFN-3×3-10L
SGM3141B	×1/×2	700	<1	2.2	TDFN-3×3-10L
SGM3200	×2	500	<1	1.4	TDFN-3×3-8L
SGM3780		1500	<1	2	TDFN-3×2-14L
SGM3781		1500	<1	2	TDFN-3×2-14L
SGM3785		1500	<1	2	TDFN-3×2-14L

White LED Drivers
白光LED驱动器

Device	LED Connection	CH	X1/X1.5/X2	Iq (μA)	SHDN Iq (μA)	Dimming	Current Matching	Package
SGM3110	Common Anode	1	×2	60	<1	PWM	±4%	SOT-23-6
SGM3122	Common Anode	4	×1/×1.5	100	<1	PWM	<±3%	TQFN-3×3-16L
SGM3123	Common Anode	4	×1	190	1	PWM	<±5%	TQFN-3×3-16L
SGM3124	Common Anode	3	×1/×1.5	100	<1	PWM	<±3%	TQFN-3×3-16L
SGM3127	Common Anode	4	×1	240	<1	PWM	<±5%	SOT-23-6
SGM3128	Common Anode	3	×1	240	1	PWM	<±5%	SOT-23-6
SGM3131	Common Anode	4	×1/×1.5	100	<1	One-Wire	<±3%	TQFN-3×3-16L
SGM3132	Common Anode	4	×1	550	<5	One-Wire	<±3%	TQFN-3×3-16L,TDFN-2×2-8L,MSOP-8
SGM3133	Common Cathode	4	×1/×1.5	300	<10	One-Wire	<±3%	TQFN-3×3-16L
SGM3135	Common Anode	3	×1	190	1	PWM	<±5%	SOT-23-6
SGM3136	Common Anode	3	×1	550	<5	One-Wire	<±3%	SOT-23-6
SGM3138	Common Anode	6	×1/×1.5	210	<1	One-Wire	<±5%	TQFN-3×3-16L
SGM3138B	Common Anode	6	×1/×1.5	155	<2.5 @ V_{IN} = 4.2V	One-Wire	<±4.8%	TQFN-3×3-16L
SGM3139	Common Anode	6	×1	720	<5	One-Wire	<±3%	TQFN-3×3-16L,TDFN-3×3-10L
SGM3139B	Common Anode	6	×1	720	<5	One-Wire	<±3%	TQFN-3×3-16L
SGM3142	Common Cathode	6	×1/×1.5	300	<10	One-Wire	<±4%	TQFN-4×4-16L
SGM3144	Common Anode	6	×1/×1.5	155	<2.5 @ V_{IN} = 4.2V	PWM	<±4.8%	TQFN-3×3-16L
SGM3145	Common Anode	8	×1/×1.5	155	<2.5 @ V_{IN} = 4.2V	PWM	<±4.8%	TQFN-3×3-20L
SGM3146	Common Anode	8	×1/×1.5	155	<2.5 @ V_{IN} = 4.2V	One-Wire	<±4.8%	TQFN-3×3-20L

White LED Drivers
白光LED驱动器

Device	LED Connection	CH	X1/X1.5/X2	Iq (μA)	SHDN Iq (μA)	Dimming	Current Matching	Package
SGM3720	Common Anode			200	<1	PWM		TSOT-23-6
SGM3721	Common Anode			200	<1	PWM		TSOT-23-6
SGM3725	Common Anode			200	<1	One-Wire		TSOT-23-6
SGM3726	Common Anode			400	<1	PWM		TDFN-2×2-6L,TSOT-23-6
SGM3727	Common Anode			45	<1	One-Wire		TDFN-2×2-8L
SGM3729	Common Anode			45	<1	PWM		TDFN-2×2-8L
SGM3732	Common Anode			200	<1	PWM		TSOT-23-6
SGM3733B	Common Anode			400	<1	PWM		TDFN-2×2-6L,TSOT-23-6
SGM3735	Common Anode			200	<1	One-Wire		TDFN-2×2-8L
SGM3736	Common Anode			200	<1	PWM		TDFN-2×2-8L
SGM3738	Common Anode	2		220	<1	PWM/One-Wire		TDFN-3×3-16L
SGM3741	Common Anode	4		240	<1	PWM/PWM		TDFN-3×3-16L

Microprocessor Supervisory Circuits
微处理器监测电路

Device	Manual Reset	Vcc (V)	Supply Current (μA)	Reset Voltage Threshold (V)	Vcc to RESET/ RESET Delay (μs)	Reset Active Timeout Period (ms)	Package
SGM706	Y	1.0 ~ 5.5	50	4.65,4.4,4.0,3.08,2.93,2.63		200	SOIC-8
SGM708	Y	1.0 ~ 5.5	20	4.65,4.4,4.0,3.08,2.93,2.63		200	SOIC-8
SGM800	N	1.6 ~ 5.0	3	2.93,2.63,2.32,1.63	80	Programmable	SOT-23-5
SGM802	N	1.6 ~ 5.0	3	2.93,2.63,2.32,1.63	80	Programmable	SC70-4 (R),SOT-143
SGM803	N	1.0 ~ 5.5	13	4.63,4.38,4.00,3.08,2.93,2.63,2.32,1.63	20	240	SOT-23-3,SOT-23
SGM804	N	1.6 ~ 5.0	3	2.93,2.63,2.32,1.63	80	Programmable	SOT-23-5
SGM809	N	1.0 ~ 5.5	13	4.63,4.38,4.00,3.08,2.93,2.63,2.32,1.63	20	240	SOT-23-3,SOT-23
SGM810	N	1.0 ~ 5.5	13	4.63,4.38,4.00,3.08,2.93,2.63,2.32,1.63	20	240	SOT-23-3,SOT-23
SGM811	Y	1.0 ~ 5.5	13	4.63,4.38,4.00,3.08,2.93,2.63,2.32	20	240	SOT-143,SOT-23-5
SGM812	Y	1.0 ~ 5.5	13	4.63,4.38,4.00,3.08,2.93,2.63,2.32	20	240	SOT-143,SOT-23-5

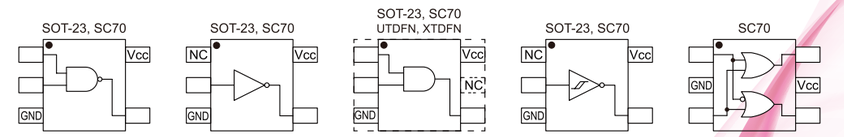
Small Logic Series
小逻辑系列

Device	Description	Package
SGM7SZ00	单2输入与非门 Single 2-Input NAND Gate	SOT-23-5,SC70-5
SGM7SZ04	单反相器 Single Inverter	SOT-23-5,SC70-5
SGM7SZ08	单2输入与门 Single 2-Input AND Gate	XTDFN-1x1-6L,SOT-23-5,SC70-5,UTDFN-1.45x1-6L
SGM7SZ14	单施密特触发反相器 Single Inverter with Schmitt Trigger Input	SOT-23-5,SC70-5
SGM7SZ19	单1对2译码器/多路分离器 Single 1-of-2 Decoder/Demultiplexer	SC70-6
SGM7SZ32	单2输入或门 Single 2-Input OR Gate	SOT-23-5,SC70-5
SGM7SZ86	单异或门 Single 2-Input Exclusive-OR Gate	SOT-23-5,SC70-5
SGM7SZ125	单低有效使能同相三态逻辑缓冲器 Single Active-Low Tri-State Logic Buffer	SOT-23-5,SC70-5
SGM7SZ126	单高有效使能同相三态逻辑缓冲器 Single Active-High Tri-State Logic Buffer	SOT-23-5,SC70-5

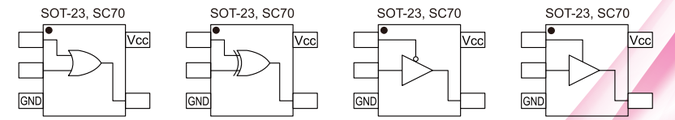
Specifications
主要规格

工作电压范围 Operation Supply Range	1.65 ~ 5.5 (V)
数据可保持电压范围 Data Retention Supply Range	1.5 ~ 5.5 (V)
输入输出电压范围 Iuput/Output Voltage Range	0 ~ 5.5 (V)
输入输出漏电流及静态电流 Input/Output Leakage Current and Quiescent Supply Current	±0.1 (μA)
DC输入低逻辑门限 Low Level Input Threshold	0.25Vcc (V)
DC输入高逻辑门限 High Level Input Threshold	0.75Vcc (V)
输出驱动能力，Vcc=3V Output Driving, at Vcc=3V	±24 (mA)
传输延迟时间（不同产品或电压） Propagation Delay (varied with different devices and supply voltages)	2.3 ~ 10.3 (ns)

Symbols and Pins
符号图及引脚



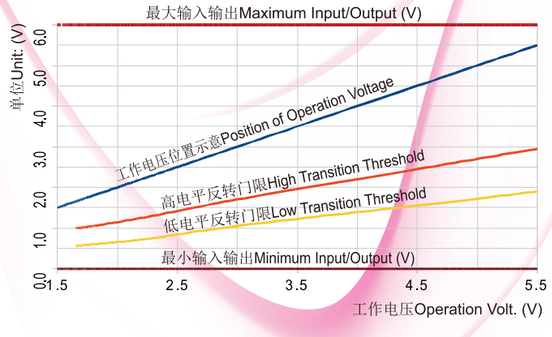
SGM7SZ00	SGM7SZ04	SGM7SZ08	SGM7SZ14	SGM7SZ19



SGM7SZ32	SGM7SZ86	SGM7SZ125	SGM7SZ126

Note: Top views
注：引脚示意为顶视图

DC阈值等参数与工作电压的关系



Except devices with Schmitt trigger on the input, logic state is defined only when input level is above or below threshold; logic state under any other input condition is undefined and not guaranteed. For devices with Schmitt trigger input, logic state is stable at any input level, and is determined by the last effective triggering.

除施密特触发输入外，仅当输入满足门限规定的电压时有明确的逻辑状态；其它状态下的任何特性本组产品不予规定和保证。施密特触发输入的品种在任何输入时都有稳定的输出状态，该状态由最后的有效触发确定。