

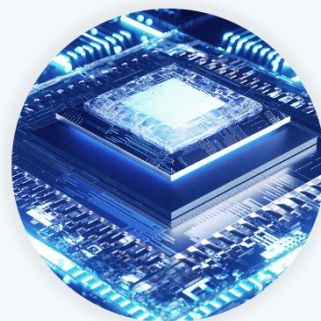
COMPANY AND PRODUCT INTRODUCTION

Focus on high quality analog circuits

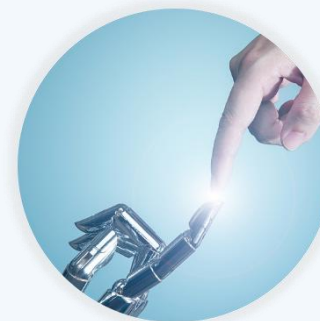
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product
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quality
system

PART ONE



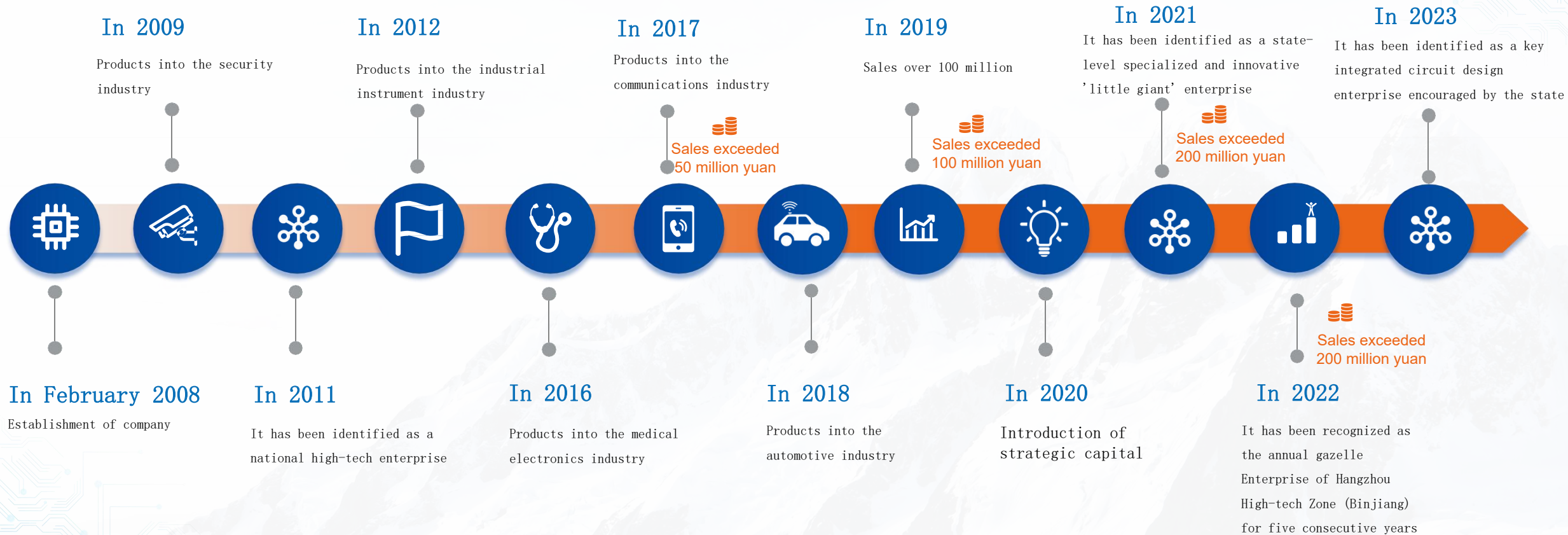
COMPANY PROFILE



Frequency	Percentage
Daily	70%
Weekly	30%

(Accounts for about 60%)





city-level
Enterprise high-tech
Research and
development center



State-level
professional and new
"Little Giant"
enterprise



country
High-tech enterprise



Hangzhou high-tech
zone
(Riverside)
Gazelle enterprise



AspenCore
Chinese IC design
TOP10
Analog chip company



AspenCore
Best year
Adc award





Converter
product



Interface product



Driving product



Special purpose
product



ADC
DAC
TDC

Stringing/unstringing
RS485/422
MLVDS/LVDS

Dc drive
Step drive
Dc brushless drive
High/low side drive

Analog front end
Radio frequency/clock
circuit
MCU/SOC

Industry/Communications/Security



Security camera



Base station,
communication power supply



Industrial control, PLC,
DCS



Industrial
instrumentation



Frequency converter,
servo drive



Spinning machine, flat
machine, hosiery machine



Color selector

Automotive electronics



New energy vehicle main
drive



BMS



lidar



GPS, Beidou navigation



Telematics



Automotive video system



AGV

Medical electronics



IVD was diagnosed in
vitro



Glucometer



CT, MRI molecular imaging



Infusion pump, ventilator

Household appliances/civil consumption



Air conditioning and
washing machine



robot vacuum cleaner



Ultrasonic water meter,
gas meter, heat meter



Telescope



Video conference system



Power tool



Industry/
communication

ZTE中兴

Schneider
Electric

invtr 英威腾

中控·SUPCON

STEP 新时达

HCFB
— 禾川科技 —

MOONS'
moving in better ways

GSK 广州数控
Command the Future

大族激光
HAN'S LASER

Samagawa



Security

uniview 宇视

KEDACOM

天地伟业
Tiandy Tech

Hanwha

TVT 同为股份

XM 雄迈



car

BYD

HYUNDAI

Volkswagen

广汽集团
GAC GROUP

五菱汽车

Longhorn



Medical
treatment

VivaChek
微谱生物

GP 基蛋生物
GeteinBiotech

COMEN

微泰医疗®
WT MICROTECH MEDICAL

ACON

SWS
MEDICAL



Household
appliances/
civil/consumption

Midea

Hisense

ECOVACS

Anker
Innovations

GGEC
GuoGuang Electric Company Ltd.

TCL

PART TWO



PRODUCT INTRODUCTION



01 Linear product

- General AMP
- High Precision AMP
- Instrumentation AMP
- Low Noise AMP
- Low Power Dissipation AMP
- High Speed AMP
- Transimpedance AMP
- Ground Isolation AMP
- Video Driving AMP
- High Precision REF
- Comparator
- LNA
- Rf Power Detection



02 Converter product

- $\Sigma-\Delta$ ADC
- SAR ADC
- PIPELINE ADC
- Isolated ADC
- Audio ADC
- RDC
- General DAC
- High Precision DAC
- High Speed DAC
- Audio DAC
- TDC



03 Interface product

- RS-422&485
- RS-232
- Digital isolator & isolated rs-485
- LVDS
- SER/DES
- M-BUS
- H-BUS
- DVI/HDMI
- Audio interface
- Level conversion circuit
- Switch
- IO-LINK



04 Driving product

- DC Motor Driver
- Stepper Motor Driver
- BLDC Motor Driver
- HIGH/LOW SIDE Motor Driver



05 Special purpose product

- AFE
- BMS
- Clocks and timekeeping
- NFC
- RF transceiver
- MCU & SOC
- HALL



Type	#of Amps	Vs span	Iq/Amp	Vos	Ibias	Ios	GBP	Rail to Rail	PSRR DC	CMRR	Package	Description
MS321	1	2.5V - 36V	0.43mA	3mV	30nA	5nA	1.0MHz	---	100dB	85dB	SOT23-5	High voltage、General AMP
MS358	2	2.5V - 36V	0.43mA	3mV	30nA	5nA	1.0MHz	---	100dB	85dB	SOP8	High voltage、General AMP
MS358A	2	2.5V - 36V	0.43mA	3mV	30nA	5nA	1.0MHz	---	100dB	85dB	SOP8	High voltage、General AMP
MS324	4	2.5V - 36V	0.43mA	3mV	30nA	5nA	1.0MHz	---	100dB	85dB	SOP14	High voltage、General AMP
MS8059/M	2	2.5V - 36V	0.43mA	3mV	30nA	5nA	1.0MHz	---	100dB	85dB	SOP8/ MSOP8	High voltage、General AMP
Δ MS321V	1	2.7V - 5.0V	50 μ A	0.4mV	0.2pA	0.1pA	1.0MHz	IN/OUT	80dB	75dB	SOT23-5	Low voltage、Low Supply Current AMP
MS358V	2	2.7V - 5.0V	50 μ A	0.4mV	0.2pA	0.1pA	1.0MHz	IN/OUT	80dB	75dB	SOP8	Low voltage、Low Supply Current AMP
Δ MS324V	4	2.7V - 5.0V	50 μ A	0.4mV	0.2pA	0.1pA	1.0MHz	IN/OUT	80dB	75dB	TSSOP14	Low voltage、Low Supply Current AMP

Symbol annotation: Product labels in research and development *, unpacked product labels Δ
The following pages are the same

Type	#of Amps	Vs span	Iq/Amp	Vos	Vos TC	GBP	Rail to Rail	PSRR DC	CMRR	Package	Description
MS8551/S	1	2.5V - 5.5V	0.4mA	B: 4 μ V C: 15 μ V	0.04 μ V/°C	1.16MHz	IN/OUT	110dB	110dB	SOP8/ SOT23-5	Rail to rail input/output High Precision AMP
MS8552	2	2.5V - 5.5V	0.4mA	B: 4 μ V C: 15 μ V	0.04 μ V/°C	1.16MHz	IN/OUT	110dB	110dB	SOP8	Rail to rail input/output High Precision AMP
MS8628	1	1.8V - 5.5V	0.85mA	2 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	SOP8	Zero Drift、single power supply、Rail to rail input/output High Precision AMP
MS8629/M/D	2	1.8V - 5.5V	0.85mA	2 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	SOP8/ MSOP8/ DFN8	Zero Drift、single power supply、Rail to rail input/output High Precision AMP
MS8630/T	4	1.8V - 5.5V	0.85mA	2 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	SOP14/TSSOP14	Zero Drift、single power supply、Rail to rail input/output High Precision AMP
MS8601	1	1.8V - 5.5V	0.85mA	4 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	SOT23-5	Precision、CMOS、Rail to rail input/output、 broadband AMP
MS8602	2	1.8V - 5.5V	0.85mA	4 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	MSOP8	Precision、CMOS、Rail to rail input/output、 broadband AMP
Δ MS8604/T	4	1.8V - 5.5V	0.85mA	4 μ V	0.03 μ V/°C	3.8MHz	IN/OUT	130dB	140dB	SOP14/ TSSOP14	Precision、CMOS、Rail to rail input/output、 broadband AMP
MS8212M	2	2.5V - 5.5V	0.4mA	5 μ V	0.056 μ V/°C	1.16MHz	IN/OUT	110dB	110dB	MSOP8	Single power supply、 output Rail to rail high- precision operational AMP

Type	#of Amps	Vs span	Iq/Amp	Vos	Vos TC	GBP	Rail to Rail	PSRR DC	CMRR	Package	Description
OP07/D	1	±3.0V – ±18V	2.6mA	150 μV	0.3 μV/°C	1.3MHz	——	106dB	123dB	SOP8/ DIP8	High Voltage、Low Offset Operational AMP
MS8228	2	±3.0V – ±18V	2.6mA	150 μV	0.3 μV/°C	1.3MHz	——	106dB	123dB	SOP8	Dual channel、low offset operational amplifier
*MS8188/S/M	1	4V–36V	560 μA	5 μV (max)	30nV/C (max)	2MHz	Output Rail to Rail	150dB	150dB	SOP8/ SOT23-5/ MSOP8	High voltage, zero drift operational amplifier/output rail to rail

Type	#of Amps	Vs span	Iq/Amp	Vos	VNoise Density at 1KHz	GBP	SR	Rail to Rail	PSRR DC	CMRR	Package	Description
MS8605	1	2.7V - 5.5V	1.2mA@2.7V	65 μV	8nV/√Hz	10MHz	7V/μs	IN/OUT	95dB	120dB	SOT23-5	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8606/M	2	2.7V - 5.5V	1.2mA@2.7V	65 μV	8nV/√Hz	10MHz	7V/μs	IN/OUT	95dB	120dB	SOP8/MSOP8	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8361S	1	2.7V - 5.5V	1mA@2.7V	65 μV	9.5nV/√Hz	16MHz	13.5V/μs	IN/OUT	85dB	95dB	SOT23-5	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8362/M	2	2.7V - 5.5V	1mA@2.7V	65 μV	9.5nV/√Hz	16MHz	13.5V/μs	IN/OUT	85dB	95dB	SOP8/MSOP8	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8561S	1	2.7V - 5.5V	0.8mA@2.7V	65 μV	11nV/√Hz	4.3MHz	2.6V/μs	IN/OUT	85dB	100dB	SOT23-5	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8562M	2	2.7V - 5.5V	0.8mA@2.7V	65 μV	11nV/√Hz	4.3MHz	2.6V/μs	IN/OUT	85dB	100dB	MSOP8	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8311	1	2.7V - 5.5V	1.2mA@2.7V	65 μV	11.5nV/√Hz	10MHz	7V/μs	IN/OUT	95dB	120dB	SOT23-5	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8312/M	2	2.7V - 5.5V	1.2mA@2.7V	65 μV	11.5nV/√Hz	10MHz	7V/μs	IN/OUT	95dB	120dB	SOP8/MSOP8	Precision、Low Noise、CMOS、Rail to rail input/output AMP
MS8608/T	4	2.7V - 5.5V	0.8mA@2.7V	65 μV	9nV/√Hz	9MHz	8V/μs	IN/OUT	95dB	100dB	SOP14/TSSOP14	Precision、Low Noise、CMOS、Rail to rail input/output AMP

Type	#of Amps	Vs span	Iq/Amp	Vos	GBP	SR	Rail to Rail	PSRR DC	CMRR	Package	Description
MS8613	1	1.8V - 5.0V	40 μA	0.4mV	1.2MHz	0.30V/μs	IN/OUT	90dB	75dB	SOT23-5	Low Supply Current、Low Noise、Rail to rail input/output AMP
MS8617/M	2	1.8V - 5.0V	40 μA	0.4mV	1.2MHz	0.30V/μs	IN/OUT	90dB	75dB	SOP8/MSOP8	Low Supply Current、Low Noise、Rail to rail input/output AMP
MS8619/S	4	1.8V - 5.0V	40 μA	0.4mV	1.2MHz	0.30V/μs	IN/OUT	90dB	75dB	TSSOP14/ SOP14	Low Supply Current、Low Noise、Rail to rail input/output AMP
MS6001S	1	1.8V - 5.0V	110 μA	1mV	1.0MHz	0.4V/μs	IN/OUT	80dB	75dB	SOT23-5	Low voltage、Rail to rail input/output AMP
MS6001S1A	1	1.8V - 5.0V	110 μA	1mV	1.0MHz	0.4V/μs	IN/OUT	80dB	75dB	SOT23-5	Automotive Grade low voltage、Rail to rail input/output AMP
MS6002/M	2	1.8V - 5.0V	110 μA	1mV	1.0MHz	0.4V/μs	IN/OUT	80dB	75dB	SOP8/MSOP8	Low voltage、Rail to rail input/output AMP
MS6004/S	4	1.8V - 5.0V	110 μA	1mV	1.0MHz	0.4V/μs	IN/OUT	80dB	75dB	TSSOP14/ SOP14	Low voltage、Rail to rail input/output AMP
MS8251	1	1.8V - 5.0V	80 μA	0.8mV	1.0MHz	0.35V/μs	IN/OUT	80dB	75dB	SOT23-5	Low Supply Current、Low Noise、CMOS、Rail to rail input/output AMP
MS8251A	1	1.8V - 5.0V	80 μA	0.8mV	1.0MHz	0.35V/μs	IN/OUT	80dB	75dB	SOT23-5	Automotive Grade Low Supply Current、Low Noise、CMOS、Rail to rail input/output AMP
MS6031/ Δ MS6031M	1	1.8V - 5.5V	1.0 μA	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	SOP8/ MSOP8	Low Supply Current、High Precision、Rail to rail input/output AMP Low bias current
Δ MS6032/M	2	1.8V - 5.5V	1.0 μA	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	SOP8/MSOP8	Low Supply、Low offset CMOS、Rail to rail, input/output AMP

Type	#of Amps	Vs span	Iq/Amp	Vos	GBP	SR	Rail to Rail	PSRR DC	CMRR	Package	Description
Δ MS6033/M	1	1.8V - 5.5V	1.0 μ A	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	SOP8/ MSOP8	Low Supply、 Low offset CMOS、 Rail to rail, input/output AMP
Δ MS6034/T	4	1.8V - 5.5V	1.0 μ A	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	SOP14/ TSSOP14	Low Supply、 Low offset CMOS、 Rail to rail, input/output AMP
MS8231	1	1.8V - 5.5V	1.0 μ A	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	SOP8	Low Supply Current、 High Precision、 Rail to rail input/output AMP
MS8232M	2	1.8V - 5.5V	1.0 μ A	0.1mV	13.0kHz	6V/ms	IN/OUT	80dB	90dB	MSOP8	Low Supply Current、 High Precision、 Rail to rail input/output AMP
MS8117S	1	1.8V - 5.0V	45 μ A	0.05mV	1.0MHz	0.40V/ μ s	IN/OUT	80dB	75dB	SOT23-5	Low Supply、 Low offset CMOS、 Rail to rail input/output AMP
MS8127M	2	1.8V - 5.0V	45 μ A	0.05mV	1.0MHz	0.40V/ μ s	IN/OUT	80dB	75dB	MSOP8	Low Supply、 Low offset CMOS、 Rail to rail input/output AMP

Type	#of Amps	Vs span	Iq/Amp	Shutd own	-3dB Bandwidth	SR	Vos	Vos TC	Rail to Rail	PSRR DC	CMRR	Package	Description
MS8051/P	1	2.5V - 5.5V	4.4mA	NO	250MHz	130V/μs	±2mV	4.4μV/℃	OUT	80dB	80dB	SOT23-5/SOP8	250MHz、Rail to rail output CMOS operational AMP
MS8052/M	2	2.5V - 5.5V	4.4mA	NO	250MHz	130V/μs	±2mV	4.4μV/℃	OUT	80dB	80dB	SOP8/MSOP8	250MHz、Rail to rail output CMOS operational AMP
MS8054/T	4	2.5V - 5.5V	4.4mA	NO	250MHz	130V/μs	±2mV	4.4μV/℃	OUT	80dB	80dB	SOP14/TSSOP14	250MHz、Rail to rail output CMOS operational AMP
MS8091/ ΔMS8091S	1	2.5V - 5.5V	4.4mA	NO	350MHz	170V/μs	±2mV	3.7μV/℃	OUT	80dB	80dB	SOP8/SOT23-5	350MHz、Rail to rail output with enable end operational AMP
ΔMS8092/M	2	2.5V - 5.5V	4.4mA	NO	350MHz	170V/μs	±2mV	3.7μV/℃	OUT	80dB	80dB	SOP8/MSOP8	350MHz、Rail to rail output with enable end operational AMP
MS8094/T	4	2.5V - 5.5V	4.4mA	NO	350MHz	170V/μs	±2mV	3.7μV/℃	OUT	80dB	80dB	SOP14/TSSOP14	350MHz、Rail to rail output with enable end operational AMP
MS8093	1	2.5V - 5.5V	4.4mA	Yes	350MHz	170V/μs	±2mV	3.7μV/℃	OUT	80dB	80dB	SOP8	350MHz、Rail to rail output with enable end operational AMP
MS8241/M	1	10V - 16V	7mA	NO	120MHz	3200V/μs	±2mV	12μV/℃	---	70dB	68dB	SOP8/MSOP8	High speed, High output current, voltage feedback AMP
MS8242/ ΔMS8242M	2	10V - 16V	7mA	NO	120MHz	3200V/μs	±2mV	12μV/℃	---	70dB	68dB	SOP8/MSOP8	High speed, High output current, voltage feedback AMP
MS86235N	2	2.7V - 5V	630μA	Yes	66MHz	150V/μs	±0.5mV	---	OUT	95dB	92dB	QFN10	Low noise, rail to rail output, high speed operational AMP

Type	#of Amps	Vs span	Iq/Amp	Shutd own	-3dB Bandwidth	SR	Vos	Vos TC	Rail to Rail	PSRR DC	CMRR	Package	Description
MS8258D	1	3.3V - 5.5V	25mA	YES	700MHz	2000V/ μ s	± 5 mV	2 μ V/ $^{\circ}$ C	——	60dB	60dB	DFN8	7GHz gain bandwidth product, CMOS input operational AMP
*MS8255	1	3.3V - 5.5V	23mA	YES	800MHz	2500V/ μ s	± 5 mV	0.5 μ V/ $^{\circ}$ C	——	80dB	80dB	DFN	8GHz gain- bandwidth product, bipolar input operational AMP

Type	#of Amps	Vs span	Iq/Amp	Shutd own	-3dB Bandwidth	SR	Transimped ance gain	Input reference current noise	Rail to Rail	PSRR DC	Package	Description
MS8257N	1	2.7V - 3.6V	23mA	NO	95MHz 125MHz	230V/μs	5kΩ 20kΩ	25nArms 15nArms	—	70dB	QFN16	Ultra Low Noise、Broadband、 Selectable Feedback Resistor (5kΩ/20kΩ) Transimpedance Amplifier

Type	#of Amps	supply voltage	supply current	-3dB Bandwidth	Control	Input offset voltage	Package	Description
MS3121	2	4.0V - 18V	9mA	---	NO	---	SOP8	Ground isolation AMP for car audio system
MS8124N	4	4.0V - 18V	18mA	---	NO	---	QFN16	Ground isolation AMP for car audio system

Type	#of Amps	Vs span	Gain	order	Iq/Amp	-3dB Bandwidth	Attenuation	SR	GroupDelay	shutdown mode	Package	Description
MS1631	1	2.7V - 5.5V	6dB	6	14.5mA	72MHz	---	260V/ μ s	---	YES	SOT23-6	6th-order HD video filter driver
MS1637	1	2.7V - 5.5V	6dB	6	36mA	80MHz	28dB	180V/ μ s	8ns	NO	SOT23-6	6th-order HD video filter driven video
MS1651	1	2.7V - 5.5V	6dB	6	14.5mA	10.5MHz	---	40V/ μ s	---	YES	SOT23-6	6th-order HD video filter driver
MS1681	1	2.7V - 5.5V	6dB	6	14.5mA	35MHz	---	160V/ μ s	---	YES	SOT23-6	6th-order HD video filter driver
MS1676	1	2.5V - 5.5V	12dB	10	35mA	30MHz	32dB	90V/ μ s	29ns	NO	SOT23-6	10th-order HD video filter driver
MS1683	1	2.7V - 5.5V	6dB	10	16mA	35MHz/ 55MHz	---	171V/ μ s	---	NO	SOT23-6	10th-order HD video filter driver
MS2631	1	2.7V - 5.5V	6dB	10	25mA	55MHz	---	90V/ μ s	---	NO	SOT23-6	10th-order HD video filter driver
MS2681	1	2.7V - 5.5V	6dB	10	25mA	35MHz	---	90V/ μ s	---	NO	SOT23-6	10th-order HD video filter driver
MS2267/D	2	4.85V - 9V	6dB	---	14mA	7MHz	---	---	---	NO	SOP8/DIP8/TSSOP8	HD video filter driver
MS6363	3	2.7V - 5.5V	6dB	6	43.5mA	35MHz	---	160V/ μ s	---	NO	SOP8	3CH 6th-order HD video filter driver

Type	#of Amps	Vs span	Gain	order	Iq/Amp	-3dB Bandwidth	Attenuation	SR	GroupDelay	shutdown mode	Package	Description
MS6364	3	2.7V - 5.5V	6dB	6	43.5mA	10MHz	---	40V/μs	---	NO	SOP8	3CH 6th-order HD video filter driver
MS6365T	5	3V - 5.5V	6dB	6	84mA	10MHz	---	35V/μs	28ns	NO	TSSOP14	5CH 6th-order HD video filter driver
MS6367	3	2.7V - 5.5V	6dB	6	33mA	95MHz	---	40V/μs	---	NO	SOP8	3CH 6th-order HD video filter driver
MS7682M	1	2.7V - 5V	6dB	6	16mA	35MHz	---	160V/μs	---	YES	MSOP8	6th-order HD video filter driver with coaxial control
MS7336M	1	2.7V - 5.5V	6dB	10	25mA	35/55MHz	40dB	80V/μs	23.5ns	NO	MSOP8	HD HD / Full HD FHD can choose video op amp and video coaxial line control decoding
MS7336MA	1	2.5V - 5.5V	6dB	10	25mA	35/55MHz	40dB	80V/μs	23.5ns	NO	MSOP8	HD HD / Full HD FHD can choose video op amp and video coaxial line control decoding、AEC-Q100
MS7338MA	1	2.5V - 5.5V	12dB	10	35mA	30/45MHz	32dB	90V/μs	29ns	NO	MSOP8	HD HD / Full HD FHD can choose video op amp and video coaxial line control decoding、AEC-Q100
MS7337M	1	2.7V - 5.5V	6dB	6	36mA	81MHz	27dB	180V/μs	10ns	NO	MSOP8	6th-order HD video filter driver with coaxial control

Type	The output voltage	Voltage accuracy	Maximum temperature drift	output driver	range of working temperature	Operating voltage range	Working current	Package	Description
MSR015	1.5V	±0.05%	A: 5ppm/°C B: 10ppm/°C C: 30ppm/°C D: 60ppm/°C	0.3mA	-40℃ - +125℃	2.5V-5.5V	0.75mA	SOT23-5	Low temperature drift, low power voltage reference
MSR025	2.5V	±0.05%	A: 5ppm/°C B: 10ppm/°C C: 30ppm/°C D: 60ppm/°C	0.3mA	-40℃ - +125℃	2.65V-5.5V	0.80mA	SOT23-5	Low temperature drift, low power voltage reference
MSR020	2.048V	±0.05%	A: 5ppm/°C B: 10ppm/°C C: 30ppm/°C D: 60ppm/°C	1.3mA	-40℃ - +125℃	VREF+0.15V-5.5V	0.75mA	SOT23-5	Low temperature drift, low power voltage reference
MSR040	4.096V	±0.05%	A: 5ppm/°C B: 10ppm/°C C: 30ppm/°C D: 60ppm/°C	1.3mA	-40℃ - +125℃	VREF+0.15V-5.5V	0.80mA	SOT23-5	Low temperature drift, low power voltage reference
MSR040SP	4.096V	±0.05%	10ppm/°C	1.3mA	-40℃ - +85℃	VREF+0.15V-5.5V	0.80mA	SOP8	Low temperature bleaching, low power consumption voltage reference

Type	#of Comps	Vs span	Dormancy current	Iq	Vos	CMRR	Propagation Delay	trise	tfall	PSRR DC	Package	Description
MS751	1	2.7V - 5V ±1.25V - ±2.75V	---	0.27mA	0.2mV	0V - (VCC-1.3V)	200ns	1.7ns	1.8ns	110dB	SOT23-5	Low voltage, high precision comparator
MS761	1	2.7V - 5V ±1.25V - ±2.75V	<1 μA	0.27mA	0.2mV	0V - (VCC-1.3V)	200ns	1.7ns	1.8ns	110dB	SOT23-6/ SOP8	Low voltage, high precision comparator
MS762M	2	2.7V - 5V ±1.25V - ±2.75V	<1 μA	0.5mA	0.2mV	0V - (VCC-1.3V)	200ns	1.7ns	1.8ns	110dB	MSOP8	Low voltage, high precision comparator
MS8923/S	1	4.5V - 5.5V ±2.5V - ±5.0V	---	6mA	0.1mV	(-VS) - (+Vs-1.5V)	10ns	1.0ns	1.0ns	85dB	SOP8/ SOT23-5	High-speed, high precision comparator
MS8911S	1	3.0V-5.5V	4.5 μA	3.2mA	3mV	-0.2V - (V+)+0.2	4.5ns	3.0ns	3.0ns	---	SOT23-6	4.5ns delay rail to rail high-speed comparator
MS8921S	1	3.0V-5.5V	4.5 μA	3.2mA	3mV	-0.2V - (V+)+0.2	4.5ns	3.0ns	3.0ns	---	SOT23-5	4.5ns delay rail to rail high-speed comparator
MS8922M	2	3.0V-5.5V	4.5 μA	3.2mA	3mV	-0.2V - (V+)+0.2	4.5ns	3.0ns	3.0ns	---	MSOP8	4.5ns delay rail to rail high-speed comparator
MS8931S	1	3.0V-5.5V	4.5 μA	3.2mA	3mV	-0.2V - (V+)+0.2	4.5ns	3.0ns	3.0ns	---	SOT-363	4.5ns delay rail to rail high-speed comparator
MS9113S	1	1.8V-5.5V	0.15mA	2mA	---	---	6ns	---	---	---	SOT-363	Audio receiving comparator

Type	Working frequency band	Operating frequency	Noise factor	Gain	Supply voltage	Quiescent current	Package	Description
MS2659	---	1550MHz-1615MHz	0.86dB	17.3dB	1.5V -3.6V	4.3mA@2.85V	SOT23-6	L1 band GNSS low noise amplifier
MS2659F	---	1550MHz-1615MHz	0.85dB	21.5dB	1.5V -3.6V	4.2mA@2.85V	LGA6	L1 band GNSS low noise amplifier
MS2659C	---	1550MHz-1615MHz	0.93dB	21.7dB	1.5V -3.6V	4.2mA@2.85V	DFN6	L1 band GNSS low noise amplifier
MS7256C	L1 band	1550MHz-1615MHz	0.99dB	22.1dB	1.5V -3.6V	4.2mA@2.85V	DFN6	L1 band GNSS low noise amplifier
MS2663	---	1550MHz-1615MHz	0.95dB	21.5dB	1.2V -3.6V	4.2mA@2.85V	SOT343	L1 band GNSS low noise amplifier
MS8215	---	1550MHz-1615MHz	0.86dB	20-43dB	1.2V -3.6V	3.4mA@1.2V; 4.2mA@2.85V	DFN8	L1 band、high gain GNSS low noise amplifier
MS2660	---	1550MHz-1615MHz	0.95dB	21.5dB	1.2V -3.6V	4.2mA@2.85V	DFN4	Wide power supply voltage range multi-mode navigation low noise amplifier
MS2662	---	1200MHz-1300MHz	1.1dB	20.0dB	1.5V -3.6V	4.2mA@2.85V	SOT343	L2 band GNSS low noise amplifier
MS2691	L1+L2 band	1164MHz-1615MHz	0.95-1.0dB	19.0dB	1.5V -3.5V	4.2mA@2.85V	DFN6	L1 and L2 band GNSS low noise amplifier

Type	Working frequency band	Operating frequency	Noise factor	Gain	Supply voltage	Quiescent current	Package	Description	Type
MS2630	Sub 1GHz band	100MHz-1000MHz	1.57dB	16.3dB	---	1.5V -3.6V	3.37mA@1.6V; 3.43mA@3V	SOT23-6	Sub-1GHz, low-power, low-noise AMP
MS2634	---	100MHz-1000MHz	1.57dB	16.3dB	---	1.5V -3.6V	3.37mA@1.6V; 3.43mA@3V	QFN16	4CH、Sub-1GHz、 Low power, low noise AMP
MS2692	---	450MHz-5000MHz	0.57-1.2dB	22dB@2.45G	16.6dBm @2.45GHz, 3.3V	2.7V-5.25V	35mA-78mA@3.3V	DFN8	Broadband low noise AMP
MS2609	L1+L2 band	1100MHz-1650MHz	0.54-0.68dB	16dB@1.6GHz	14dBm @1.6GHz, 3.3V	1.8V-5.25V	20mA@3.0V	SOT343	Full system navigation Low noise amplifier

Type	Signal frequency	Input dynamic range	Supply voltage	Quiescent current	Enable shutdown current	Package	Description
MS2351M/D	0.05-2.5GHz 2.6-3.0GHz 3.1-4.0GHz	-45-0dBm -40-0dBm -35-0dBm	4.3mA@3.3V	440 μ A@3.3V	1.5mA	MSOP8/DFN8	RF signal power detector/ controller
MS2350M/ Δ MS2350D	0.005-3.0GHz	-40-0dBm	2.7V - 5.5V	4.5mA@3.3V	70 μ A@3.3V	MSOP8/DFN8	RF signal detector/controller



Type	Architec ture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
MS1100	Σ-Δ	16bit	15SPS、30SPS、 60SPS、240SPS	Differential single channel	I2C	2.7V - 5.5V	0.3mA	SOT23-6	Built-in 2.048 reference, PGA, 16bit built-in reference ADC
MS1112	Σ-Δ	16bit	15SPS、30SPS、 60SPS、240SPS	Two pairs of differential inputs or three single-ended inputs	I2C	2.7V - 5.5V	0.3mA	MSOP10	Built-in 2.048 reference, PGA, 16bit multi-input built-in reference ADC
MS5112M	Σ-Δ	16bit	15SPS、30SPS、 60SPS、240SPS	Two pairs of differential inputs or three single-ended inputs	I2C	2.7V - 5.5V	0.3mA	MSOP10	Low imbalance, built-in 2.048 reference, PGA, 16bit multi-input built-in reference ADC
MS5115M	Σ-Δ	18bit	3.75SPS、15SPS、 60SPS、240SPS	2 pairs of differential inputs	I2C	2.7V - 5.5V	0.3mA	MSOP10	Built-in 2.048 reference, PGA, 18bit two-channel differential input ADC
MS5110S	Σ-Δ	16bit	15SPS、30SPS、 60SPS、240SPS	Differential single channel	I2C	2.7V - 5.5V	0.3mA	SOT23-6	Built-in 2.048 reference, PGA, 16bit built-in reference analog-to-digital converter
MS5175	Σ-Δ	16bit	15SPS、30SPS、 60SPS、240SPS	4 Select 1 single-ended input	I2C	2.7V - 5.5V	0.3mA	MSOP10	Built in 2.048 benchmark, PGA, 16 bits four input built-in reference ADC
MS5213T	Σ-Δ	16bit	20-500SPS	2 fully differential input channels	SPI	2.7V - 5.5V	0.6mA	TSSOP16	Built-in PGA, dual - channel fully differential delta-Sigma ADC
MS7705/D	Σ-Δ	16bit	20-500SPS	2 fully differential input channels	SPI	2.7V - 5.5V	0.6mA	SOW16/ DIP16	Built-in PGA, dual - channel fully differential delta-Sigma ADC
Δ MS7706/D	Σ-Δ	16bit	20-500SPS	Three single-ended inputs	SPI	2.7V - 5.5V	0.6mA	SOW16/ DIP16	Three-channel pseudo differential delta-sigma ADC
MS1242	Σ-Δ	24bit	1.875-15SPS	Four-way combined differential input	SPI	2.7V - 5.25V	0.24mA	TSSOP16	Integrated 50Hz/60Hz notch, PGA, 24bit high precision, low power consumption ADC
MS1243	Σ-Δ	24bit	1.875-15SPS	8-way combined differential input	SPI	2.7V - 5.25V	0.24mA	TSSOP20	Integrated 50Hz/60Hz notch, PGA, 24bit high precision, low power consumption ADC

Type	Archite cture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
*MS5046T	Σ-Δ	16bit	2kSPS((max)	Single channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP16	Low noise, low power, 16bit, 2kSPS delta-Sigma ADC
*MS5047T	Σ-Δ	16bit	2kSPS((max)	Two-channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP20	Low noise, low power, 16bit, 2kSPS delta-Sigma ADC
*MS5048T/*MS5048N	Σ-Δ	16bit	2kSPS((max)	Four-channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP28/ QFN32	Low noise, low power, 16bit, 2kSPS delta-Sigma ADC
Δ MS5146T	Σ-Δ	24bit	2kSPS((max)	Single channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP16	Low noise, low power, 24bit, 2kSPS, delta-Sigma ADC
Δ MS5147T	Σ-Δ	24bit	2kSPS((max)	Two-channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP20	Low noise, low power, 24bit, 2kSPS, delta-Sigma ADC
MS5148T	Σ-Δ	24bit	2kSPS((max)	Four-channel differential input	SPI	2.7V-5.25V ±2.5V	0.23mA	TSSOP28	Low noise, low power, 24bit, 2kSPS, delta-Sigma ADC
MS5192T	Σ-Δ	16bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
Δ MS5192ET	Σ-Δ	16bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
MS5192TA	Σ-Δ	16bit	4.17-470SPS	Three channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source

Type	Archite cture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
MS5195T	Σ-Δ	16bit	4.17-470SPS	Six-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP24	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source Integrated internal oscillator Integrated input burnout current source Integrated on-chip bias voltage generator Integrated internal temperature sensor
MS5196T	Σ-Δ	16bit	4.17-123SPS	Single channel differential input	SPI	2.7V-5.25V	0.25mA	TSSOP16	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated internal 128x amplifier Integrated internal oscillator Integrated internal temperature sensor
MS5198T	Σ-Δ	16bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.38mA	TSSOP16	Low noise, low power, 16 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated internal oscillator Integrated low noise input buffer
MS5193T	Σ-Δ	24bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
Δ MS5193TA	Σ-Δ	24bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
MS5193ET	Σ-Δ	24bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
MS5194T	Σ-Δ	24bit	4.17-470SPS	Six-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP24	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated low noise input buffer integrated internal low temperature bleach reference voltage source Integrated internal oscillator Integrated input burnout current source Integrated on-chip bias voltage generator Integrated internal temperature sensor

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
MS5197T	Σ-Δ	24bit	4.17-123SPS	Single channel differential input	SPI	2.7V-5.25V	0.25mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated internal 128x amplifier Integrated internal oscillator Integrated internal temperature sensor
MS5199T	Σ-Δ	24bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.38mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated internal oscillator Integrated low noise input buffer
*MS5199ET	Σ-Δ	24bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.38mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA Integrated internal oscillator Integrated low noise input buffer
MS5185T	Σ-Δ	20bit	4.17-470SPS	Three-channel differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 20-bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise input buffer integrated internal low temperature bleach reference voltage source
MS5180T	Σ-Δ	24bit	10-16.7SPS	Differential input	SPI	2.7V-5.25V	0.4mA	TSSOP16	Low noise, low power, 24 bit delta-Sigma ADC Integrated 50Hz/60Hz notch Integrated low noise PGA
*MS5581T	Σ-Δ	32bit	4kSPS((max)	Single channel differential input	SPI	2.7V-5.25V ±2.5V	2.6mA	TSSOP24	Single channel, high resolution delta-Sigma ADC
*MS5582T	Σ-Δ	32bit	4kSPS((max)	Two-channel differential input	SPI	2.7V-5.25V ±2.5V	5.1mA	TSSOP28	Two channel, built-in PGA, high resolution delta-Sigma ADC
MS5583N	Σ-Δ	32bit	4kSPS((max)	Two-channel differential input	SPI	2.7V-5.25V ±2.5V	3.2mA	QFN24	Two channel, built-in low noise PGA, high resolution Σ-Δ ADC
*MS5584N	Σ-Δ	32bit	4kSPS((max)	Two-channel differential input	SPI	2.7V-5.25V ±2.5V	3mA/4.6mA	QFN24	Support for both high precision and low power operation, two channels, built-in PGA, low noise, high resolution Σ-Δ ADC

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
*MS5120T/N	Σ-Δ	24bit	2kSPS((max)	2 pairs of differential inputs or 4 single ended inputs	SPI	2.7V-5.25V±2.5V	0.4mA	TSSOP16/QFN16	Low noise, low power consumption, 24 bit Σ-Δ ADC Integrated 50Hz/60Hz notch, integrated low-noise PGA Integrated internal oscillation, integrated input burnout current source, integrated internal low-temperature drift reference voltage source, integrated internal temperature sensor

Type	Architec ture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc@5V	Package	Description
MS1549	SAR	10bit	25kSPS	Single-ended input	SPI	2.7V-5.5V	0.8mA	SOP8	10 bit ADC controlled by serial port
*MS51780T	SAR	8bit	1MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	2.7mA	TSSOP20	Channel sequencer, 8 channels、1MSPS、8bit ADC
*MS51790T	SAR	8bit	2MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	4mA	TSSOP20	Channel sequencer, 8 channels、2MSPS、8bit ADC
*MS51781T	SAR	10bit	1MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	2.7mA	TSSOP20	Channel sequencer, 8 channels、1MSPS、10bit ADC
*MS51791T	SAR	10bit	2MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	4mA	TSSOP20	Channel sequencer, 8 channels、2MSPS、10bit ADC
*MS51782T	SAR	12bit	1MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	2.7mA	TSSOP20	Channel sequencer, 8 channels、1MSPS、12bit ADC
*MS51792T	SAR	12bit	2MSPS	Eight-channel single-ended input	SPI	2.7V-5.25V	4mA	TSSOP20	Channel sequencer, 8 channels、2MSPS、12bit ADC

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc@5V	Package	Description
*MS5151M/D	SAR	14bit	100kSPS	Single channel pseudo differential input	SPI	2.3V-5.5V	0.3mA	MSOP10/DFN10	Single channel、14bit、100kSPS、external reference voltage、SAR ADC
*MS5152M/D	SAR	14bit	250kSPS	Single channel pseudo differential input	SPI	2.3V-5.5V	0.3mA	MSOP10/DFN10	Single channel、14bit、250kSPS、external reference voltage、SAR ADC
*MS5153M/D	SAR	14bit	500kSPS	Single channel pseudo differential input	SPI	2.3V-5.5V	0.3mA	MSOP10/DFN10	Single channel、14bit、500kSPS、external reference voltage、SAR ADC
*MS5154N	SAR	14bit	100kSPS	Four-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	4 channel、14bit、100kSPS、built-in/external reference voltage、SAR ADC
*MS5155N	SAR	14bit	250kSPS	Four-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	4 channel、14bit、250kSPS、built-in/external reference voltage、SAR ADC
*MS5156N	SAR	14bit	500kSPS	Four-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	4-channel、14bit、500kSPS、built-in/external reference voltage、SAR ADC
*MS5157N	SAR	14bit	100kSPS	Eight-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	8 channel、14bit、100kSPS、built-in/external reference voltage、SAR ADC
MS5158N	SAR	14bit	250kSPS	Eight-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	8 channel、14bit、250kSPS、built-in/external reference voltage、SAR ADC
*MS5159N	SAR	14bit	500kSPS	Eight-channel single-ended input	SPI	2.3V-5.5V	0.4mA	QFN20	8 channel、14bit、500kSPS、built-in/external reference voltage、SAR ADC

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc@5V	Package	Description
*MS5171M	SAR	16bit	100kSPS	Single channel pseudo differential input	SPI	2.3V-5.5V	0.3mA	MSOP8	Single channel、16bit、100kSPS、external reference voltage、SAR ADC
MS5172M/ Δ MS5172D	SAR	16bit	200kSPS	Single channel pseudo differential input	SPI	2.7V-5.5V	0.3mA	MSOP10/DFN10	Single channel、16bit、200kSPS、external reference voltage、SAR ADC
MS5173M	SAR	16bit	200kSPS	Single channel pseudo differential input	SPI	2.7V-5.5V	0.3mA	MSOP8	Single channel、16bit、200KSPS、external reference voltage、SAR ADC
*MS5174M/D	SAR	16bit	500kSPS	Single channel pseudo differential input	SPI	2.3V-5.5V	0.3mA	MSOP10/DFN10	Single channel、16bit、500kSPS、external reference voltage、SAR ADC
*MS5181N	SAR	16bit	100kSPS	Four-channel single-ended input /Two channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、100kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
MS5182N	SAR	16bit	250kSPS	Four-channel single-ended input /Two channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
*MS5183N	SAR	16bit	500kSPS	Four-channel single-ended input /Two channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、500kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
*MS5187N	SAR	16bit	100kSPS	Eight-channel single-ended input /Four channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、100kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
MS5189N	SAR	16bit	250kSPS	Eight-channel single-ended input /Four channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
MS5188N	SAR	16bit	500kSPS	Eight-channel single-ended input /Four channel pseudo differential input	SPI	4.5V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、500kSPS、internal 4.096V/ external optional reference、internal temperature sensor、channel sequencer

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc@5V	Package	Description
MS51582N	SAR	16bit	250kSPS	Four-channel single-ended input / Two channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、external reference、internal temperature sensor、channel sequencer
MS51589N	SAR	16bit	250kSPS	Eight-channel single-ended input / Four channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、external reference、internal temperature sensor、channel sequencer
MS51588N	SAR	16bit	500kSPS	Eight-channel single-ended input / Four channel pseudo differential input	SPI	4.5V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、500kSPS、external reference、internal temperature sensor、channel sequencer
MS51682N	SAR	16bit	250kSPS	Four-channel single-ended input / Two channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
MS51689N	SAR	16bit	250kSPS	Eight-channel single-ended input / Four channel pseudo differential input	SPI	2.3V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、250kSPS、internal 2.5V or 4.096V/ external optional reference、internal temperature sensor、channel sequencer
MS51688N	SAR	16bit	500kSPS	Eight-channel single-ended input / Four channel pseudo differential input	SPI	4.5V-5.5V	0.4mA	QFN20	Single/bipolar optional input、16bit、500kSPS、internal 4.096V/ external optional reference、internal temperature sensor、channel sequencer

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	Vcc span	Icc	Package	Description
MS9280	Pipeline	10bit	35MSPS	Single-ended input	parallel	2.7V - 5.5V	32mA	SSOP28	Integrated internal programmable reference, input clamp circuit,10 bit High-Speed ADC
MS2510	Semiflash	8bit	20MSPS	Single-ended input	parallel	2.7V - 3.6V	18mA	SOP16	Integrated built-in REF voltage-dividing resistor,8 bit High-Speed ADC
MS5510	Semiflash	8bit	20MSPS	Single-ended input	parallel	4.5V - 5.5V	18mA	SOP24	Integrated built-in REF voltage-dividing resistor,8 bit High-Speed ADC
*MS5135N	Pipeline	12bit	80MSPS/125MSPS	differential input	DDR/SD RLVDS output	1.8V	100mA/120mA	QFN32	Dual channel, 12 bit, 80MSPS/125MSPS serial LVDS 1.8V high-speed analog-to-digital converter

Type	Architecture	Resolution	Sample Rate	Data output interface	Vcc span	Transient immunity of insulation	Isolation voltage	Package	Description
MS2400	$\Sigma-\Delta$	16bit	10MSPS	The serial isolation	4.5-5.5V	25kV/ μ s	5kV	SOPW16	16 $\Sigma-\Delta$ ADC modulator Serial code stream output Fixed built-in 10MHz clock
MS2401	$\Sigma-\Delta$	16bit	20MSPS	The serial isolation	4.5-5.5V	25kV/ μ s	5kV	SOPW16	16 $\Sigma-\Delta$ ADC modulator Serial code stream output Maximum external input 20MHz clock
MS2402	$\Sigma-\Delta$	16bit	10MSPS	The serial isolation	4.5-5.5V	25kV/ μ s	5kV	SOPW8	16-Bit Sigma-Delta ADC Modulator Serial stream output Fixed built-in 10MHz clock
MS2403	$\Sigma-\Delta$	16bit	20MSPS	The serial isolation	4.5-5.5V	25kV/ μ s	5kV	SOPW8	16-Bit Sigma-Delta ADC Modulator Serial stream output Maximum external input 20MHz clock

Type	Architecture	Resolution	Sample Rate	Input configuration	Interface	SNR	Vcc span	Icc	Package	Description
MS1808	$\Sigma - \Delta$	24bit	8kHz -96kHz	2CH single-ended input	24-bit left justified / I2S	95dB	2.7V - 3.6V (DVDD) 4.5V - 5.5V (AVDD)	2mA (DVDD) 10mA (AVDD)	TSSOP14	96kHz、24 bit audio ADC
MS5358	$\Sigma - \Delta$	24bit	8kHz -96kHz	2CH single-ended input	24-bit left justified / I2S	95dB	2.7V - 3.6V (DVDD) 4.5V - 5.5V (AVDD)	2mA (DVDD) 10mA (AVDD)	TSSOP16	96kHz、24 bit audio ADC
MS2358	$\Sigma - \Delta$	24bit	8kHz -96kHz	2CH single-ended input	I2S	95dB	2.7V - 3.6V (DVDD) 4.5V - 5.5V (AVDD)	2mA (DVDD) 10mA (AVDD)	DFN12	96kHz、24 bit audio ADC

Type	Input structure	Angular accuracy	Velocity accuracy	Frequency range	Maximum tracking rate	Digital output structure	Vcc span	Icc	Package	Description
MS5905PA	difference	±11 arc minutes	±0.44 LSB	2kHz-20kHz	1250rps	Parallel/serial	5V±5%(VDD)	20mA	QFP44	Rotary digital converter with 12bit, single power supply and built-in reference voltage
MS5910PA	difference	±2.5 arc minutes	±2LSB	2kHz-20kHz	3125rps	Parallel/serial	2.3V - 5V (DVDD) 5V±5%(AVDD)	35mA (DVDD) 12mA (AVDD)	LQFP48	10 to 16bit rotary digital converter with built-in reference voltage



Type	Architecture	Resolution	DNL (LSB)	#of Amps	Output configuration	Interface	Vcc span	Icc	Package	Description
MS5620	Resistance partial pressure	8bit	±1	4	6dB Amp	SPI	2.7V - 5.5V	2mA	SOP14	4CH serial 8 bit voltage output DAC Integrated REF buffer Integrated 2x output amplifier
MS5231M	Resistance partial pressure	8bit	±1	1	6dB Amp	SPI	2.7V - 5.5V	2mA	MSOP8	1CH serial 8 bit voltage output DAC Integrated REF buffer Integrated 2x output amplifier
MS5314	Resistance partial pressure	10bit	±1	4	0dB Amp	SPI	2.5V - 5.5V	1.6mA	MSOP10	10 bit 4CH DAC Integrated REF buffer Integrated output buffer
MS5614/T	Resistance partial pressure	12bit	±1	4	6dB Amp	SPI	2.7V - 5.5V	3.8mA	SOP16/ TSSOP16	12 bit 4CH DAC with power down mode Integrated REF buffer Integrated 2x output amplifier
MS5612M	Resistance partial pressure	12bit	±1	2	6dB Amp	SPI	2.7V - 5.5V	3.8mA	MSOP10	12 bit 2CH DAC Integrated REF buffer Integrated 2x output amplifier
MS5611D	Resistance partial pressure	12bit	±1	1	6dB Amp	SPI	2.7V - 5.5V	3.8mA	DFN12	12 bit 1CH DAC with power down mode Integrated REF buffer Integrated 2x output amplifier
MS5814/T	Resistance partial pressure	12bit	±1	4	6dB Amp	SPI/I2C	2.7V - 5.5V	4.5mA	SOP16/ TSSOP16	Integrated REF buffer and 2x output amplifier circuit, optional built-in reference, 12 bit four-channel digital-to-analog converter with power-down mode
*MS5812D	Resistor divider	12bit	±1	2	6dB Amp	SPI/I2C	2.7V - 5.5V	3mA	DFN12	Integrated REF buffer and 2x output amplifier circuit, optional built-in reference, 12-bit dual-channel digital-to-analog converter with power-down mode

Type	Architect ure	Resolution	DNL (LSB)	#of Amps	Ouput configurat ion	Interface	Vcc span	Icc	Package	Description
*MS5811	Resistor divider	12bit	±1	1	6dB Amp	SPI/I2C	2.7V - 5.5V	3mA	SOP8	Integrated REF buffer and 2x output amplifier circuit, optional built-in reference, 12-bit single-channel digital-to-analog converter with power-down mode
MS5224D	Resistance partial pressure	12bit	±1	4	6dB Amp	SPI	2.7V - 5.5V	3.8mA	DFN12	12 bit 4CH DAC Integrated REF buffer Integrated 2x output amplifier
MS5221/M	Resistance partial pressure	12bit	±1	1	6dB Amp	SPI	2.7V - 5.5V	0.6mA	SOP8/MSOP8	12 bit 1CH DAC Integrated REF buffer Integrated 2x output amplifier

Type	Architecture	Resolution	DNL (LSB)	INL (LSB)	Ouput configuration	Power-on reset value	Interface	Vcc span	Icc	Package	Description
MS5531	R-2R	16bit	±3	±3	unbuffer	0	SPI	2.7V - 5.5V	0.002mA	SOP8	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC
MS5532	R-2R	16bit	±3	±3	unbuffer	0	SPI	2.7V - 5.5V	0.002mA	SOP14	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC
*MS5533N	R-2R	16bit	±3	±3	unbuffer	mid-Code	SPI	2.7V - 5.5V	0.002mA	QFN14	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC
MS5541	R-2R	16bit	±4	±6.5	unbuffer	0	SPI	2.7V - 5.5V	0.13mA	SOP8	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC
MS5542	R-2R	16bit	±4	±6.5	unbuffer	0	SPI	2.7V - 5.5V	0.13mA	SOP14	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC
MS5543	R-2R	16bit	±4	±6.5	unbuffer	mid-Code	SPI	2.7V - 5.5V	0.13mA	SOP14	2.7V to 5.5V、 serial input、 voltage output、 16bit ADC

Type	Architecture	Resolution	DNL (LSB)	INL (LSB)	Output configuration	Power-on reset value	Interface	Vcc span	Icc	Package	Description
*MS5269	R-string	16bit	±1	±16LSB (max)	buffered	0	I2C	2.7V - 5.5V	1.8mA	TSSOP16/QFN16/WLCSP16	8-channel、16bit、I2C、voltage output analog-to-digital converter with integrated low temperature drift reference
*MS5229	R-string	12bit	±1	±1LSB (max)	buffered	0	I2C	2.7V - 5.5V	1.8mA	TSSOP16/TSSOP14/QFN16/WLCSP16	8-channel, 12bit, I2C, voltage output analog-to-digital converter with integrated low temperature drift reference
MS5268T2/ MS5268C/ Δ MS5268N	R-string	16bit	±1	±16LSB (max)	buffered	0	SPI	2.7V - 5.5V	1.8mA	TSSOP16/QFN16/WLCSP16	2.7V to 5.5V, 12/14/16Bit, built-in reference, 8-channel digital-to-analog converter
Δ MS5248T1/ T2	R-string	14bit	±1	±4LSB (max)	buffered	0	SPI	2.7V - 5.5V	1.8mA	TSSOP14/TSSOP16	2.7V to 5.5V, 12/14/16Bit, built-in reference, 8-channel digital-to-analog converter
Δ MS5228T1/ T2/N/C	R-string	12bit	±1	±1LSB (max)	buffered	0	SPI	2.7V - 5.5V	1.8mA	TSSOP14/TSSOP16/QFN16/WLCSP16	2.7V to 5.5V, 12/14/16Bit, built-in reference, 8-channel digital-to-analog converter
MS5208T/ Δ MS5208N	R-string	12bit	±1	±8LSB (max)	buffered	0	SPI	2.7V - 5.5V	1.0mA	TSSOP16/QFN16	8-channel, 12bit, SPI, external reference、voltage output digital-to-analog converter

Type	Architecture	Resolution	conversion rate	Ouput configuration	Interface	Vcc span	Icc	Package	Description
MS2502	current-steering	8bit	30MHz	Voltage output	Parallel input	2.7V - 3.6V	16mA	SOP16	8bit high-speed digital-to-analog converter
MS5602	current-steering	8bit	30MHz	Voltage output	Parallel input	4.5V - 5.5V	16mA	SOP20	8bit high-speed digital-to-analog converter
MS9708	current-steering	8bit	125MHz	Current output	Parallel input	2.7V - 5.5V	28mA	TSSOP28	8-bit, low-power, high-speed analog-to-digital converter
MS9714	current-steering	14bit	125MHz	Current output	Parallel input	2.7V - 5.5V	28mA	TSSOP28	14bit, low-power, high-speed analog-to-digital converter

Type	Architec ture	Resolution	Signal frequencies	DR	Ouput configuration	Interface	Vcc span	Icc	Package	Description
MS4344	$\Delta - \Sigma$	24bit	8kHz-192kHz	110dB	Dual channel linear filter output	I2S	2.7V - 5.5V	22mA	MSOP10	24bit, 192KHz Dual channel audio DAC circuit
MS5281D	$\Delta - \Sigma$	24bit	8kHz-192kHz	110dB	Dual channel linear filter differential output	I2S	2.7V - 5.5V	22mA	DFN12	24bit, 192KHz Dual channel Differential Audio DAC circuit
MS5282N	$\Delta - \Sigma$	24bit	8kHz-192kHz	110dB	Four-channel linear filter differential output	I2S	2.7V - 5.5V	40mA	QFN28	24bit, 192KHz Four channel Differential Audio DAC

Type	Supply voltage	Supply current	Measurement mode	measurement accuracy	Measuring range	Measurable pulse number	Calibration factor	Temperature report	Pulse generation port	Package	Description
MS1003	2.5V - 3.6V	<1.5 μ A	Measurement 1	23ps	Non-calibration mode: 14NS-16Us/calibration mode: 14NS-4Us	20 dual channels, 10 single channels	Readable	0	0	QFN20	High speed measurement TDC;Laser ranging, lidar
MS1004	2.5V - 3.6V	<1.5 μ A	Measurement 1	23ps	Non-calibration mode: 3.5ns-16us /Calibration mode: 3.5ns-4us	20 dual channels, 10 single channels	Readable	0	0	QFN20	High speed measurement TDC;Laser ranging, lidar
MS1005	2.5V - 3.6V	<1.5 μ A	Measurement 1	30ps	Non-calibration mode: 3.5ns~25us Calibration mode: 3.5ns~16us	20 dual channels, 10 single channels	Readable	0	0	QFN20	High-precision time measurement (TDC) circuit for laser ranging and lidar
MS1205N	2.5V - 3.6V	<1.5 μ A	Measurement 1	30ps	Non-calibration mode: 3.5ns~25us Calibration mode: 3.5ns~16us	40 dual channels, 20 single channels	Readable	0	0	QFN40	High-precision time measurement (TDC) circuit for laser ranging and lidar
MS1202N	2.5V - 3.6V	<1.5 μ A	Measure 1/Measure 2	65ps	Measurement 1: 3.5ns-1.8us/ Measurement 2: 500ns-4ms@4MHz	Measurement 1: 2*4 Measurement 2: 2*3	Unreadable	0	0	QFN40	High-precision time measurement (TDC) circuit for laser ranging and lidar
MS1022	2.5V - 3.6V	<1.5uA	Measurement 1 / Measure 2	19ps	Measurement 1: 3.5ns-2.5us/ Measurement 2: 500ns-4ms@4MHz	Measurement 1: 4/ Measurement 2: 3	Unreadable	4	2	QFN32/ LQFP32	High speed measurement TDC;Ultrasonic flowmeter, laser ranging
MS1030	2.5V - 3.6V	<1.5uA	Measure 2	15ps	500ns-4ms@4MHz	8	Unreadable	4	2	QFN32	High speed measurement TDC;Ultrasonic flowmeter

Type	Supply voltage	Supply current	Measurement mode	Measurement accuracy	Measuring range	Measurable pulse number	Calibration factor	Temperature port	Pulse generation port	Package	Description
MS1052NA	2.4V - 3.6V	<100uA	alone/combined	10ps	not limited	not limited	-	0	4	QFN64	High-precision time measurement (TDC) circuit for laser ranging and lidar
MS5350	2.5V - 3.6V	<1.5uA	Measure 2	15ps	500ns-16ms@4MHz	8	Unreadable	2	2	QFN24	High speed measurement TDC;Ultrasonic ranging
MS1050NA	2.4V - 3.6V	<100 μA	alone/combined	10ps	not limited	not limited	---	0	4	QFN40	High precision time measurement (TDC) circuit, used in laser ranging, laser radar
MS1051PA	2.4V - 3.6V	<100 μA	alone/combined	10ps	not limited	not limited	---	0	2	LQFP48	High precision time measurement (TDC) circuit, used in laser ranging, laser radar



Type	TX/RX	Input CM span	acceptance threshold	Transmission	ESD	Vs span	Iq/Amp	Data Rate (max)	Bus Polarity	Package	Description
MS1285/M/D	1/1	-7V-12V	-200mV-200mV	Half duplex	20kV	4.5V-6.0V	0.48mA	10Mbps	polar	SOP8/MSOP8/ DIP8	RS-485 interface circuit with polarity
MS3485/ MS3485M/ Δ MS3485D	1/1	-7V-12V	-200mV--10mV	Half duplex	20kV	2.5V-6.0V	0.2mA	10Mbps	polar	SOP8/MSOP8/ DIP8	RS-485 interface circuit with polarity
*MS3487/M/D	1/1	-7V-12V	-200mV-200mV	Half duplex	20kV	2.5V-6.0V	0.2mA	10Mbps	polar	SOP8/MSOP8/ DIP8	RS-485 interface circuit with polarity
MS1585/ Δ MS1585M/ Δ MS1585D	1/1	-7V-12V	-200mV-200mV	Half duplex	20kV	4.5V-6.0V	0.48mA	10Mbps	Non-polar	SOP8/MSOP8/ DIP8	Non-polar RS-485 interface circuit
MS3585/ Δ MS3585M/ Δ MS3585D	1/1	-7V-12V	-200mV-200mV	Half duplex	20kV	2.5V-6.0V	0.2mA	10Mbps	Non-polar	SOP8/MSOP8/ DIP8	Non-polar RS-485 interface circuit
MS2561	1/1	-7V-12V	-200mV-200mV	Half duplex	15kV	1.8V-5.5V	0.12mA	250Kbps	polar	SOP8	Low power RS-485 interface circuit
MS2581/M	1/1	-7V-12V	-200mV-200mV	Full duplex	15kV	1.8V-5.5V	0.12mA	250Kbps	polar	SOP8/MSOP8	Low power RS-485/ RS-422 interface circuit
MS2583/ Δ MS2583M	1/1	-7V-12V	-200mV-200mV	Full duplex	15kV	1.8V-5.5V	0.22mA	5Mbps	polar	SOP8/MSOP8	Low power RS-485/ RS-422 interface circuit

Type	TX/RX	Input CM span	acceptance threshold	Transmissi on	ESD	Vs span	Iq/Amp	Data Rate (max)	Bus Polarity	Package	Description
MS2576/T/S	4/0	---	---	Differential drive	20KV	2.5V-5.5V	0.1mA	10Mbps	polar	SOP16/TSSOP16/SSOP16	4CH low power differential line driver
MS2574/MS2574T/ Δ MS2574S	4/0	---	---	Differential drive	20kV	3.0V-5.5V	0.01mA	50Mbps	polar	SOP16/TSSOP16/SSOP16	4CH high-speed, differential line driver
MS2573/T	0/4	±12V	-200mV-200mV	Differential reception	15kV	2.5V-5.5V	0.8mA	7Mbps	polar	SOP16/TSSOP16	4CH Low power differential line receiver
MS2575/T	0/4	±15V	-200mV-200mV	Differential reception	20kV	2.5V-5.5V	0.8mA	7Mbps	polar	SOP16/TSSOP16	4CH low power differential line receiver
MS2374/T/S/D	4/0	---	---	Differential drive	2kV	4.5V-7.0V	6mA	10Mbps	polar	SOP16/TSSOP16/SSOP16/DIP16	4CH RS-422 differential line driver
MS2375/T	0/4	±12V	-200mV-200mV	Differential reception	2kV	4.5V-7.0V	13mA	10Mbps	polar	SOP16/TSSOP16	4CH RS-422 differential line receiver
MS2591	1/1	-7-12V	-200mV-200mV	Half duplex	25kV	3V-5.5V	0.365mA	5Mbps	polar	SOP8	Low power RS-485 interface circuit

Type	TX/RX	Input CM span	acceptance threshold	Transmission	ESD	Vs span	Iq/Amp	Data Rate (max)	Bus Polarity	Package	Description
*MS2530	1/1	±15V	-200mV~-50mV	Half duplex	30kV	4.5V-6.0V	0.7mA	500kbps	polar	SOP8	High ESD、half duplex RS-485 interface circuit
*MS2550	1/1	±15V	-200mV~-50mV	Half duplex	30kV	4.5V-6.0V	0.7mA	50Mbps	polar	SOP8	High ESD 、half duplex RS-485 interface circuit
*MS2531	1/1	±15V	-200mV~-50mV	Full duplex	30kV	4.5V-6.0V	0.7mA	500kbps	polar	SOP8	High ESD 、full duplex RS-485 interface electrical
*MS2551	1/1	±15V	-200mV~-50mV	Full duplex	30kV	4.5V-6.0V	0.7mA	50Mbps	polar	SOP8	High ESD、full duplex RS-485 interface circuit
*MS2532	1/1	±15V	-200mV~-50mV	Full duplex	30kV	4.5V-6.0V	0.7mA	500kbps	polar	SOP14	High ESD、transceiver control RS-485 interface circuit
*MS2552	1/1	±15V	-200mV~-50mV	Full duplex	30kV	4.5V-6.0V	0.7mA	50Mbps	polar	SOP14	High ESD、transceiver control RS-485 interface circuit
*MS2547	1/1	-7-+12V	-50mV~50mV	Half duplex	3kV	4.5V-5.5V	4mA	500kbps	polar	SOP8	Automatic reversing RS-485 interface circuit
MS2548	1/1	-7-+12V	-50mV~50mV	Half duplex	3kV	4.5V-5.5V	4mA	20Mbps	polar	SOP8	Automatic reversing RS-485 interface circuit

Type	TX/RX	Input CM span	acceptance threshold	Transmission	ESD	Vs span	Iq/Amp	Data Rate (max)	Bus Polarity	Package	Description
MS2232/T	2/2	±25V	logic input	Double closed double	20kV	3V-5.5V	1mA	400kbps	---	SOP16/TSSOP16	Low power、3-5.5V powered、RS-232 transceiver

Type	TX/RX	Isolated voltage withstand	CMTI	Non-isolated side VCC	Isolated side VCC	Static current per channel	Maximum transmission rate	Package	Description
*MS2420W/2420FW	2/0	5kV	25kV/ μ s	3V-5.5V	3V-5.5V	0.5mA	50Mbps	SOW8	2/0 digital isolator
*MS2421W/2421FW	1/1	5kV	25kV/ μ s	3V-5.5V	3V-5.5V	0.5mA	50Mbps	SOW8	1/1 digital isolator
*MS2423W/2423FW	2/1	5kV	25kV/ μ s	3V-5.5V	3V-5.5V	0.5mA	50Mbps	SOW16	2/1 digital isolator
*MS2491W	1/1	5kV	25kV/us	3V-5.5V	3V-5.5V	—	10Mbps	SOW16	Half duplex isolation RS-485 transceiver
*MS2483W	1/1	5kV	25kV/us	3V-5.5V	3V-5.5V	—	10Mbps	SOW16	Full duplex isolation RS-485 transceiver
*MS2485W	1/1	5kV	25kV/us	3V-5.5V	4.5V-5.5V	—	10Mbps	SOW16	Half duplex isolation RS-485 transceiver

Type	Number of channel	Supply voltage	Supply current	data rate	Bits	Package	Description
MS2652D	2	2.5V - 5.5V	4.0mA	≥155Mbps	1bit	DFN10	LVDS two-channel bus driver
MS90C031	4	2.5V - 5.5V	4.0mA	≥155Mbps	1bit	SOP16	TTL to LVDS Transmitter
MS90C032/T	4	2.5V - 5.5V	3.7mA	≥155Mbps	1bit	SOP16/TSSOP16	LVDS to TTL Receiver
MS90C366	3	2.7V - 4.0V	60mA	140-1225Mbps	3*7bit	LQFP48	1: 7 LVDS to TTL signal receiver
MS90C385B	4	2.7V - 4.0V	31mA	140-700Mbps/ 140-1015Mbps	4*7bit	TSSOP56	7: 1 TTL to LVDS Transmitter
MS90C386B/P	4	2.7V - 4.0V	30mA	140-1015Mbps	4*7bit	TSSOP56	1: 7 LVDS to TTL signal receiver, Falling edge to collect data
MS90C104	5	2.7V - 4.0V	30mA	56-1225Mbps	5*7bit	LQFP64	1: 7 LVDS to TTL signal receiver
MS2111	1	3V - 3.6V	Transceiver fully open: 18mA	200Mbps	1bit	SOP8	Multi-point low voltage differential signal receiver/driver

Type	Number of channel	Supply voltage	Supply current	data rate	Bits	Package	Description
MS21147T	4	3V-3.6V	30mA	200Mbps	1bit	TSSOP16	4-channel LVDS drive
MS21148T	4	3V-3.6V	8.5mA	200Mbps	1bit	TSSOP16	4-channel LVDS receiver

Type	Supply voltage	Supply Current	data rate	Bits	Package	Description
MS1023	3.0V - 3.6V	65mA	120-960Mbps	10bit	SSOP28	10:1 LVDS Serializer
MS1224	3.0V - 3.6V	105mA	120-960Mbps	10bit	SSOP28	10:1 LVDS Deserializer
MS9218	2.7V - 3.6V	60mA	60-700Mbps	27bit	LQFP48	DC balance Deserializer
MS913N	1.8V、2.8V、3.3V	40mA	0.35-1.4Gbps	10/12bit	QFN32	FPD-Link III Serializer
MS914N	1.8V、2.8V、3.3V	40mA	0.35-1.4Gbps	10/12bit	QFN48	Two-way series-parallel converter for two-channel flat panel display
MS933NA	1.8V、2.8V、3.3V	61mA	0.525-1.87Gbps	10/12bit	QFN32	Apply to 1 mp / 60 FPS camera serializer
MS2201	2.3V - 3.6V	80mA	1.0-1.85Gbps	10bit	TQFP64	Gigabits per second ethernet transceivers
*MS953NA	1.8V	180mA	0.7-4.16Gbps	—	QFN32	Suitable for 2.3MP/60fps cameras, radars, and other sensors with CSI-2 interface and 4.16Gbps serial port
MS2201BP	2.3V - 2.7V	100mA	1.0-1.85Gbps	10bit	TQFP64	Gigabit Ethernet transceiver circuit

Type	Supply voltage	Supply current	data rate	Package	Description
MS721	22.0V-42.0V	1.0mA-2.5mA	300bps-9600bps	SOP16	Instrument Bus (M - BUS) from the station to send and receive
MS726	22.0V-42.0V	1.0mA-2.5mA	300bps-9600bps	SOP8-PP	Instrument Bus (M - BUS) from the station to send and receive
MS720	24.0V-40.0V	5.8mA	300bps-9600bps	eTSSOP14	Instrument BUS (M-BUS) master station sending and receiving

Type	Supply voltage	Supply current	data rate	Package	Description
MS1192	4.5V-5.5V	90mA	130kbps	SOP16	H-BUS The transmission and receiving circuit

Type	Supply voltage	Supply current	data rate	Package	Description
MS3813	3V - 3.6V	110mA	0.25-1.65Gbps	QFN40	DVI/HDMI TMDS digital video equalization driver
MS3814	3V - 3.6V	98mA	0.25-1.65Gbps	QFN40	DVI/HDMI TMDS FR-4 Cable equalizing driver
MS3815	3V - 3.6V	198mA	0.25-1.65Gbps	TQFP48	DVI/HDMI TMDS Digital Video equalizing driver

Type	Supply voltage	Supply current	Sampling frequency range	Interface mode	S / PDIF input multiplexer	Output configuration	Package	Description
MS8412	3.0V-5.0V	25-40mA	32kHz-192kHz	I2C software mode	4:1	2 channel analog output	SSOP28	Receive and decode the digital audio, Output analog audio, applications include multimedia speaker, digital audio processor
MS8413	3.0V-5.0V	25-40mA	32kHz-192kHz	Hardware mode	4:1	2 channel analog output	SSOP28	Receive and decode the digital audio, Output analog audio, applications include multimedia speaker, digital audio processor
MS8416T/ Δ MS8416N	3.0V-5.0V	14.4mA	32kHz-192kHz	SPI or I2C software mode, Hardware mode	8:1 (Hardware mode 4:1)	IIS Align left Align right	TSSOP28/ QFN28	Digital audio interface receiver (support IEC60958\S/PDIF\EIAJ CP1201 and AES3) , applications include multimedia speaker, digital audio processor
MS8422N	1.8V-5.5V	40mA	28kHz-216kHz	SPI or I2C software mode, Hardware mode	4:1 IIS	IIS Align left Align right	QFN32	24bit, 192KHz, Built-in asynchronous sampling digital audio interface receiver, applications include multimedia speaker, digital audio processor

Type	Type of Switch	Ron	Data rate	Vs span	Iq	Package	Description
MS4553M/S	2CH bidirectional level switching	---	Push-pull mode: 20Mbps Leak-open mode: 2Mbps	Terminal A: 1.65V-5.5V Terminal B: 2.3V-5.5V	10 μA	MSOP8/SOT23-8	2bit Bidirectional Voltage-Level Translator for open drain mode and push-pull mode
MS6212D	2CH bidirectional level switching	---	Push-pull mode: 20Mbps Leak-open mode: 2Mbps	Terminal A:1.65V - 5.5V Terminal B: 2.3V-5.5V	10 μA	DFN8	2bit Bidirectional Voltage-Level Translator for open drain mode and push-pull mode
MS4554N/ MS4554N1	4CH bidirectional level switching	---	Push-pull mode: 10Mbps Leak-open mode: 2Mbps	Terminal A:1.65V - 5.5V Terminal B: 2.3V-5.5V	10 μA	QFN14/QFN12	4bit Bidirectional Voltage-Level Translator for open drain mode and push-pull mode

Type	Type of Switch	Ron	-3dB Bandwidth	Vs span	Iq	Package	Description
MS2244	Choose one of the three	——	10MHz	5.0V - 12V	16.5mA	SOP8	Audio switch & driver
MSUSB30/N	DPDT	4.5Ω	550MHz	1.8V - 5.5V	1μA	MSOP10/QFN10	Hi-Speed USB 2.0 Switch
MS2534N	DPDT	4.5Ω	550MHz	1.8V - 5.5V	1μA	QFN20	Hi-Speed USB 2.0 Switch
MS703D	SPST+DPDT	4.5Ω	550MHz	1.8V - 5.5V	1μA	DFN12	high speed analog switch
MS713T	4CH	2.5Ω	200MHz	1.8V - 5.5V	1μA	SOP16/TSSOP16	SW-SPST
MS714/T	8CH	2.5Ω	200MHz	1.8V - 5.5V	1μA	QFN20/TSSOP20	SW-SPST
MS715T	10CH	2.5Ω	200MHz	1.8V - 5.5V	1μA	TSSOP24	CMOS Low Voltage, Low On-Resistance, 10CH Switch
MS3494	8x16 analog matrix switch	45@12V	45MHz	4.5V - 13.2V	1μA	PLCC44	Wide voltage range, 8x16 analog matrix switch



Type	Number of full bridges	Vs (Min)–Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS3111D/S	1	1.8V – 6V	0.8A	1A	850mΩ	IN1/IN2	DFN8/SOT23-6	Single channel low-voltage full bridge drive, low cost
MS31051S/D	1	1.8V – 6V	1.2A	1.8A	480mΩ	IN1/IN2	SOT23-6/DFN8	Single independent full bridge, low cost, single channel, high current
MS3010	1	1.8V – 6V	0.8A	1A	850mΩ	IN1/IN2	SOP8	Single channel low-voltage full bridge drive, low cost
MS3112	2	1.8V – 6V	0.8A	1A	850mΩ	IN1/IN2	eTSSOP16	Dual channel low-voltage full bridge drive, low cost
MS3114	4	1.8V – 6V	0.8A	1A	850mΩ	IN1/IN2	QFN24	Four channel low-voltage full bridge drive, low cost
MS31001D	1	2.0V – 5.5V	0.8A	1A	1130mΩ	IN1/IN2	DFN8	Single channel low-voltage full bridge drive with low current hold mode
MS31011D	1	2.0V – 5.5V	0.8A	1A	1130mΩ	IN1/IN2	DFN8	Single channel low-voltage full bridge drive with locked rotor detection
MS31010S	1	2.0V – 6V	0.85A	1.2A	1130mΩ	IN	SOT23-6	Single channel low-voltage full bridge drive, single line pulse control
MS8837	1	1.8V – 12V	—	1.4A	420mΩ	IN1/IN2	DFN8	Single channel 12V full bridge drive, working voltage as low as 1.8V, sleep pin control

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Type	Number of full bridges	Vs (Min) - Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
*MS31908	4	4.5V - 32V	1A	1.4A	1.5 Ω	SPI	HTSSOP24L	8-way half-bridge output, with advanced diagnosis, Daisy chain function, through SPI interface to PWM generator programming, integrated protection function
MS31542	2	4V - 12V	1.1A	1.5A	850m Ω	IN1/IN2	eMSOP10	Double full bridge, small package, simple periphery

Type	Number of full bridges	Vs (Min) – Vs (Max)	Pre-drive pull-up capability	Pre-drive pull-down capability	Control interface	Package	Description
MS31703NA	1	5.5V – 45V	250mA	400mA	PH/EN SPI PWM	QFN32	Single-channel H-bridge gate driver, three control modes, adjustable gate drive capability, with a current sense amplifier, complete protection functions
MS31702NA	1	5.5V – 45V	250mA	400mA	IN1/IN2 PH/EN	QFN32	Single channel H-bridge gate Driver, three control modes, configured via hardware ports, adjustable gate drive capability, With a current detection amplifier, complete protection function

Type	Number of full bridges	Vs (Min)-Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS41908M	5	3V - 5.5V	300mA	400mA	2500mΩ & 3300mΩ	SPI	QFN44	Camera lens focus 、 Automatic aperture drive, 256 subdivision steps
MS41928M	5	3V - 5.5V	500mA	650mA	1600mΩ & 3600mΩ	SPI	QFN44	Camera lens focus 、 Automatic aperture drive, 256 subdivision step, 1.8V interface
MS41938M	5	3V - 5.5V	500mA	650mA	1600mΩ & 3600mΩ	SPI	QFN44	Camera lens focus 、 Automatic aperture drive, 256 subdivision step, 1.8V interface, support passive crystal
MS41909	4	3V - 5.5V	500mA	600mA	1500mΩ & 1000mΩ	SPI	QFN44	Built-in 256 subdivision、 dual channel low voltage stepper motor driver
MS41919	5	3V - 5.5V	500mA	600mA	1500mΩ & 1000mΩ	SPI	QFN44	Built-in 256 subdivision、 dual channel low voltage stepper motor driver (with IR-cut driver1)
MS41929	5	3V - 5.5V	500mA	600mA	1500mΩ & 1000mΩ	SPI	QFN32	Built-in 256 subdivision、 dual channel low voltage stepper motor drive, support passive crystal oscillator (with IR-CUT drive)
MS41939	3	3V - 5.5V	500mA	600mA	1500mΩ & 1000mΩ	SPI	QFN24	Built-in 256 subdivision、 single channel low voltage stepper motor driver (with IR-CUT drive)
MS41949	9	4V - 5.5V	500mA	1A	1530mΩ	SPI	QFN48	Built-in 256 subdivision、 four channel low voltage stepper motor drive (with IR-CUT drive)
MS41968	10	3V - 5.5V	400mA	500mA	1100mΩ	SPI	QFN88	Built-in 256 subdivision、 integrated automatic aperture drive, four-channel stepper motor drive, two-channel DC motor drive, four-channel LED drive, support 1.8V interface, support passive crystal oscillator



Type	Number of full bridges	Vs (Min)-Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS41959	9	4V - 5.5V, 7V -13.5V	500mA, 1A	1A, 1.5A	1530mΩ & 620mΩ	SPI	QFN48	Built-in 256 subdivision four-channel stepper motor drive (with IR-CUT drive), two ways high voltage, two ways low voltage, 256 subdivision, integrated IRCUT
MS41969	5	7V -13.5V	1A	1.5A	620mΩ	SPI	QFN36	Built-in 256 subdivision two-channel high voltage stepper motor drive (with 5V IR-CUT drive)
MS35009	7	2.7V - 5.5V	500mA	0.8A	1500mΩ	SPI	QFN44	Digital camera lens motor drive, 7 channels, including DC motor and voice coil motor motor drive
MS32006	5	3V - 5.5V	500mA	---	1000mΩ	I2C	QFN24	Motor drive of shaking machine ,5CH, low cost, support 1.8V interface
MS32007	5	3V - 5.5V	500mA	---	1000mΩ	I2C	QFN24	Shaking head machine Drive, 5 channels, low cost, Support 1.8V interface, I2C control, built-in system clock
MS3988N	4	8V - 36.0V	800mA	1.2A	1400mΩ	PWM	QFN36	2CH stepper motor driver,high voltage
MS3989/N	4	8V - 36.0V	800mA	1.2A	1400mΩ	PWM	TQFP48/QFN36	Low stopping noise 2CH stepper motor driver,high voltage, silent optimization during shutdown
MS3999	4	8V - 36.0V	800mA	1.2A	1400mΩ	I2C	TQFP48	Built-in 8bit DACLow stopping noise stepper motor driver,high voltage, I2C interface
MS35639PE	4	8V - 36.0V	800mA	1.2A	1000mΩ	I2C	TQFP48	I2C interface control, Built-in 8bit DAC, low shutdown noise dual stepper motor drive
MS35631/N	4	8V - 36.0V	800mA	1.2A	1000mΩ	PWM	TQFP48/QFN36	Low stop noise dual step motor drive, high voltage, stop silent optimization, over current protection
MS35632N/ ΔMS35632P	4	8V - 36.0V	800mA	1.2A	1000mΩ	PWM	QFN36/TQFP48	Low stop noise dual step motor drive, high voltage, stop silent optimization



Type	Number of full bridges	Vs (Min)-Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS35612/N	4	8V - 36V	1A	1.2A	1000mΩ	PWM	TQFP48 /QFN36	Low stop noise dual stepper motor drive, high voltage, shutdown mute optimization, overcurrent protection
MS35656N	2	7V - 30V	1.4A	2A	500mΩ	PWM	QFN28	Low shutdown noise single circuit stepper motor drive, high voltage, Shutdown mute optimization, overcurrent protection
MS35657/N	2	7V - 30V	1.4A	2A	490mΩ	PWM	eTSSOP28/ QFN28	Low shutdown noise single circuit stepper motor drive, high voltage, Shutdown mute optimization, overcurrent protection
MS35776/ MS35776A	2	4.7V - 36.0V	1.4A	2A	570mΩ	step/dir	QFN28	Built-in 256 subdivision stepper motor drive, ultra-low noise high-voltage stepper motor, speed adaptive torque adjustment, built-in mos, with mode switching control pin
MS35774/ MS35774A	2	4.7V - 36.0V	1.4A	2A	570mΩ	step/dir	QFN28	Built-in 256 subdivision stepper motor drive, ultra low noise high voltage stepper motor, speed adaptive torque adjustment, built-in MOS
MS4988B	2	7V - 35.0V	---	1.5A	730mΩ	step/dir	QFN28	Built-in 16 subdivision 1CH stepper motor driver
MS4989	2	7V - 35.0V	---	2A	750mΩ	step/dir	TSSOP28	Built-in 16 subdivision single step motor drive, decay time adjustable
MS4998	2	7V - 35.0V	---	2A	750mΩ	step/dir	TSSOP28	Built-in 256 subdivision single step motor drive, decay time adjustable



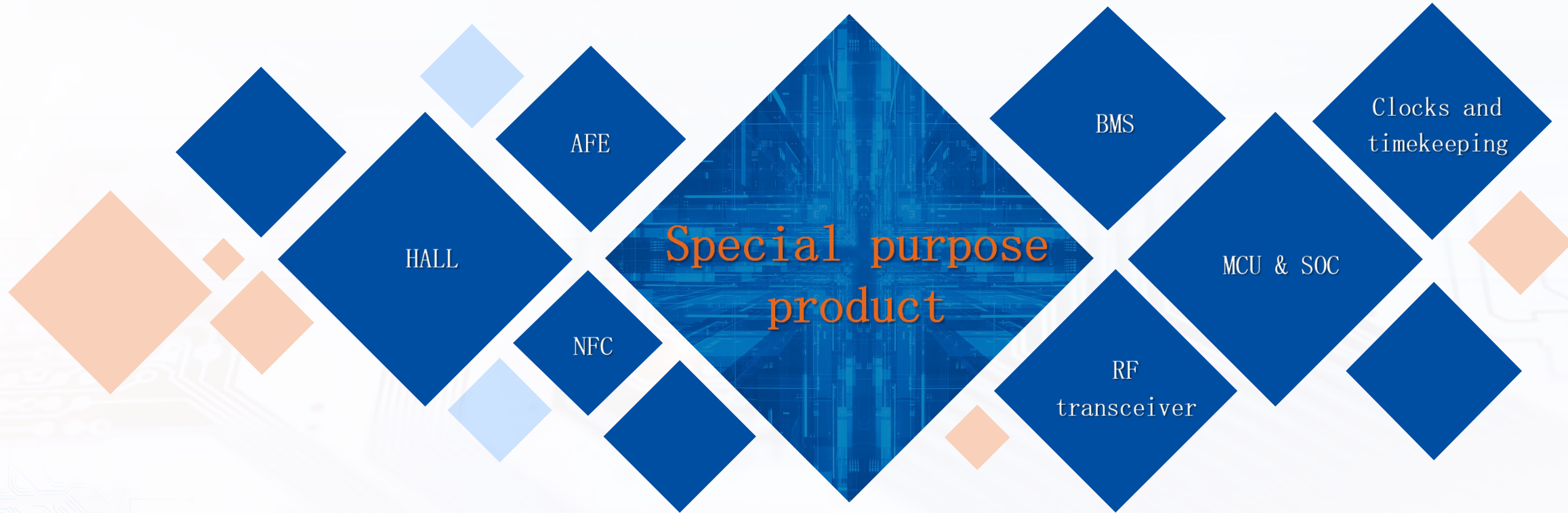
Type	Number of full bridges	Vs (Min)-Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS35711T/ MS35711TE	2	8V-60V	---	---	---	SPI	TSSOP38/ TSSOP38/PP	Built-in 256 subdivision stepper motor driver, current mode, blocking detection, external MOS
MS35930	2	4.75V - 36.0V	1A	2.5A	570mΩ	step/dir, uart, spi	TQFP48	Built-in 256 subdivision stepper motor driver, ultra-low noise high voltage stepper motor, speed adaptive torque adjustment, load detection, load adaptive torque adjustment
MS35229N	2	4V - 15V	1A	1.4A	1Ω	I2C	QFN16	Built-in 256 subdivision microstepper with instruction register, low noise and low vibration, built-in system clock
MS31805TE	4	7.2V - 60V	1.4A	2A	420mΩ	STEP/ DIR	eTSSOP16	Single pole stepper motor drive, 4 low side power drives, built-in high side freewheeling diode
*MS35580TEA	2	5.5V - 50V	1A	1.4A	1.05Ω	S/D and SPI	TSSOP28/PP	Stepper motor drive with built-in encoder, equipped with short circuit protection and motor stall detection function

Type	Vs (Min)–Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS8828	8V – 36V	——	1.5A	850mΩ	PWM	QFN24	Three phase inductive square wave BLDC pre-drive,Feeling, square wave, 3FG output
MS8829	8V – 36V	——	1.5A	850mΩ	PWM	QFN24	Three phase inductive square wave BLDC pre-drive,Feeling, square wave, FG output
MS39361N	3V – 10V	1.5A	——	400mΩ	PWM	QFN24	Three-phase sensible square wave BLDC drives sensible, square wave, FG output
MS3791	4.7V– 36V	<10A	——	——	——	QFN28	Three phase inductive square wave BLDC pre-drive,Inductive, square wave, external mos, low voltage 5V operation
MS4931	8V – 36V	<10A	——	——	PWM	QFN28	Three phase inductive square wave BLDC pre-drive,Feeling, square wave, external mos
MS4932/N	8V – 18V	<10A	——	——	PWM	LQFP32/QFN32	Three phase sensed sine wave BLDC pre-drive,Support space vector modulation (SVM), support sine wave and square wave solutions, current leading phase correction, three-level overcurrent protection (OCP)
MS4933	8V – 18V	<10A	——	——	PWM	LQFP32	Three phase sensed sine wave BLDC pre-drive,Support space vector modulation (SVM), support sine wave and square wave solutions, current leading phase correction, three-level overcurrent protection (OCP), with standby mode
MS39233	1.8–12V	2A	2.8A	420mΩ	EN/IN	QFN16	Low voltage three independent half bridge drivers, independent EN/IN half bridge control logic, standby mode
*MS39234	1.8–10V	2A	2.8A	420mΩ	EN/IN	QFN20	Low voltage four independent half bridge drivers, independent EN/IN half bridge control logic, standby mode
MS8313/N	8V – 36V	1.75A	2.5A	440mΩ	EN/IN	TSSOP28/QFN36	Three independent half bridge high current drives, independent EN/IN half bridge control logic, with a built-in comparator

Type	Vs (Min)–Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
*MS39531N	5V-16V	—	3A	130mΩ	PWM/VSP	QFN24	Three phase non inductive BLDC sine wave drive, 180 degree sine wave drive with low noise characteristics, Efficient and insensitive control, lock detection, overcurrent protection, short circuit protection, and soft start
*MS39533	5V-24V	2. 5A	5A	140mΩ	PWM	QFN40	Three independent half bridge high current drives, PWM control, with a switching frequency of up to 1MHz
MS37545/ MS37549	4V-24V	<10A	—	—	PWM/VSP/VDD	QFN16	Three phase non-inductive BLDC sine wave pre-drive, 180-degree sine drive with low noise, high efficiency control algorithm, non-inductive control, stall protection and self-starting, low power consumption
MS39545/ MS39549	4V-16V	—	1. 6A	800mΩ	PWM/VSP/VDD	SOP8/PP	Three phase non-inductive BLDC sine wave drive, 180-degree sinusoidal drive with low noise, high efficiency control algorithm, non-inductive control, stall protection and self-starting
MS39545-A/ MS39549-A	4V-24V	—	1. 6A	800mΩ	PWM/VSP/VDD	SOP8/PP	Three phase non-inductive BLDC sine wave drive, 180-degree sinusoidal drive with low noise, high efficiency control algorithm, non-inductive control, stall protection and self-starting
MS39535/ MS39539	4V-24V	—	1. 6A	800mΩ	PWM / VDD	SOP8/PP	Three phase non-inductive BLDC sine wave drive, 180-degree sinusoidal drive with low noise characteristics, high-sensitivity start-up, high-efficiency non-inductive control, stall detection, overcurrent protection, short circuit protection and soft start
MS39545D/ MS39549D	4V-24V	—	1. 6A	800mΩ	PWM / VDD	DFN8	Three phase non-inductive BLDC sine wave drive, small package size, 180-degree sinusoidal drive with low noise characteristics, high-efficiency non-inductive control, stall detection, overcurrent protection, short circuit protection and soft start
*MS37906N	5. 5V-48V	—	—	—	PWM/VSP	QFN28	Three-phase non-inductive FOC control scheme, with brake and direction control, integrated constant speed, constant torque, constant power, or open-loop control mode, wind rotation start, stall protection, ultra-low noise, complete protection functions

Type	#of Amps	Vs (Min) -Vs (Max)	RMS output current (A)	peak current	RDS (ON) (HS + LS) (mOhms)	Control interface	Package	Description
MS31803TE	4	7.2V - 60V	1.4A	2A	420mΩ	EN/IN	eTSSOP16	EN/IN control, 4 low-side power drivers, built-in high-side freewheeling diode
MS31804TE	4	7.2V - 60V	1.4A	2A	420mΩ	SPI	eTSSOP16	Serial data interface control, 4 low-side power drivers, built-in high-side freewheeling diode
MS31813TE	4	7.2V - 60V	1.4A	2A	420mΩ	EN/IN	eTSSOP16	EN/IN control, 4 low side power drives, built-in high side freewheeling diode
*MS31814TE	4	7.2V - 60V	1.4A	2A	420mΩ	SPI	eTSSOP16	Serial data interface control, 4 low side power drives, built-in high side freewheeling diode
MS31860T	8	6.5V - 38V	600mA	700mA	1.5Ω	SPI	eTSSOP16	Serial data interface control, 8-channel low-side drivers, built-in high-side freewheeling diodes for daisy-chaining multiple devices

Type	#of Amps	V _s (Min) – V _s (Max)	Supporting power device	Peak current	Rise time	Descent time	Package	Description
MS30517SA	1	4.5V – 18V	MOSFET, IGBT, GaFET	4A	9ns	7ns	SOT23-5	EN/IN control, 1 low side power drives, built-in high side current diode



Type	Architecture	Resolution	Sample Rate	input cinfigation	Interface	Vcc span	Icc	Package	Description
MS9943	CDS +(pipelined ADC)	10bit	25MSPS	CCD analog signal input	parallel	2.7V - 3.6V	26mA	QFN32	10bit, 25MHz CCD signal analog-to-digital converter Integrated correlated double sampling circuit Integrated PGA Integrated dark pixel clamp circuit
MS9945	CDS +(pipelined ADC)	12bit	40MSPS	CCD analog signal input	parallel	2.7V - 3.6V	46mA	QFN32	12bit, 40MHz CCD signal analog-to-digital converter Integrated correlated double sampling circuit Integrated PGA Integrated dark pixel clamp circuit
MS9912N	Amp +(Σ-Δ ADC)	12 - 16bit	480SPS	Blood glucose analog signal input	I2C	2.5V - 3.6V	1.4mA	QFN36	Simulation of blood glucose test AFE Integrated high-precision amplifier Integrated internal benchmark Integrated internal amplifier
MS9913N	Amp +(Σ-Δ ADC)	12 - 16bit	480SPS	Blood glucose analog signal input	I2C	2.5V - 3.6V	1.4mA	QFN36	Blood sugar test simulates AFE chip Integrated high precision amplifier Integrated internal benchmark Integrated internal amplifier OP1,OP2 Internal and external bias voltages are optional
MS9842SS	CDS+(pipelined ADC)	16bit	15MSPS	CCD/CIS analog signal input	Multiplexed byte output	3V - 3.6V	51mA	SSOP20	16bit, 15MHz CCD/CIS signal analog-to-digital converter Integrated correlated double sampling circuit Integrated PGA Integrated clamping circuit

Type	Architecture	BW	input cinfuration	Gain	Interface	Vcc span	Icc	Package	Description
MS91050	Amp + LPF +Amp	First level: 18KHz Second level: 360KHz	Single channel input	167-7986 times	SPI	2.7V - 5.5V	3.9mA	MSOP10	Configurable AFE for nondispersive infrared (NDIR) sensors ntegrated internal PGA Integrated common-mode generator
MS91051	Amp + LPF +Amp	First level: 18KHz Second level: 360KHz	Dual input	167-7986 times	SPI	2.7V - 5.5V	3.9mA	TSSOP14	Configurable AFE for nondispersive infrared (NDIR) sensors ntegrated internal PGA Integrated common-mode generator
MS1000TA	Amp+PGA+COMP	First level: 5KHz Second level: 12KHz	Two-channel input	20-41dB	SPI	2.7V - 5.5V	8mA	TSSOP28	Ultrasonic measurement analog front end, internal integrated low noise amplifier, programmable gain amplifier, temperature sensor

Type	Supply voltage	Supply current	Interface	Package	Description
MS9920T	BAT:7.5V-25V	SHIP mode: 800nA; Normal working mode: 155uA	I2C	TSSOP20	3 to 10 lithium battery or phosphate battery management chips
MS9930T	BAT:15V-42V	SHIP mode: 800nA; Normal working mode: 155uA	I2C	TSSOP30	3 to 10 lithium battery or phosphate battery management chips
MS9940T	BAT:22.5V-63V	SHIP mode: 800nA; Normal working mode: 155uA	I2C	TSSOP48	11 to 15 lithium or phosphate battery management chips

Type	Supply voltage	Supply current	Interface	Package	Description
MS5351/M	VDD: 2.7V-3.3V VDDIO:1.8V-3.6V	3.0V power supply, three channels fully open, maximum driving capacity, 46mA at 100MHz output	I2C	eMSOP10/MSOP10	I ² C Programmable output CMOS clock generator at frequency 2.5kHz - 200MHz
MS1152D	VDD: 2.7V-3.3V VDDIO: 1.8V-3.6V	3.0V power supply, two channels fully open, maximum drive capacity, 100MHz output time 41mA	I2C	DFN8	I ² C Programmable arbitrary frequency output CMOS clock generator 2.5kHz-200MHz
MS72300	Charge pump power supply 2.7V-5.25V Other power supply 2.7V-3.6V	Main and auxiliary loops are fully open: 17mA@3V	SPI	QFN24	Main loop: 2.1GHz stray-free fractional N divider synthesizer Secondary loop: 500MHz stray-free fractional N divider synthesizer
MS72310/ MS72310N1	Charge pump power supply 2.7V-5.25V Other power supply 2.7V-3.6V	8.5mA@3V	SPI	QFN24/QFN20	2.1GHz stray-free fractional N divider synthesizer

Type	Supply voltage	Clock output	interface	Package	Description
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MS85163/M	1.8V-5.5V	32.768kHz, 1.024kHz, 32Hz, 1Hz	I2C	SOP8/MSOP8	Real-time clock and calendar circuit
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Type	Supply voltage	Supply current(TX1/2 end output is floating)	Operating frequency	Interface	Working mode	Package	Description
MS512	2.5V-3.6V	35mA	13.56MHz	SPI, I2C, UART, 8-bit parallel interface	Reader / writer mode of ISO /IEC 14443A, ISO/IEC 14443B, FeliCa Card operation mode of ISO /IEC 14443A, FeliCa NFCIP-1 mode	QFN32	The contactless card reader IC
MS520	2.5V-3.6V	35mA	13.56MHz	SPI	ISO/IEC 14443A reader mode	QFN32	The contactless card reader IC
MS523	2.5V-3.6V	35mA	13.56MHz	SPI、I2C、UART	ISO/IEC 14443A, ISO/IEC 14443B reader mode	QFN32	The contactless card reader IC

Type	Supply voltage	Standby current	Package	Description
MS616F512	1.8V-3.6V	1 μ A	LQFP100	16bit low power consumption MCU
MS616F512NS	1.8V-3.6V	1 μ A	QFN48	16bit low power consumption MCU
MS616F22	1.8V-3.6V	3 μ A	QFN48	Ultrasonic water meter SOC circuit
MS616F187	1.8V-3.6V	2 μ A	QFN88	Blood glucose meter SOC circuit

Type	Supply voltage	Supply current	Withstang voltage	-3dB Bandwidth	output drive capability	Working point	Release point	Hysteresis	Package	Description
MS40/S	4.5V - 24V	<10mA	60V	>100kHz	<20mA	4mT	-4mT	8mT	T0-92S/ TSOT23-3L	Bipolar Hall, used in DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS41/S	4.5V - 24V	<10mA	60V	>100kHz	<40mA	4mT	-4mT	8mT	T0-92S/ TSOT23-3L	Bipolar Hall, used in DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS411	3V- 40V	<8mA	60V	>100kHz	<30mA	2.5mT	-2.5mT	3mT	T0-92S	Bipolar Hall, used in DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS413/S	3V- 40V	<8mA	60V	>100kHz	<30mA	6.5mT	-6.5mT	11mT	T0-92S/ TSOT23-3L	Bipolar Hall,used in DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS466	3V- 40V	<8mA	60V	>100kHz	<30mA	13mT	-13mT	26mT	T0-92S	Bipolar Hall, used in DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS443/S	3V- 40V	<8mA	60V	>100kHz	<30mA	15mT	10mT	5mT	T0-92S/ TSOT23-3L	Unipolar Hall, applied to DC brushless motors (electric vehicle motors, air conditioning motors, washing machine motors, etc.)、 speed and speed sensing, flow rate detection
MS451/S	3V - 36V	<6mA	60V	>100kHz	<40mA	9mT	6mT	3mT	T0-92S/ TSOT23-3L	All pole Hall switch0mnipolar Hall, used for speed and speed detection、 printer head direction sensing、 liquid level position detection, etc.

Type	Supply voltage	Supply current	-3dB Bandwidth	output drive capability	0 magnetic field center point	Sensitivity	temperature drift	Package	Description
M49E	3V - 6.5V	<8mA	>100kHz	1.5mA	2.5±200mV	1.4mV/gauss	-0.04 to 0.185%/℃	T0-92S	Linear Hall, used in electric vehicles、 motorcycle speed control、 motor control、 liquid level detection、 weight detection
M496B	4.5V -10.5V	<10mA	>100kHz	1.5mA	2.5±150mV	2.5mV/gauss	-0.02 to 0.06%/℃	T0-92S	Linear Hall, used in electric vehicles、 motorcycle speed control、 motor control、 liquid level detection、 weight detection
MS1820	4.5V - 5.5V	<10mA	10kHz	1mA	Programmable 2.5 ± 10mV	Programming ranges from 1to11mV/gauss	-0.03 to 0.03%/℃	T0-94	Linear programmable Hall for linear position measurement、 angle sensor、 distance measurement、 magnetic field and current measurement

PART THREE



QUALITY SYSTEM

Customer first, First-class quality
Good faith keep promise, excellence



General manager

Quality management
department

Quality system

Quality system
standardization

Supplier
management

Supplier quality
management
Customer quality
assurance

Quality
assurance

Process quality
assurance
Customer quality
assurance

Reliability
guarantee

Reliability test
Reliability
monitoring

Failure analysis

FA failure analysis
Feedback analysis



External audit

Third-party audit

Customer audit

New system
introduction audit

Supplier audit

Supplier routine
audit

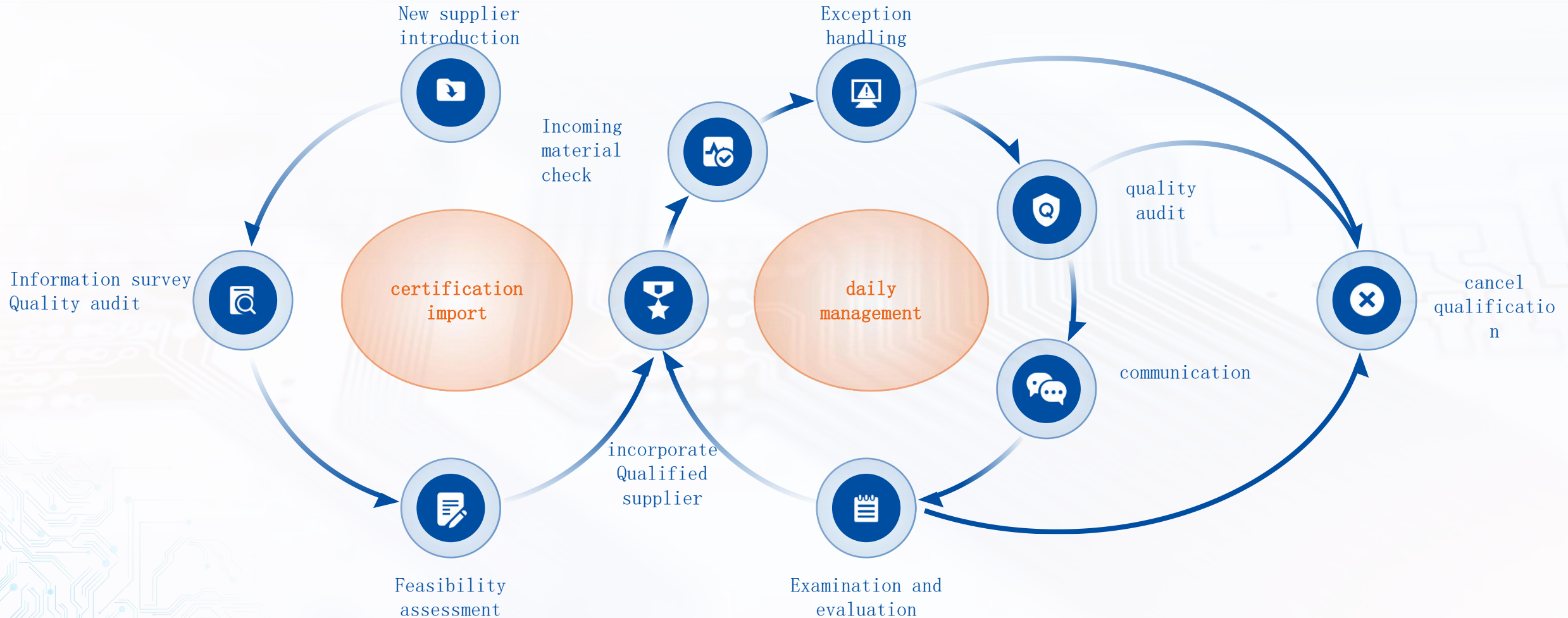
New supplier import
audit

Internal audit

Internal audit

Management audit

In order to ensure product quality, the company introduces new suppliers with the principle of quality first
Manage suppliers effectively with whole process management



Provide reliability certification, reliability evaluation and reliability monitoring for products and processes



Rapid temperature change
test chamber



Cold and hot impact test
chamber



High temperature test
chamber



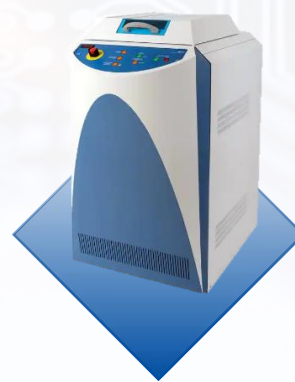
High speed aging test
chamber



SEM



EMMI



ESD/LU机台



Temperature cycle test
chamber



FIB







顾客满意 是瑞盟永远的追求

CUSTOMER SATISFACTION IS OUR ETERNAL PURSUIT



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