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MShine Technologies Corp.

MShine Technologies Corp. is a professional IC design House, headquarter and research & development center located in Hsinchu, Taiwan. Our major business activities focused in the area of IC design and marketing. Our Professional design team has over fifteen years solid experience on IC design, especially on Industrial & Home Appliance ICs & MCUs, Voice playing & voice Recording, Toys and Telecom. For those years, we supply reliable and extremely competitive products, these help our customers to gain orders easily.

APal Technology Co. Ltd

APal Technology Co. Ltd is a member of MShine Group. We concentrate on Sales of Greater China and worldwide, also provide professional technical support on our customers. For over 10 years sale experience, our customers are from many different places over the world and they establish good relationship with us. Our business aims is to offer extremely competitive solution to our business partners and rapidly provide professional technical supports & ideas to them. We hope these can help our customers to gain more business.

Product Line Status

Voice Recording ICs & MCUs

In 2014, we plan to launch 3 new ICs (MS231, MS232 & MS233) for special recording Applications. On the other hand, we re-design a new series recording IC, which has much improvements: upgrade to 16bit audio codec, enhance the noise reduction technology, increase audio output power. To comply market competition, this new series integrate much external components and reduce bonding wires, that meanings customer can further reduce total BOM Cost and size of PCB. MS205 (Simple Recording IC), MS215 (Recording IC with Preload Voice), MS225 (Talk back IC), MS311 (Simple Recording MCU) will come on 2014.

8-bit MCUs

In 2014, new OTP MCU (MS6xP) series will be launched. MS6xP Series are RISC Core OTP MCUs with Industrial Grade Standard, those MCUs have ADC, PWM, PFD which is suitable for most applications, especially, MS61P10, which is designed for Power Bank Application and can perform most function & detection to fulfill different requirement of Power Bank. For Advanced Applications, MS89F series high speed 8051 MCUs, which adopt Flash ROM. Those MCUs use 1T 8051 CPU, can reach 1T / 20MHz. They also has multi-channel high r ADC, PWM, SPI, UART, I2C interface and also be industrial grade.

Power Bank IC

Power Bank is a new IC Product Line. MS501 is designed for Power Bank of Mobile Device which supports 3 different Charging Methods : Trickle Charging, Constant-Current Charging & Constant-Voltage Charging. MS501 has Strong Protection by various detections : No Load Detection, Over Voltage Detection, Over Current Detection & Over Temperature Detection. Using these Detections & Management, MS501 can Control the current and determine to use the best Charging Modes

Caller ID MCUs

For over past 10 years, we develop many Caller ID chipsets, they are applied on Caller ID Phone, Caller ID box, Cordless Phone, Digital Answering Machines and SMS Phone. To comply more restrict standard and against price competition from market, we launch MS85066 (CLID TYPE II), MS8510 (LCD Phone MCU).

MShine Technologies Corp.

IC MCU IC

APal Technology Co. Ltd

Year	Product Line	Product Name	Key Features / Applications
2014	MCU	(MS231, MS232, MS233)	Special recording Applications, 16bit audio codec, noise reduction technology, increase audio output power.
		MS205 ()	(Audio Codec)
2014	MCU	MS215 ()	Recording IC with Preload Voice
		MS225 ()	Talk back IC
2014	MCU	MS311 ()	Simple Recording MCU
		MS205 ()	Simple Recording IC
2014	8-bit MCU	MS6xP	RISC Core OTP MCUs with Industrial Grade Standard, ADC, PWM, PFD
		MS89F	High speed 8051 MCUs, adopt Flash ROM, 1T 8051 CPU, 1T / 20MHz
2014	Power Bank IC	MS501	Power Bank of Mobile Device, supports 3 different Charging Methods, Strong Protection
		MS501	Power Bank
2014	Caller ID MCU	(Caller ID)	Caller ID Phone, Caller ID box, Cordless Phone
		(SMS)	Caller ID Phone, Caller ID box, Cordless Phone
2014	Caller ID MCU	MS85066 (CLID TYPE II)	Caller ID Phone, Caller ID box, Cordless Phone
		MS8510 (LCD Phone MCU)	Caller ID Phone, Caller ID box, Cordless Phone

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Voice Recording IC Family & Roadmap

2014 2H



MS215
8s – 32mins
Multi-function
Recording IC
(Several Preload Segments,
Voice Change, Mix Voice,
Repeat)



MS225
8-15s
Auto Record
& Talkback IC
(Voice Change)



MS232
Flexible Voice
Recording IC
(User friendly Software to edit
the flow of function)

2014 1H



MS205
8s – 22s
One Segment
Recording IC
(Voice Change)



MS233
Toy Mobile
Phone IC
(Interface with 2.4GHz RF
Module)



MS311
15s – 64mins
Simple Recording
MCU

Now



MS203
8s – 22s
One Segment
Recording IC
(Voice Change, One Key
Operation, Erase Key)



MS213
4 x 8s – 64s
Multi-Recording
Segments
Recording IC
(Max 4 Rec Segments, Voice
Change, Mix Voice, Repeat)



MS222
6s / 10s
Pitch Shift Voice
Change with Preload
Talkback IC



MS212
8s – 32mins
Multi-function
Recording IC
(Several Preload Segments,
Voice Change, Mix Voice,
Repeat)



MS221
6s / 10s
Pitch Shift Voice
Change
Talkback IC



MS230
Story Teller IC with
Auto Talkback &
Hardware Capacitive
Touch Keys
(User friendly Software to edit
the flow of function)



MS342
15s – 64mins
Recording OTP
MCU with Touch
Capacitive Touch



RTS0075
6s
Recording IC with Melody
(SRAM)



MS202
8s – 22s
One Segment
Recording IC
(Voice Change)



MS211
15s – 32mins
Multi-function
Recording IC
(2 Segments, Voice Change,
Mix Voice, Repeat)



MS220
8-30s
Auto Record
& Talkback IC
(2 Segments, Voice Change)



MS231
Record IC for
Loudspeaker
(Preload Voice, Digital
Volume Control, Alarm)



MS322
15s – 64mins
Recording OTP
MCU



RTS0073
3s
Auto Record
& Talkback IC
(SRAM)



MS200
30s – 32mins
One Segment
Recording IC
(Voice Change)

SINGLE CHIP
RECORDING IC

SPI FLASH
RECORDING IC

SPI FLASH
RECORDING IC WITH
PRELOAD VOICES

SPI FLASH
TALKBACK IC

SPECIAL
APPLICATION
RECORDING IC

SPI FLASH
RECORDING MCU



2014下半年



MS215
8秒-32分钟
多功能录音芯片
(多段预录式, 变声, 混音, 重复)



MS225
8秒-15秒
声控录音芯片
(变声)



MS232
可編流程
錄音芯片
(可用简单计算机程式编辑
操作流程)

2014上半年



MS205
8秒-22秒
单段录音芯片
(变声)



MS233
玩具手机
芯片
(配合2.4GHz RF模块)



MS311
8秒-64分钟
简单录音
MCU

现在



MS203
8秒-22秒
单段录音芯片
(单按键操作, 变声, 清除键)



MS213
4段8秒-64秒
多段录音芯片
(段式, 变声, 混音, 重复)



MS222
6秒 / 10秒
带变调不变速
声控录音芯片
(2段预录式)



RTS0075
6秒
带音乐录音芯片
(非掉电保存)



MS202
8秒-22秒
单段录音芯片
(变声)



MS212
8秒-32分钟
多功能录音芯片
(多段预录式, 变声, 混音, 重复)



MS221
6秒 / 10秒
带变调不变速
声控录音芯片



MS230
说故事玩具芯片
带声控录音及
电容式触摸按键
(可用简单计算机程序编辑
操作流程)



MS342
8秒-64分钟
带电容式触摸按键
录音OTP MCU
(内置OP-AMP及AGC)



RTS0073
3秒
声控变声
录音芯片
(非掉电保存)



MS200
30秒-32分钟
单段录音芯片
(变声)



MS211
15秒-32分钟
多功能录音芯片
(二段式, 变声, 混音, 重复)



MS220
8秒-30秒
声控录音芯片
(二段式, 变声)



MS231
喊話器錄音芯片
(预录, 數位音量調節, 警
報, 重複)



MS322
15秒-64分钟
录音OTP MCU
(内置OP-AMP及AGC)

单芯片

SPI FLASH
录音芯片

可带预录语音 SPI
FLASH 录音芯片

SPI FLASH
声控录音芯片

特别应用
录音芯片

SPI FLASH
录音MCU



Voice Recoding IC Function Table

Functions	MS202	MS203	MS200	MS211	MS212	MS213	MS205 (2014)	MS215 (2014)	RTS0075 (Single Chip)
Support Rec / Preload Voice Length	8s~22s	8s~22s	30s~32min	8s~32min	8s~32min	4 x 8s~64s	8s~22s	8s~32min	6s
Single Segment Mode									
4 Recording Segments mode									
Pre-load Voice (Segment)				1	2	2		2	Fix Melody
Mix Mode									
Power On Welcome Message									
Recording Guide Message									
One Key Operation									
Preload Voice Play Key									
Recorded Voice Play Key									
Recorded Voice Erase Key									
Childish Voice Change									
Robotic Voice Change									
Auto Power On Rec. Voice Erase									
Recording Voice Protection									
LED Flash base on Vol. Level									
Voice Amplifier Mode									
Speaker acting Mic application									
Motor Driving									
Line-in Audio Recording									
PIR Trigger									
Internal LDO for SPI Flash									