



ISSI推荐选型

ISSI是一家国际性的高科技公司，专门从事设计、开发、制造和销售高性能集成电路存储器，是北美最大的SRAM制造商之一。ISSI的核心产品包括高速、低功耗的SRAM；中、低容量的DRAM；EEPROM及其他集成电路存储器。

ISSI的产品结合了集成电路设计的尖端技术与先进的制造工艺，满足了半导体器件市场和客户在多元化连接性、可携带性和宽带方面的要求。



Synchronous SRAM

Density	Org	Part No.
Pipelined and Flowthrough Synchronous SRAM		
4Mb	128Kx32/36	IS61LF12836A
		IS61LPS12836A
	256Kx16/18	IS61LF25618A
		IS61LPS25618A
8Mb	256Kx36	IS61LF25636A
		IS61LPS25636A
		IS61VPS25636A
	512Kx18	IS61LPS51218A
		IS61LF51218A
		IS61LPS51218A
18Mb	1Mx18	IS61LF102418A
		IS61LPS102418A
		IS61LPD51236A
	512Kx36	IS61LPS51236A
		IS61LPS51236A
		IS61LPS25672A
No-Wait Synchronous SRAM		
4Mb	128Kx32/36	IS61NLF12836A
		IS61NLP12836B
	256Kx18	IS61NLP25618A
		IS61NLP25636A
8Mb	256Kx36	IS61NLP25636A
		IS61NVP25636A
	512Kx18	IS61NLP51218A
		IS61NLF51218A
18Mb	1Mx18	IS61NLP102418
		IS61NLP51236
	512Kx36	IS61NLP51236

Dynamic RAM

Density	Org	Part No.	
3.3V SDR (Single Data Rate) Synchronous DRAM			
16M	1Mx16	IS42S16100E	
		IS42S16400F	
64M	4Mx16	IS42S16400F	
	2Mx32	IS42S32200E	
	128M	16Mx8	IS42S81600E
		8Mx16	IS42S16800E
256M	4Mx32	IS42S32400E	
	32Mx8	IS42S83200D	
		16Mx16	IS42S16160C
	8Mx32	IS42S32800D	
		512M	32Mx16
	16Mx32		IS42S32160C
2.5V DDR (Double Data Rate) Synchronous DRAM			
128M	8Mx16	IS43R16800CC	
	4Mx32	IS43R32400D	
256M	16Mx16	IS43R16160B	
	8Mx32	IS43R32800B	
1.8V DDR2 (Double Data Rate) Synchronous DRAM			
256M	8Mx32	IS43DR32800A	
		IS43DR86400B	
512M	64Mx8	IS43DR86400B	

Automotive SRAM

Density	Org	Part No.
256K	32Kx8	IS65C256AL
1M	64Kx16	IS64WV6416BLL
1M	64Kx16	IS64C6416AL
2Mb	128Kx16	IS64WV12816DBLL
4Mb	256Kx16	IS64LV25616AL
4Mb	256Kx16	IS64WV25616BLL
8Mb	512Kx16	IS64LV51216
8Mb	512Kx16	IS64WV51216BLL

Commodity DRAM

Density	Org	Part No.
16M	1Mx16	IC42S16100E
64M	4Mx16	IC42S16400F
128M	8Mx16	IC43R16800E
256M	16Mx16	IC42S16160C

Asynchronous SRAM

Density	Org	Part No.
High Speed, 5V		
256K	32Kx8	IS61C256AL
1Mb	64Kx16	IS61C6416AL
	128Kx8	IS61C1024AL
4Mb	256Kx16	IS61C25616AL
Low Power, 5V		
256K	32Kx8	IS62C256AL
1Mb	128Kx8	IS62C1024AL
High Speed, 3.3V		
256K	32Kx8	IS61LV256AL
1Mb	64Kx16	IS61LV6416
		IS61WV6416BLL
	128Kx8	IS63LV1024
		IS63LV1024L
		IS63WV1024BLL
2Mb	128Kx16	IS61LV12816L
	256Kx8	IS61LV2568L
4Mb	256Kx16	IS61LV25616AL
		IS61WV25616BLL
	512Kx8	IS61LV5128AL
		IS61WV5128BLL
8Mb	512Kx16	IS61LV51216
		IS61WV51216BLL
16Mb	1Mbx8	IS61WV10248BLL
	2Mbx8	IS61WV20488BLL
	1Mbx16	IS61WV102416BLL
Power Saver		
256K	32Kx8	IS62LV256AL
1Mb	64Kx16	IS62WV6416BLL
	128Kx8	IS62WV1288BLL
2Mb	128Kx16	IS62WV12816BLL
	256Kx8	IS62WV2568BLL
4Mb	256Kx16	IS62WV25616BLL
	512Kx8	IS62WV5128BLL
8Mb	512Kx16	IS62WV51216BLL
16Mb PSRAM	1Mbx16	IS62WV102416BLL

旺宏推荐选型



旺宏电子—创新型非易失半导体存储器解决方案的领导者，是世界上ROM和串行NOR Flash产品的最大供应商，同时也生产并行NOR Flash和安全Flash，为用户提供了低价格、高性能和高可靠性的Flash产品。

并行NOR Flash有多种电压可选，容量从4Mb到512Mb不等，每种型号都有多种封装可选。此外，针对4Mb和8Mb的产品，旺宏电子还提供了4mm×6mm的BGA封装，非常适合对空间要求严格的场合。

并行NOR Flash

Part number	Density	Organization	Access Times(ns)	Package	Vcc
5V标准读访问					
MX29F200CT/B	2Mb	× 8/ × 16	70/90	44-SOP,48-TSOP	5V
MX29F040C	4Mb	× 8	70/90	32-TSOP,32-PLCC	5V
MX29F400CT/B	4Mb	× 8/ × 16	70/90	48-TSOP ,44-SOP	5V
MX29F800CT/B	8Mb	× 8/ × 16	70/90	44-SOP,48-TSOP, 48-TFBGA	5V
3V标准读访问					
MX29LV004CT/B	4Mb	× 8	55R/70/90	32-TSOP,32-PLCC	3V
MX29LV040C	4Mb	× 8	55R/70/90	32-TSOP,32-PLCC	3V
MX29LV400CT/B	4Mb	× 8/ × 16	55R/70/90	48-SOP,48-TSOP,48-WFBGA,48-TFBGA,48-LFBGA,48-XFLGA	3V
MX29LV800CT/B	8Mb	× 8/ × 16	55R/70/90	48-SOP,48-TSOP,48-WFBGA,48-TFBGA,48-LFBGA,48-XFLGA	3V
MX29LV160DT/B	16Mb	× 8/ × 16	55R/70/90	48-SOP,48-TSOP,48-WFBGA,48-TFBGA,48-LFBGA,48-XFLGA	3V
MX29LV161DT/B	16Mb	× 16	90	48-TSOP, 48-WFBGA, 48-TFBGA, 48-XFLGA	3V
MX29LV320DT/B	32Mb	× 8/ × 16	70/90	48-TSOP, 48-TFBGA, 48-LFBGA, 44-SOP	3V
MX29LV321DT/B	32Mb	× 16	90	48-TSOP, 48-TFBGA	3V
MX29LV640ET/B	64Mb	× 8/ × 16	70	48-TSOP, 48-LFBGA	3V
MX29LV128DT/B	128Mb	× 8/ × 16	90/120	48-TSOP, 56-TSOP, 70-SSOP	3V
1.8V标准读访问					
MX29SL402CT/B	4Mb	× 8/ × 16	90	48-TSOP, 48-WFBGA, 48-TFBGA, 48-LFBGA	1.8V
MX29SL800CT/B	8Mb	× 8/ × 16	90	48-TSOP, 48-WFBGA, 48-TFBGA, 48-LFBGA	1.8V
页模式读访问					
MX29GL320EH/L	32Mb	× 8/ × 16	70	56-TSOP, 64-FBGA	3V
MX29GL320ET/B	32Mb	× 8/ × 16	70	48-TSOP, 48-LFBGA	3V
MX29GL640EH/L	64 Mb	× 8/ × 16	90	56-TSOP, 64-FBGA	3V
MX29GL640ET/B	64 Mb	× 8/ × 16	90	48-TSOP, 48-LFBGA	3V
MX29GL128EH/L	128 Mb	× 8/ × 16	90	56-TSOP, 64-FBGA,70-SSOP	3V
MX29GL128EU/D	128 Mb	× 8/ × 16	110	56-TSOP, 64-FBGA	3V
MX29GL256EH/L	256 Mb	× 8/ × 16	90R	56-TSOP, 64-FBGA,70-SSOP	3V
MX29GL256EU/D	256 Mb	× 8/ × 16	110	56-TSOP, 64-FBGA	3V
MX29GL512EH/L**	512 Mb	× 8/ × 16	110R	56-TSOP, 64-FBGA,70-SSOP	3V

旺宏提供业界标准串行NOR Flash产品，容量从512Kb至256Mb，并提供和以前产品兼容的MXSMIO™系列和MXSMIO™ Duplex(DTR)系列产品。

串行NOR Flash

Interface	Part number	Density	Organization	I/O Bus	Package	Clock Speed(MHz)
3V SPI接口	标准SPI接口					
	MX25L512C	512Kb	4Kb/64Kb	单	8-SOP, 8-TSSOP,8- USON(2×3mm)	85
	MX25L1005C	1Mb	4Kb/64Kb	单	8-SOP,8-USON(2×3mm)	85
	MX25L2005C	2Mb	4Kb/64Kb	单	8-SOP,8-WSON(6×5mm)	85
	MX25L4005C	4Mb	4Kb/64Kb	单	8-SOP, 8-PDIP,8-WSON(6×5mm)	85
	MX25L8005	8Mb	4Kb/64Kb	单	8-SOP, 8-PDIP, 8-SON8-WSON(6×5mm),8-USON(4×4mm)	86
	MX25L1605D	16Mb	4Kb/64Kb	单/双	8-SOP, 8-PDIP,16-SOP8-WSON(6×5mm),8-USON(4×4mm)	86/100
	MX25L3205D	32Mb	4Kb/64Kb	单/双	8-SOP, 8-PDIP, 16-SOP,8-WSON(6×5mm)8-USON(4×4mm)	86/100
	MX25L6405D*	64Mb	4Kb/64Kb	单/双	16-SOP,8-WSON(8×6mm)	86/100
	MX25L12805D†	128Mb	4Kb/64Kb	单	16-SOP	50
	默认写保护					
	MX25L1025C	1Mb	4Kb/64Kb	单	150mil 8-SOP	85
	MX25L2025C	2Mb	4Kb/64Kb	单	150mil 8-SOP	85
	MX25L2026C	2Mb	4Kb/64Kb	单	150mil 8-SOP	85
	MX25L4025C	4Mb	4Kb/64Kb	单	150mil 8-SOP	85
MX25L3225C	32Mb	4Kb/64Kb	单/双/多	200mil 8-SOP	104/150/300	

旺宏推荐选型



Interface	Part number	Density	Organization	I/O Bus	Package	Clock Speed(MHz)
3V SPI接口	MXSMIO™ & MXSMIO™ Duplex系列					
	MX25L1635D	16Mb	4Kb/64Kb	单/双/多	8-SOP, 16-SOP, 8-WSON(6×5mm)	104/150/300
	MX25L1636D	16Mb	4Kb/64Kb	单/双/多	8-SOP, 16-SOP	86/150/300
	MX25L3235D	32Mb	4Kb/64Kb	单/双/多	8-SOP, 16-SOP, 8-WSON(6×5mm)	104/150/300
	MX25L3236D	32Mb	4Kb/64Kb	单/双/多	8-SOP	104/150/300
	MX25L3237D	32Mb	4Kb/64Kb	单/双/多	16-SOP, 8-WSON(6×5mm)	86/150/300
	MX25L6436E	64Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP	104/140/280
	MX25L6445E	64Mb	4Kb/32Kb/64Kb	单/双/多/DTR	8-SOP, 16-SOP, 8-WSON(8×6mm)	104/140/280/400
	MX25L12836E	128Mb	4Kb/32Kb/64Kb	单/双/多	16-SOP	104/140/280
	MX25L12845E	128Mb	4Kb/32Kb/64Kb	单/双/多/DTR	16-SOP, 8-WSON**(8×6mm)	104/140/280/400
MX25L25635E**	256Mb	4Kb/32Kb/64Kb	单/双/多	16-SOP	80/140/280	
2.5V SPI接口	标准SPI接口					
	25V512C	512Kb	4KB / 64KB	单	8-WSON(2×3mm)	50
	25V4005C	4Mb	4KB / 64KB	单	8-SOP, 8-WSON(6×5mm)	50
	25V8005	8Mb	4KB / 64KB	单	8-SOP, 8-WSON(6×5mm)	50
	多端输入、多端输出					
	25V4035	4Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6×5mm)	66/100/200
25V8035	8Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6×5mm)	66/100/200	
1.8V SPI接口	MXSMIO™系列					
	25U4035	4Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6x5mm) **, 8USON(4×4mm)	40/80/132
	25U8035	8Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6x5mm) **, 8USON(4×4mm)	40/80/132
	25U1635E**	16Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-USON(4×4mm)	104/168/416
	25U3235E**	32Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6×5mm)	104/168/416
	25U6435E**	64Mb	4Kb/32Kb/64Kb	单/双/多	8-SOP, 8-WSON(6×5mm)	84/168/336

为了保护用户数据不被恶意读取，旺宏电子提供了安全Flash产品。它们通常用于机顶盒、数字电视以及其它对代码要求严格的场合。

安全Flash

Part number	Density	Organization	Access Time(ns)	Package	Vcc
标准读访问					
MX29LA320DH/L	32Mb	× 8 / × 16	70	64-FBGA	3V
MX29LA321DH/L	32Mb	× 8 / × 16	70	64-FBGA	3V
MX29LA640EH/L	64Mb	× 8 / × 16	90	64-FBGA	3V
MX29LA641DH/L	64Mb	× 8 / × 16	90	64-FBGA	3V
MX29LA128DT/B	128Mb	× 8 / × 16	90	64-FBGA	3V
MX29LA129DT/B	128Mb	× 8 / × 16	90	64-FBGA	3V
页模式读访问					
MX29GA320E H/L	32Mb	× 8 / × 16	70	64-FBGA	3V
MX29GA321E C/F	32Mb	× 8 / × 16	70	64-FBGA	3V
MX29GA321E H/L	32Mb	× 8 / × 16	70	64-FBGA	3V
MX29GA640E H/L	64Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA641E C/F	64Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA641E H/L	64Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA128E H/L	128Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA129E C/F	128Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA129E H/L	128Mb	× 8 / × 16	90	64-FBGA	3V
MX29GA256E H/L	256Mb	× 8 / × 16	90R	64-FBGA	3V
MX29GA257E C/F	256Mb	× 8 / × 16	90R	64-FBGA	3V
MX29GA257E H/L	256Mb	× 8 / × 16	90R	64-FBGA	3V

作为掩膜ROM行业的领导者，旺宏电子继续为客户提供最先进的掩膜ROM产品。在过去8年，旺宏是掩膜ROM行业最大的供应商，并将继续为用户提供高品质的产品。

ROM

Part number	Density	Organization	Package	Access Time(ns)
并行Mask ROM				
MX23L1610	16M bit	2M × 8/1M × 16	Die/Wafer	100
MX23L1611	16M bit	2M × 8/1M × 16	Die/Wafer	100
MX23L3210	32M bit	4M × 8/2M × 16	Die/Wafer	70
MX23L3211	32M bit	4M × 8/2M × 16	Die/Wafer	70
MX23L6410A	64M bit	8M × 8/4M × 16	48-TSOP(I)	70/90
MX23L12810A	128M bit	16M × 8/8M × 16	48-TSOP(I)	100/120
串行Mask ROM				
MX23L1654	16M bit	16M × 1	16-SOP	20
MX23L3254	32M bit	32M × 1	16-SOP	20
MX23L6454	64M bit	64M × 1	16-SOP	20
MX23L12854	128M bit	128M × 1	16-SOP	20
XtraROM ^[1]				
MX23J51243	512M bit	64M × 8	48-TSOP	25
MX23J1G43	1G bit	128M × 8	48-TSOP	25

[1]: XtraROM采用旺宏最新的ROM技术，没有使用掩膜技术，开启时间(TAT)更短。经过验证显示，XtraROM提供耐用的媒介做数据储存，MCU唯一需要做的就是读数据，不需要担心坏块。XtraROM兼容NAND Flash，但是比NAND Flash更耐用，尤其是在游戏、电子字典等方面。