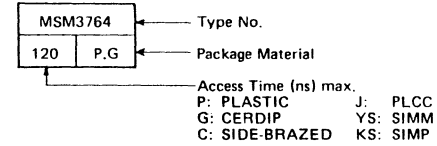


CROSS REFERENCE LIST

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(Note)



1. DYNAMIC RAM (1/5)

Structure	Total Bit	Organization	Number of Pin	Oki	Hitachi	Intel	Texas	Motorola	NEC	Toshiba	Mitsubishi	Fujitsu
NMOS	64k	65536 x 1	16/18	MSM3764A-12	HM4864A-1		TMS4164A-12	MCM6665A-12	μPD4164A-4	TMM4164A-2	M5K4164A-12	MB8264A-12
				120 P.J	120 P.G		120 P.C	120 C	120 P.G.C	120 P	120 P.C	120 P.G
				MSM3764A-15	HM4864A-2		TMS4164A-15	MCM6665A-15	μPD4164A-3	TMM4164A-3	M5K4164A-15	MB8264A-15
				150 P.J	150 P.G		150 P.C	150 C	150 P.G.C	150 P	150 P.C	150 P.G
NMOS	256k	262144 x 1	16/18	MSM41256A-10				MCM6256-10				MB81256-10
				100 P.J				100 P.C				100 P
				MSM41256A-12	HM50256-12		TMS4256-12	MCM6256-12	μPD41256-12	TMM41256C-12	M5M4256S-12	MB81256-12
				120 P.J	120 P.G		120 P	120 P.C	120 P.G.C	120 P.G	120 P.C	120 P
				MSM41256A-15	HM50256-15		TMS4256-15	MCM6256-15	μPD41256-15	TMM41256C-15	MSM4256S-15	MB81256-15
				150 P.J	150 P.G		150 P	150 P.C	150 P.G.C	150 P.G	150 P.C	150 P
				MSM41257A-10					μPD41257-10			MB81257-10
				100 P.J					100 P.C			100 P.C
				MSM41257A-12	HM50257-12		TMS4257-12	MCM6257-12	μPD41257-12	TMM41257-12	M5M41257-12	MB81257-12
				120 P.J	120 P.C		120 P	120 P.C	120 P.C	120 P.C	120 P.C	120 P.C
				MSM41257A-15	HM50257-15		TMS4257-15	MCM6257-15	μPD41257-15	TMM41257-15	M5M41257-15	MB81257-15
				150 P.J	150 P.C		150 P	150 P.C	150 P.C	150 P.C	150 P.C	150 P.C

1. DYNAMIC RAM (2/5)

Structure	Total Bit	Organization	Number of Pin	Ok		Hitachi		Intel	Texas	Motorola	NEC		Toshiba		Mitsubishi		Fujitsu								
NMOS	256k	65536 x 4	18	MSM41464-10		HM50464P-10					μPD41464C-10						MB81464-10								
				100	P.J	100	P.J				100	P.J					100	P.J							
				MSM41464-12		HM50464P-12					μPD41464C-12		TMM41464P-12		MB81464-12										
				120	P.J	120	P.J				120	P.J	120	P.J	120	P.J									
				MSM41464-15		HM50464P-15					μPD41464C-15		TMM41464P-15		MB81464-15										
				150	P.J	150	P.J				150	P.J	150	P.J	150	P.J	150	P.J							
CMOS	256K	262144 x 1	16(P) 18(J)	MSM51C256-8																					
				80	P.J																				
				MSM51C256-10																					
				100	P.J																				
CMOS	1M	1048576 x 1	18(P) 20(J) 20(Z)	MSM511000-10		HM511000-10			TMS4C1024-10				TC511000-10		M5M4C1000-10		MB81C1000-10								
				100	P.J.Z	100	P		100	P			100	P	100	P									
				MSM511000-12		HM511000-12			TMS4C1024-12				TC511000-12		M5M4C1000-12		MB81C1000-12								
				120	P.J.Z	120	P		120	P			120	P	120	P									
				MSM511001-10					TMS4C1025-10				TC511001-10		M5M4C1001-10		MB81C1001-10								
				100	P.J.Z				100	P			100	P	100	P	100	P							
				MSM511001-12		HM511001-12			TMS4C1025-12				TC511001-12		M5M4C1001-12		MB81C1001-12								
				120	P.J.Z	120	P.J.Z		120	P			120	P	120	P	120	P							

1. DYNAMIC RAM(3/5)

Structure	Total Bit	Organization	Number of Pin	Oki	Hitachi	Intel	Texas	Motorola	NEC	Toshiba	Mitsubishi	Fujitsu
CMOS	1M	1,048,576 ×1	18(P)	MSM511002-10	HM511002-10		TMS4C1027-10			TC511002-10	M5M4C1002-10	MB81C1002-10
				100 P.J.Z	100 P		100 P			100 P	100 P	100 P
			20(J)	MSM511002-12	HM511002-12		TMS4C1027-12			TC511002-12	M5M4C1002-12	MB81C1002-12
				120 P.J.Z	120 P		120 P			120 P	120 P	120 P
			20(Z)	MSM514256-10	HM514256-10					TC514256-10	M5M44C256-10	MB81C4256-10
				100 P.J.Z	100 P					100 P	100 P	100 P
		262,144 ×4	20	MSM514256-12	HM514256-12					TC514256-12	M5M44C256-12	MB81C4256-12
				120 P.J.Z	120 P					120 P	120 P	120 P
				MSM514258-10	HM514258-10					TC514258-10	M5M44C258-10	MB81C4258-10
				100 P.J.Z	100 P					100 P	100 P	100 P
				MSM514258-12	HM514258-12					TC514258-12	M5M44C258-12	MB81C4258-12
				120 P.J.Z	120 P					120 P	120 P	120 P
			16	MSM514221-3			TMS4C1050-3					
				25 P.G			25 P.G.					
				MSM514221-6			TMS4C1050-6					
				30 P.G			50 P.G.					
		1,048,576 ×1	18(P) 20(J) 20(Z)	MSM511000A-80	HM511000A-8				μPD421000-80	TC511000A-80	M5M41000A-8	MB81C1000-80
				80 P.J.Z	80 P.J.P.ZP				80 C.L.A.V	80 P.J.Z	80 P.J.L	80 C.P
				MSM511000A-10	HM511000A-10				μPD421000-10	TC511000A-10	M5M41000A-10	MB81C1000-10
				100 P.J.Z	100 P.J.P.ZP				100 C.L.A.V	100 P.J.Z	100 P.J.L	100 C.P
				MSM511001A-80	HM511001A-8				μPD421001-80	TC511001A-80	M5M41001A-8	MB81C1001-80
				80 P.J.Z	80 P.J.P.ZP				80 C.L.A.V	80 P.J.Z	80 P.J.L	80 C.P
				MSM511001A-10	HM511001A-10				μPD421001-10	TC511001A-10	M5M41001A-10	MB81C1001-10
				100 P.J.Z	100 P.J.P.ZP				100 C.L.A.V	100 P.J.Z	100 P.J.L	100 C.P
				MSM511002A-80	HM511002A-8				μPD421002-80	TC511002A-80	M5M41002A-8	MB81C1002-80
				80 P.J.Z	80 P.J.P.ZP				80 C.L.A.V	80 P.J.Z	80 P.J.L	80 C.P
				MSM511002A-10	HM511002A-10				μPD421002-10	TC511002A-10	M5M41002A-10	MB81C1002-10
				100 P.J.Z	100 P.J.P.ZP				100 C.L.A.V	100 P.J.Z	100 P.J.L	100 C.P

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1. DYNAMIC RAM (4/5)

Structure	Total Bit	Organization	Number of Pin	Ok	Hitachi	Intel	Texas	Motorola	NEC	Toshiba	Mitsubishi	Fujitsu
CMOS	1M	262,144 ×4	20	MSM514256A-80	HM514256A-8				μPD424256-80	TC514256A-80	M5M44256A-8	MB81C4256-80
				80 P.J.Z	80 P.J.P.ZP				80 C.L.A.V	80 P.J.Z	80 P.J.L	80 C.P
				MSM514256A-10	HM514256A-10				μPD424256-10	TC514256A-10	M5M44256A-10	MB81C4256-10
				100 P.J.Z	100 P.J.P.ZP				100 C.L.A.V	100 P.J.Z	100 P.J.L	100 C.P
				MSM514258A-80	HM514258A-8				μPD424258-80	TC514258A-80	M5M44258A-8	MB81C4258-80
				80 P.J.Z	80 P.J.P.ZP				80 C.L.A.V	80 P.J.Z	80 P.J.L	80 C.P
				MSM514258A-10	HM514258A-10				μPD424258-10	TC514258A-10	M5M44258A-10	MB81C4258-10
				100 P.J.Z	100 P.J.P.ZP				100 C.L.A.V	100 P.J.Z	100 P.J.L	100 C.P
NMOS	2048k	262,144 ×8	30	MSC2304-10								
				100 YS.KS								
				MSC2304-12								
				120 YS.KS								
				MSC2304-15								
				150 YS.KS								
	2304k	262,144 ×9	30	MSC2304-10								
				100 YS.KS								
				MSC2304-12	HM561003-12						MH25609-12	
				120 YS.KS	120 YS.KS						120 YS	
				MSC2304-15	HM561003-15						MH25609-15	
				150 YS.KS	150 YS.KS						150 YS	
		262,144 ×8	30	MSC2307-10								
				100 YS.KS								
				MSC2307-12								
				120 YS.KS								
				MSC2307-15								
				150 YS.KS								
	2304k	264,144 ×9	30	MSC2307-10								
				100 YS.KS								

1. DYNAMIC RAM (5/5)

Structure	Total Bit	Organization	Number of Pin	Oki	Hitachi	Intel	Texas	Motorola	NEC	Toshiba	Mitsubishi	Fujitsu
NMOS	2304k	262,144 x9	30	MSC2307-12								
				120 YS.KS								
				MSC2307-15								
				150 YS.KS								
CMOS	8M	1,048,576 x8	30	MSC2313-10								
				100 YS.KS								
				MSC2313-12								
				120 YS.KS								
	9M	1,048,576 x9	30	MSC2312-10								
				100 YS.KS								
				MSC2312-12								
				120 YS.KS								

2. STATIC RAM

Structure	Total Bit	Organization	Number of Pin	Ok	Hitachi	NEC	Toshiba	Mitsubishi	Fujitsu	SONY	SHARP	Motorola
CMOS	64k	8192 × 8	28	MSM5165A-10	HM6264-10	μPD4364-10	TC5565-10	M5M5165-10	MB8464-10	CXK5864-10		MCM6064-10
				100 P	100 P	100 P	100 P	100 P	100 P	100 P		100 P
				MSM5165A-12	HM6264-12	μPD4364-12	TC5565-12	M5M5165-12		CXK5864-12		MCM6064-12
				120 P	120 P	120 P	120 P	120 P		120 P		120 P
		16384 × 4	22	MSM5165A-15	HM6264-15	μPD4364-15	TC5565-15	M5M5165-15	MB8464-15	CXK5864-15		
				150 P	150 P	150 P	150 P	150 P	150 P	150 P		
				MSM5188-45	HM6288-45	μPD4362-45		M5M5188-45		CXK5464-45		
				45 P	45 P	45 P		45 P		45 P		
	256k	32768 × 8	28	MSM5188-55		μPD4362-55		M5M5188-55		CXK5464-55		
				55 P		55 P		55 P		55 P		
				MSM5188-70		μPD4362-70				CXK5464-70		
				70 P		70 P				70 P		
		32768 × 8	28	MSM51257L-85	HM62256-85	μPD43256-85	TC55257-85	M5M5256-85				MCM60256-85
				85 P	85 P	85 P	85 P	85 P				85 P
				MSM51257L-10	HM62256-10	μPD43256-10	TC55257-10	M5M5256-10	MB84256-10	CXK58256-10		MCM60256-10
				100 P	100 P	100 P	100 P	100 P	100 P	100 P		100 P
Full CMOS	256k	32768 × 8	28	MSM51257L-12	HM62256-12	μPD43256-12	TC55257-12	M5M5256-12	MB84256-12	CXK58256-12	LH52256-12	MCM60256-12
				120 P	120 P	120 P	120 P	120 P	120 P	120 P	120 P	120 P
				MSM51256-10			TC55256-10					
				100 P			100 P					
				MSM51256-12			TC55256-12					
				120 P			120 P					

3. MASK ROM

Structure	Total Bit	Organization	Number of Pin	Oki	Fujitsu	Hitachi	Matsushita	Mitsubishi	NEC	Suwaseiko	Sharp	Toshiba
NMOS	64K	8192 x 8	28	MSM3864				M5M2364	μPD2364E		LH2369	TMM2365
				250 P				250 P	200 P		200 P	200 P
	128k	16384 x 8	28	MSM38128A			MN23128	M5M23128	μPD23128A		LH23126	TMM23128
				250 P			200 P	250 P	200 P		200 P	200 P
	256k	32767 x 8	28	MSM38256A					μPD23256A			TMM23256
				150 P					200 P			150 P
				MSM38256			MN23257	M5M23256	μPD23256		LH23257	
				250 P			200 P	200 P	250 P		200 P	
CMOS	256k	32767 x 8	28	MSM53256	MB83256	HN623257			μPD23C256E	SMM6325	LH53257	TC53257
				150 P	250 P	150 P			150 P	250 P	250 P	150 P
	1M	131072 x 8	28	MSM531000	MB831000	HN62321	MN231000	M5M23C100	μPD23C1000	SMM23100	LH531000	TC531000C
				250 P	150 P	150 P	250 P	150 P	200 P	450 P	250 P	150 P
			32	MSM531001		HN62321A			μPD23C1001E		LH530800	TC531001C
				200 P		150 P			200 P		150 P	150 P
	4M	262144 x 16	40	MSM534000	MB834100A							
				200 P	200 P							
				MSM53400A	MB834100A							
				150 P	200 P							
		524288 x 8	32	MSM534001A	MB834000A	HN62304B	MN234002	M5M23C401	μPD23C4001E		LH534300	TC53400F
				150 P	200 P	200 P	200 P	250 P	250 P		150 P	200 P
		262144 x 16 or 524288 x 8	40	MSM534002A	MB834200A	HN62404	MN234000	M5M23C400	μPD23C4000A		LH534500	
				150 P	200 P	200 P	200 P	250 P	200 P		150 P	

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4. EPROM

Structure	Total Bit	Organization	Number of Pin	Oki		Hitachi		Intel		AMD		ATMEL		WSI		NEC		Toshiba		Mitsubishi		Fujitsu	
NMOS	64K	8192×8	28	MSM2764A		HN482764		i2764A		Am2764						μPD2764D		TMM2764AD		MSL2764K		MBM2764	
				120 150 200 250	G	200 250	G	200 250	G	200 250	G					200 250	G	150 200	G	200 250	G	200 250	G
	128K	16384×8	28	MSM27128A		HN4827128		i27128A		Am27128A						μPD27128D		TMM27128AD		MSL27128K		MBM27128	
				120 150 200 250	G	200 250	G	200 250	G	150 200	G					200 250	G	150 200	G	200 250	G	200 250	G
	256K	32768×8	28	MSM27256		HN27256		i27256		Am27256						μPD27256AD		TMM27256AD		MSL27256K		MBM27256	
				120 150 200 250	G	200 250	G	250	G	250	G					200 250	G	150 200	G	150 200 250	G	200 250	G
	512K	65536×8	28	MSM27512		HN27512		i27512		Am27512								TMM27512D		MSL27512K		MBM27512	
				120 150 200 250	G	250	G	250	G	250	G							150 200	G	250	G	250	G
CMOS	256K	32768×8	28	MSM27C256		HN27C256		i27C256				AT27C256				μPD27C256AD		TC57256AD		M5M27C256K		MBM27C256A	
				100 120 150 200	G	200 250	G	250	G			120 150 170 200	G			120 150 200	G	120 150	G	120 150 250	G	150 200 250	G
	256K	32768×8	28	MSM27C256H		HN27C256H						AT27HC256		WS57C256F									
				55 70	G	70 85	G					55 70 90	G	70	G								

EPROM

Structure	Total Bit	Organization	Number of Pin	Oki		Hitachi		Intel		AMD		ATMEL		WSI		NEC		Toshiba		Mitsubishi		Fujitsu	
NMOS / CMOS	1M	131072 × 8	32	MSM271000		HN27C101G		i27010		Am27C010						μPD27C1001D		TC571000D		MSM27C101		M8M27C1001	
				120 150 200	G	170 200 250	G	200	G	150 170 200	G					120 150 200	G	150 200	G	120 150 200	G	150 200 250	G
		65536 × 16	40	MSM271024 MSM27C1024		HN27C1024H		i27210		Am27C1024		AT27C1024				μPD27C1024D		TC571024D		MSM27C102		M8M27C1024	
				120 150 200	G	85 100	G	150	G	200 250 300	G	150 170 200	G			150 200	G	150 200	G	120 150 200	G	150 200 250	G
CMOS	2M	262144 × 8	32	MSM27C2000																MSM27C201			
				100 120 150	G															100 120 150	G		
		131072 × 16	40	MSM27C2048																MSM27C202			
				120 150 200	G															100 120 150	G		

5. E²PROM (SERIAL)

Structure	Total Bit	Organization	Number of Pin	Oki	ASAHI KASEI	HYUNDAI	GI	NS	CATALYST	EXEL	ICT	SEIKO	ROHM
CMOS	1k	128 x 8 or 64 x 16	8	MSM16811	AK93C46	HY93C46		NMC9346	CAT93C46	LX93C46	93C46	S-2914R	BR93C46
				250 P	250 P	250 P		250 P	250 P	250 P	250 P	250 P	250 P
				MSM16911			ER5911		CAT59C11			S-2911R	
				250 P			250 P		250 P			250 P	
CMOS	2k	256 x 8 or 128 x 16	8	MSM16812	AK93C56				CAT35C102			S-2924R	BR93C56
				250 P	250 P				250 P			250 P	250 P
				MSM16911			ER5912		CAT35C202			S-2921R	
				250 P			250 P		250 P			250 P	

6. E²PROM

Structure	Total Bit	Organization	Number of Pin	Oki	XICOR	SEEQ	ATMEL	CATALYST	Hitachi	NEC	Fujitsu	Mitsubishi	intel
CMOS	16k	2048 x 8	24	MSM28C16A	X2816A	2816A		CAT28C16A					
				150 200 P	200 250 300 P	250 300 350 P		150 200 P					
	64k	8192 x 8	28	MSM28C64A	X28C64	28C64	AT28C64	CAT28C64A	HN58C65	μPD28C64C	MBM28C64	M5M28C64AP	2864A
				120 150 200 P	150 P	250 300 350 P	150 200 250 —	150 200 250 P	250 P	200 250 P	250 350 P	150 200 P	200 250 350 P

7. OTP

Structure	Total Bit	Organization	Number of Pin	Oki		Hitachi		Intel		AMD		ATMEL		WSI		NEC		Toshiba		Mitsubishi		Fujitsu	
NMOS	64K	8192×8	28	MSM2764AZB				P2764A										TMM2464AP					
				150	P			250	P							200	P						
	128K	16384×8	28	MSM27128AZB		HN27128AP		P27128A										TMM24128AP					
				150	P	200	P	250	P							200	P						
	256K	32768×8	28	MSM27256ZB		HN27256P		P27256A										TMM24256BP		M5M27256P			
				170	P	250	P	250	P							170 200	P	250	P				
	512K	65536×8	28	MSM27512ZB		HN27512P		P27512								μPD27C512C		TMM24512AP		M5M27512P			
				200	P	250	P	250	P						150 200	P	200 250	P	250	P			
CMOS	256K	32768×8	28	MSM27C256ZB														TC54256AP		M5M27C256P		M8M27C256AP	
				150	P											200	P	200	P	200	P		
NMOS / CMOS	1M	131072 ×8	32	MSM271000ZB		HN27C101												TC541000P		M5M27C100P			
				200	P	200	P								200	P	200	P					
		65536 ×16	40	MSM271024ZB																M5M27C102P			
				170	P														200	P			

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