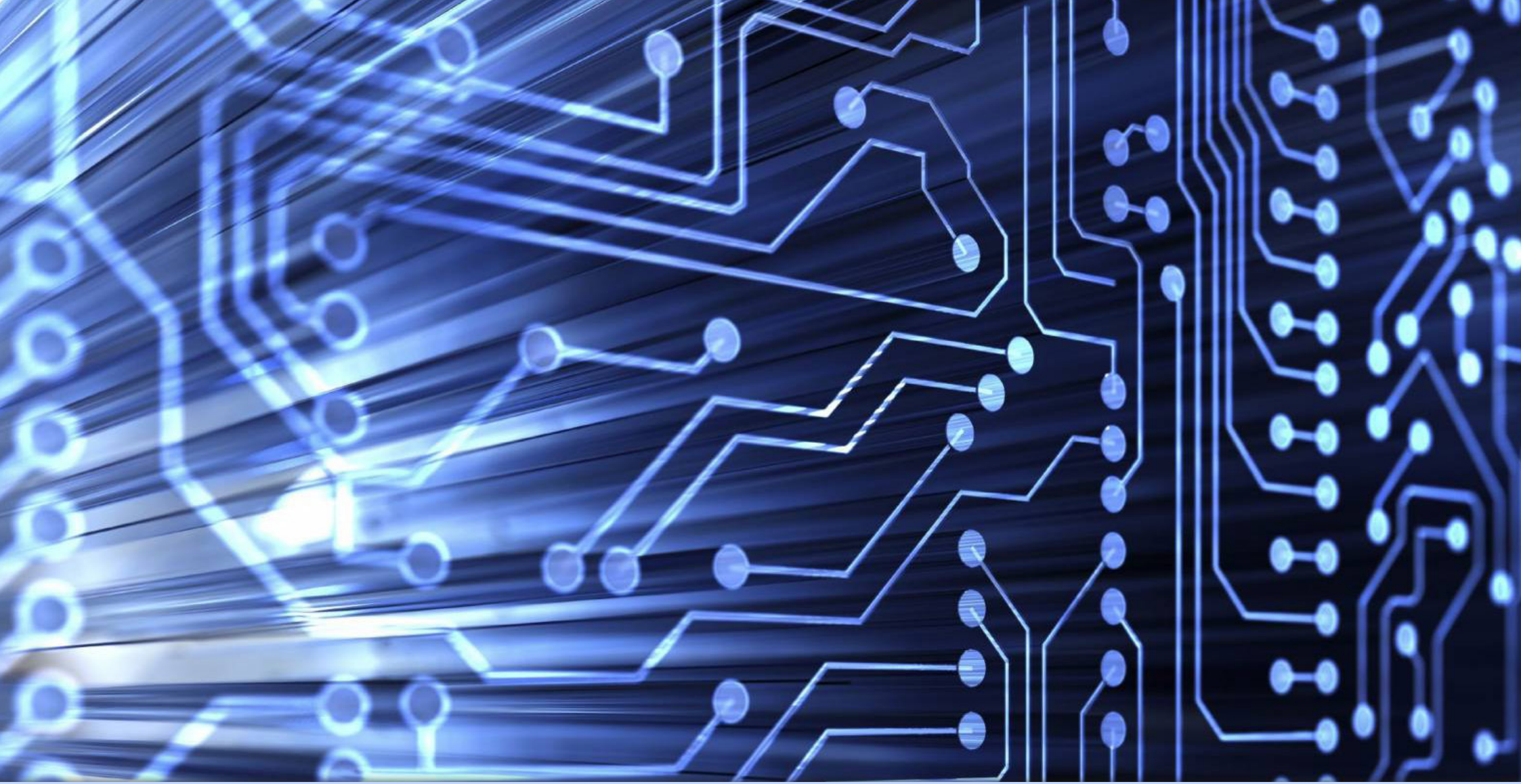
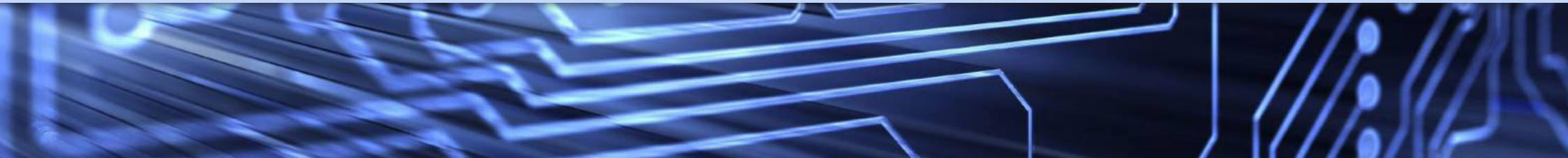


PRODUCT CATALOG 2026

ALLIANCE MEMORY

Worldwide Leader in Legacy Memory



Alliance Memory is pleased to highlight our new product offerings in DRAM, SRAM, FLASH and eMMC in this new edition of our Product Selection Guide.

We continue to be the premier legacy memory supplier offering high quality products, minimal die shrinks and long term support.

ALLIANCE MEMORY

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Synchronous DRAM 3.3V (x4, x8, x16 and x32)

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY (MHz)	TEMPERATURE OPTIONS	ALLIANCE
16Mb	1M x 16	3.3V	50pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C1M16S-6/7 TxN
64Mb	4M x 16	3.3V	54pin TSOP II	143/166/200 MHz	Commercial, Industrial, Automotive	AS4C4M16SA-5/6/7 TxN
64Mb	4M x 16	3.3V	54pin TSOP II	166 MHz	Industrial	AS4C4M16SB-6TIN
64Mb	4M x 16	3.3V	54-ball FBGA	143/166 MHz	Commercial, Industrial, Automotive	AS4C4M16SA-6/7 BxN
64Mb	2M x 32	3.3V	90-ball TFBGA	143/166 MHz	Commercial, Industrial	AS4C2M32S-6/7 BxN
64Mb	2M x 32	3.3V	86pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C2M32SA-6/7 TxN
128Mb	8M x 16	3.3V	54pin TSOP II/54-ball FBGA	143/166 MHz	Commercial, Industrial, Automotive	AS4C8M16SA-6/7 TxN/BxN
128Mb	8M x 16	3.3V	54pin TSOP II	166 MHz	Inudstrial	AS4C8M16SB-6TIN
128Mb	4M x 32	3.3V	90-ball TFBGA	143/166 MHz	Commercial, Industrial	AS4C4M32S-6/7 BxN
128Mb	4M x 32	3.3V	86pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C4M32SA-6/7 TxN
256Mb	16M x 16	3.3V	54pin TSOP II/54-ball FBGA	143/166 MHz	Commercial, Industrial	AS4C16M16SA-6/7 TxN/BxN
256Mb	16M x 16	3.3V	54pin TSOP II/54-ball FBGA	143/166 MHz	Commercial, Industrial	AS4C16M16SB-6/7 TxN/BxN
256Mb	8M x 32	3.3V	86pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C8M32S-6/7 TxN
256Mb	8M x 32	3.3V	90-ball TFBGA	143/166 MHz	Commercial, Industrial	AS4C8M32SA-6/7 BxN
256Mb	32M x 8	3.3V	54pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C32M8SA-6/7 TxN
256Mb	64M x 4	3.3V	54pin TSOP II	143/166 MHz	Commercial, Industrial	AS4C64M4SA-6/7 TxN
512Mb	32M x 16	3.3V	54-ball FBGA	143 MHz	Industrial	AS4C32M16SB-7BIN
512Mb	32M x 16	3.3V	54pin TSOP II	143 MHz/166 MHz	Commercial, Industrial	AS4C32M16SB-6/7 TxN
512Mb	32M x 16	3.3V	54pin TSOP II	143 MHz	Industrial	AS4C32M16SC-7TIN
512Mb	16M x 32	3.3V	86pin TSOP II	143 MHz	Industrial	AS4C16M32SC-7TIN
512Mb	16M x 32	3.3V	90ball TFBGA	166MHz	Commercial, Industrial	AS4C16M32SB-6BxN
512Mb	64M x 8	3.3V	54pin TSOP II	143 MHz	Industrial	AS4C64M8SC-7TIN
512Mb	64M x 8	3.3V	54pin TSOP II	133 MHz	Commercial	AS4C64M8SD-7TCN

* X= TEMPERATURE GRADE; C = COMMERCIAL ; I = INDUSTRIAL; A = AUTOMOTIVE

Synchronous DRAM 3.3V Cross Reference

DENSITY	ORG	ALLIANCE	SAMSUNG (EOL)	MICRON (EOL)	SK HYNIX (EOL)	ISSI	WINBOND	NANYA (EOL)	ELITE (ESMT)	ELPIDA (EOL)
16Mb	1M x 16	AS4C1M16S-6/7TxN	K4S161622E	MT48LC1M16A1 (EOL)	HY57V161610	IS42S16100	W9816G6TH	NT56V1616AOT	M12L16161A-xTG2Q	EDS1616AGTA
64Mb	4M x 16	AS4C4M16SA-5/6/7TxN AS4C4M16SB-6TIN	K4S641632N-UCxx	MT48LC4M16A2P (EOL)	HY57V641620	IS42S16400 IS45S16400	W9864G6JH	NT56V6620C0T-xxB	M12L64164A-xTG2U	uPD4564163G5-Axx
64Mb	4M x 16	AS4C4M16SA-6/7BxN		MT48LCM16A2B4(EOL)	HY5V66D	IS42S16400 IS45S16400	W9864G6JT		M12L64154A-xBG2C	
64Mb	2M x 32	AS4C2M32S-6/7BXN		MT48LC2M32B2B5 (EOL)	HY5V62	IS42S32200	W9864G2IB-X			EDS6432AFBH
64Mb	2M x 32	AS4C2M32SA-6/7TxN	K4S643232H-Ucxx	MT48LC2M32B2P-x (EOL)	HY57V643220	IS42S32200	W9864G2J(G,I)H-x		M12L64322A-xTG2U	EDS6432AFTA
128Mb	8M x 16	AS4C8M16SA-6/7TxN AS4C8M16SB-6TIN	K4S281632K-UCxx	MT48LC8M16A2P(EOL)	HY57V281620	IS42S16800 IS45S16800	W9812G6K(G,I)H	NT5SV8M16AT-xxB	M12L128168A-xTG2N	uPD45128163G5-Axx
128Mb	8M x 16	AS4C8M16SA-6/7BxN	K4S281632D-RL75	MT48LC8M16A2B4 (EOL)	HY5V26	IS42S16800 IS45S16800	W9812G6JB		M12L128168A-xBG2N	
128Mb	4M x 32	AS4C4M32S-6/7BxN		MT48LC4M32B2B5 (EOL)	HY5V22	IS42S32400	W9812G21(G)B-x		M12L128324-xBG2E	EDS1232AHBH
128Mb	4M x 32	AS4C4M32SA-6/7TxN		MT48LC4M32B2P-x (EOL)	HY57V283220T	IS42S32400	W9812G2GH			EDS1232AHTA
256Mb	16M x 16	AS4C16M16SA/B-6/7TxN	K4S561632N-UCxx	MT48LC16M16A2P (EOL)	H57V2562GTR	IS42S16160 IS45S16160	W9825G6K(D,E,J)H	NT5SV16M16AT-xxB	M12L2561616A-xTG2A	EDS2516AP(AF,AC) TA-xx
256Mb	16M x 16	AS4C16M16SA/B-6/7BxN	K4S561632D-RL75	MT48LC16M16A2B4 (EOL)	HY5V56	IS42S16160 IS45S16160	W9825G6JB		M12L2561616A-xBG2A	EDS2516EE(JE)BH
256Mb	8M x 32	AS4C8M32S-6/7TxN		MT48LC8M32B2B5-x (EOL)	HY5V52	IS42S32800	W9825G2J(D)B-x			EDS2532EEBH
256Mb	8M x 32	AS4C8M32SA-6/7BxN		MT48LC8M32B2B5-x (EOL)	HY5V52	IS42S32800	W9825G2J(D)B-x			EDS2532EEBH
256Mb	32M X 8	AS4C32M8SA-6/7TxN		MT48LC32M8A2P (EOL)		IS42S83200J				
256Mb	64M x 4	AS4C64M4SA-6/7TxN		MT48LC64M4A2P (EOL)		IS42S32800				
512Mb	32M x 16	AS4C32M16SB-7BIN				IS42S16320			M12L5121632A	
512Mb	32M x 16	AS4C32M16SB-6/7TxN	K4S511632M-TC75	MT48LC32M16A2 (EOL)		IS42S16320			M12L5121632A	EDS5116ABTA
512Mb	32M x 16	AS4C32M16SC-7TIN	K4S511632M-TC75	MT48LC32M16A2 (EOL)		IS42S16320			M12L5121632A	EDS5116ABTA
512Mb	16M x 32	AS4C16M32SB-6BxN		MT48LC16M32S2 (EOL)		IS42S32160				
512Mb	16M x 32	AS4C16M32SC-7TIN				IS42S32160				
512Mb	64M x 8	AS4C64M8SC-7TIN		MT48LC64M8A2P-75:C (EOL)		IS42S86400				
512Mb	64M x 8	AS4C64M8SD-7TCN		MT48LC64M8A2P-75:C (EOL)		IS42S86400				

DDR1 2.5V DRAM

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY (MHz)	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
64Mb	4M x 16	2.5V	66pin TSOP II	200 MHz	400 Mbps	Commercial, Industrial, Automotive	AS4C4M16D1A-5TxN
64Mb	2M x 32	2.5V	144-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial	AS4C2M32D1A-5BxN
128Mb	8M x 16	2.5V	66pin TSOP II	200 MHz	400 Mbps	Commercial, Industrial	AS4C8M16D1A-5TxN
128Mb	8M x 16	2.5V	60-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial	AS4C8M16D1-5BxN
128Mb	4M x 32	2.5V	144-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial	AS4C4M32D1A-5BxN
256Mb	16M x 16	2.5V	60-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial, Automotive	AS4C16M16D1-5BxN
256Mb	16M x 16	2.5V	66pin TSOP II	200 MHz	400 Mbps	Commercial, Industrial	AS4C16M16D1A-5TxN
512Mb	32M x 16	2.5V	66pin TSOP II	200 MHz	400 Mbps	Commercial, Industrial, Automotive	AS4C32M16D1A-5TxN
512Mb	32M x 16	2.5V	60-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial, Automotive	AS4C32M16D1-5BxN
512Mb	64M x 8	2.5V	66pin TSOP II 60-ball FBGA	200 MHz	400 Mbps	Commercial, Industrial	AS4C64M8D1-5TxN AS4C64M8D1-5BxN
1Gb	64M x 16	2.5V	66pin TSOP II	166 MHz	333Mbps	Commercial, Industrial	AS4C64M16D1-6TxN
1Gb	64M x 16	2.5V	60-ball FBGA	166 MHz	333Mbps	Industrial	AS4C64M16D1A-6BIN

* X= TEMPERATURE GRADE; C = COMMERCIAL ; I = INDUSTRIAL; A = AUTOMOTIVE

DDR1 2.5V DRAM Cross Reference

DENSITY	ALLIANCE	SAMSUNG (EOL)	MICRON (EOL)	ISSI	HYNIX - ALL EOL	WINBOND	NANYA	ELITE (ESMT)	ELPIDA
64Mb	AS4C4M16D1A-5TxN	K4H641638N	MT46V4M16TG (EOL)	IS43R16400B		W9464G6K(I,J)H		M13S64164A-5TG2Y	(EOL)
64Mb	AS4C2M32D1A-5BxN								
128Mb	AS4C8M16D1-5BXN	K4H281638D		IS43R16800E-5BL		W9412G6JB		M13S128168A-5BG2N	EDD1216A
128Mb	AS4C8M16D1A-5TxN	K4H281638D	MT46V8M16 (EOL)	IS43R16800E-5TL	HY5DU1281622	W9412G6K(I,J)H		M13S128168A-5TG2N	EDD1216A
128Mb	AS4C4M32D1A-5BxN		MT46V4M32FK (EOL)	IS43R32400E-5BL		W9412GIB		M13S128324A-5BG2M	EDD1232A
256Mb	AS4C32M8D1-5TxN	K4H560838N	MT46V32M8P (EOL)	IS43R83200	HY5DU56822		NT5DS32M8ES		EDD2508A
256Mb	AS4C16M16D1-5BxN	K4H561638D	MT46V16M-16CY(EOL)	IS43R16160 IS46R16160	HY5DU561622	W9425G6JB		M13S2561616A-xBG2A	
256Mb	AS4C16M16D1A-5TxN	KH561638D	MT46V16M16P (EOL)	IS43R16160	HY5DU561622	W945G6K(D,E,J)H		M13S2561616A-xTG2A	EDD2516A
512Mb	AS4C32M16D1-5BxN	K4H511638J	MT46V32M-16CY(EOL)	IS43R16320 IS46R16320	HY5DU121622				EDD5116
512Mb	AS4C32M16D1A-5TxN	K4H511638J	MT46V32M16P(EOL)	IS43R16320 IS46R16320	HY5DU121622		NT5DS32M16ES	M13S5121632A-5TG2S	EDD5116A
512Mb	AS4C64M8D1-5TxN	K4H510838J	MT46V64M8P (EOL)	IS43R86400	HY5DU12822		NT5DS64M8ES		EDD5108A
512Mb	AS4C64M8D1-5BxN	K4H510838J	MT46V64M8CY(EOL)	IS43R86400	HY5DU12822				
1Gb	AS4C64M16D1-6TxN		MT46V64M16P (EOL)						
1Gb	AS4C64M16D1A-6BIN								

DDR2 1.8V DRAM

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY (MHz)	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
256Mb	16M x 16	1.8V	84-ball FBGA	400 MHz	800 Mbps	Commercial, Industrial	AS4C16M16D2-25BxN
512Mb	32M x 16	1.8V	84-ball FBGA	400 MHz	800Mbps	Commercial, Industrial,Automotive	AS4C32M16D2A/C-25BxN
512Mb	64M x 8	1.8V	60-ball FBGA	400 MHz	800 Mbps	Commercial, Industrial,Automotive	AS4C64M8D2-25BxN
1Gb	64M x 16	1.8V	84-ball FBGA	400 MHz	800Mbps	Commercial, Industrial,Automotive	AS4C64M16D2A-25BxN
1Gb	64M x 16	1.8V	84-ball FBGA	400 MHz	800 Mbps	Commercial	AS4C64M16D2B-25BCN
1Gb	128M x 8	1.8V	60-ball FBGA	400 MHz	800Mbps	Commercial, Industrial	AS4C128M8D2A-25BxN
2Gb	128M x 16	1.8V	84-ball FBGA	400 MHz	800 Mbps	Commercial, Industrial	AS4C128M16D2-25BxN
2Gb	128M x 16	1.8V	84-ball FBGA	400 MHz	800Mbps	Commercial, Industrial	AS4C128M16D2A-25BxN

* X= TEMPERATURE GRADE; C = COMMERCIAL ; I = INDUSTRIAL; A = AUTOMOTIVE

DDR2 1.8V DRAM Cross Reference

DENSITY	ALLIANCE	SAMSUNG (EOL)	MICRON	ISSI	WINBOND	NANYA	ELITE (ESMT)	HYNIX (EOL)
256Mb	AS4C16M16D2-25BxN	K4T56163Q	MT47H16M16BG	IS43DR16160	W9725G6K(J)B	NT5TU16M16BG	M14D2561616A-2.5BG	HY5PS561621
512Mb	AS4C32M16D2A/C-25BxN	K4T51163Q	MT47H32M16HR(NF)-25E	IS43DR16320 IS46DR16320	W9751G6K(J)B	NT5TU32M16GG	M14D5121632A-2.5BG	HY5PS121621
512Mb	AS4C64M8D2-25BxN	K4T51083Q	MT47H64M8CF(SH)-25E	IS43DR86400 IS46DR86400	W9751G8K(J)B	NT5TU64M8EE		H5PS5182KFR
1Gb	AS4C64M16D2A-25BxN	K4T1G164Q	MT47H64M16HR(NF)-25E	IS43DR16640 IS46DR16640	W971GG6JB	NT5TU64M16HG	M14D1G1664A-2.5BG	H5PS1G63
1Gb	AS4C64M16D2B-25BCN	K4T1G164Q	MT47H64M16HR(NF)-25E	IS43DR16640	W971GG6JB	NT5TU64M16HG	M14D1G1664A-2.5BG	H5PS1G63
1Gb	AS4C128M8D2A-25BxN	K4T1G084Q	MT47H128M8SH-25E	IS43DR81280	W971GG8JB	NT5TU128M8HE	M14D1G8128A	H5PS1G83
2Gb	AS4C128M16D2-25BxN		MT47H128M16RT-25E (EOL)	IS43DR16128	W972GG6JB			
2Gb	AS4C128M16D2A-25BxN		MT47H128M16RT-25E (EOL)	IS43DR16128 IS46DR16128	W972GG6JB			

DDR3 1.5V SDRAM

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
512Mb	32M x 16	1.5V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial	AS4C32M16D3-12BxN
512Mb	32M x 16	1.5V	96-ball FBGA	933 MHz	1866 Mbps	Commercial	AS4C32M16D3-10BCN
512Mb	64M x 8	1.5V	78-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial	AS4C64M8D3-12BxN
1Gb	64M x 16	1.5V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C64M16D3B-12BxN
1Gb	64M x 16	1.5V	96-ball FBGA	800 MHz	1600 Mbps	Commercial	AS4C64M16D3W-12BCN
1Gb	128M x 8	1.5V	78-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C128M8D3B-12BxN
2Gb	128M x 16	1.5V	96-ball FBGA	1066 MHz	2133 Mbps	Commercial, Industrial	AS4C128M16D3C-93BxN
4Gb	256M x 16	1.5V	96-ball FBGA	800 MHz 933 MHz 1066 MHz	1600 Mbps 1866 Mbps 2133 Mbps	Commercial, Industrial	AS4C256M16D3C-12BxN AS4C256M16D3C-10BxN AS4C256M16D3C-93BxN

* X= TEMPERATURE GRADE; C = COMMERCIAL ; I = INDUSTRIAL; A = AUTOMOTIVE

DDR3L 1.35V SDRAM

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
512Mb	32M x 16	1.35V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial	AS4C32M16D3L-12BxN
512Mb	64M x 8	1.35V	78-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial	AS4C64M8D3L-12BxN
1Gb	64M x 16	1.35V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C64M16D3LB-12BxN AS4C64M16D3LC-12BxN
1Gb	64M x 16	1.35V	96-ball FBGA	933 MHz	1866 Mbps	Commercial	AS4C64M16D3LW-10BCN
1Gb	128M x 8	1.35V	78-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C128M8D3LB-12BxN AS4C128M8D3LC-12BxN
2Gb	128M x 16	1.35V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C128M16D3LC-12BxN
2Gb	256M x 8	1.35V	78-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial, Automotive	AS4C256M8D3LC-12BxN
4Gb	256M x 16	1.35V	96-ball FBGA	800 MHz 933 MHz	1600 Mbps 1866 Mbps	Commercial, Industrial, Automotive	AS4C256M16D3LC-12BxN AS4C256M16D3LC-10BxN
4Gb	512M x 8	1.35V	78-ball FBGA	800 MHz 933MHz	1600 Mbps 1866 Mbps	Commercial, Industrial, Automotive	AS4C512M8D3LC-12BxN AS4C512M8D3LC-10BAN
8Gb	512M x 16	1.35V	96-ball FBGA	933 MHz	1866 Mbps	Commercial, Industrial, Automotive	AS4C512M16D3LA-10BxN
8Gb	512M x 16	1.35V	96-ball FBGA	800 MHz	1600 Mbps	Commercial, Industrial	AS4C512M16D3LB-12BxN
8Gb	512M x 16	1.35V	96-ball FBGA	800 MHz 933 MHz	1600 Mbps 1866 Mbps	Commercial, Industrial	AS4C512M16D3LC-10BxN AS4C512M16D3LC-12BxN
8Gb	512M x 16	1.35V	96-ball FBGA	933 MHz	1866 Mbps	Commercial, Industrial, Automotive	AS4C512M16D3LD-10BxN
8Gb	1G x 8	1.35V	78-ball FBGA	933 MHz	1866 Mbps	Commercial, Industrial, Automotive	AS4C1G8D3LA-10BxN

* X= TEMPERATURE GRADE; C = COMMERCIAL ; I = INDUSTRIAL; A = AUTOMOTIVE

DDR3/L SDRAM Cross Reference

DENSITY	ALLIANCE	MICRON	SAMSUNG(EOL)	ISSI	HYNIX	WINBOND	ELITE (ESMT)	ELPIDA	NANYA
512Mb	AS4C32M16D3-12BxN AS4C32M16D3-12BxN					W6351G6KB-x	M15T5121632A	EDJ5316BASE	
512Mb	AS4C64M8D3-12BxN							EDJ5308BASE	
512Mb	AS4C32M16D3L-12BxN						M15T5121632A	EDJ5316BASE	
512Mb	AS4C64M8D3L-12BxN							EDJ5308BASE	
1Gb	AS4C64M16D3B-12BxN AS4C64M16D3W-12BCN	MT41J64M16JT(TW)-125 (EOL)	K4B1G1646E(G)	IS43TR16640 IS46TR16640	H5TQ1G63D	W631GG6KB-x	M15F1G1664A	EDJ1116DJ(BA) BG	NT5CB64M16F(G)P
1Gb	AS4C64M16D3LB/C-12BxN AS4C64M16D3LW-10BCN	MT41K64M16JT(TW)-125	K4B1G1646E(G)	IS43TR16640xL IS46TR16640xL	H5TC1G63EFR (EOL)	W631GU6KB-x	M15T1G1664A-(2C)	EDJ1116EJBG	NT5CC64M16F(G)P-DI
1Gb	AS4C128M8D3B-12BxN	MT41J128M8JP(DA)-125	K4B1G0846E(F,G)	IS43TR81280 IS46TR81280	H5TQ1G83	W631GG8KB-x	M15T1G8128A	EDJ1108DJ(BA) BG	NT5CB128M8F(G)N-DI
1Gb	AS4C64M16D3LB/C-12BxN	MT41K64M16JT-125 (EOL) MT41K64M16TW-125	K4B1G1646E(G)	IS43TR16640xL IS46TR16640xL	H5TC1G63EFR (EOL)	W631GU6KB-x	M15T1G1664A-(2C)	EDJ1116EJBG	NT5CC64M16F(G)P-DI
2Gb	AS4C128M16D3C-93BxN	MT41J128M16JT(TW)-125	K4B2G1646E-B	IS43TR16128	H5TQ2G63	W632GG6KB-x	M15F2G16128A	EDJ2116DEBG	NT5CB128M16I(F)P-DI
2Gb	AS4C128M16D3LC-12BxN	MT41K128M16JT-125	K4B2G1646Q-B	IS43TR16128xL IS46TR16128xL	H5TC2G63	W632GU6KB-x	M15F2G16128A	EDJ2116EEBG	NT5CC128M16I(F)P-DI
2Gb	AS4C256M8D3LC-12BxN	MT41K256M8DA-125	K4B2G0846Q-BCK	IS43TR82560xL IS46TR82560xL	H5TQ2G83FFR-x	W632GG8KB-x	M15T2G8256A	EDJ2108DEBG	NT5CB256M8IN-FL
4Gb	AS4C256M16D3C-93BCN AS4C256M16D3C-10BxN AS4C256M16D3C-12BxN	MT41J256M16HA-107 MT41J256M16HA-125	K4B4G1646B(D)	IS43TR16256	H5TQ4G63	W634GG6MB/ NB	M15F4G16256A	EDJ4216BFBG (BASE)	NT5CB256M16C(D,E) P-DI
4Gb	AS4C256M16D3LC-10BxN AS4C256M16D3LC-12BxN	MT41K256M16HA-107/125 MT41K256M16TW-107/125	K4B4G1646E(Q)	IS43TR16256xL IS46TR16256xL	H5TC4G63	W634GU6MB/ NB	M15T4G16256A	EDJ4216EFBG	NT5CC256M16C(D,E) P-DI
4Gb	AS4C512M8D3LC-10BAN AS4C512M8D3LC-12BxN	MT41K512M8DA-125	K4B4G0846B(C,D)	IS43TR85120xL IS46TR85120xL	H5TC4G83	W634GU8MB/ NB	M15T4G8512A	EDJ4208EFBG	NT5CC512M8C(D,E) N-DI
8Gb	AS4C512M16D3LA-10BxN	MT41K512M16VRN-107 MT41K512M16VRP-107 MT41K512M16HA-125 (EOL)	K4B8G1646x	IS43TR16512	H5TC8G63CMR	W638GU6QB	M15T8G16512A–DE		NT5CC512T16EH-DI/A/H NT5CC512T16EH-EK/A/H
8Gb	AS4C512M16D3LB-12BxN	MT41K512M16HA-125 (EOL)	K4B8G1646x	IS43TR16512	H5TC8G63CMR	W638GU6QB	M15T8G16512A–BD		NT5CC512T16EH-DI/A/H
8Gb	AS4C512M16D3LC-10BxN AS4C512M16D3LC-12BxN AS4C512M16D3LD-10BxN	MT41K512M16VRN-107 MT41K512M16VRP-107 MT41K512M16HA-125 (EOL)	K4B8G1646x	IS43TR16512	H5TC8G63CMR	W638GU6QB	M15T8G16512A–BD M15T8G16512A–DE		NT5CC512T16EH-DI/A/H NT5CC512T16EH-EK/A/H
8Gb	AS4C1G8D3LA-10BxN	MT41K1G8SN-107/125:E	K4B8G0846x	IS43TR81024	H5TC8G83BMR				
8Gb	MT41K512M16HA-125	MT41K512M16HA-125	K4B8G1646x	IS43TR16512	H5TC8G63CMR	W638GU6QB	M15T8G16512A–BD		NT5CC512T16EH-DI/A/H

DDR4 SDRAM

DENSITY	ORG	VCC	PACKAGES	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
4Gb	256M x 16	1.2V	96-ball FBGA (7.5x13.5mm)	1333 MHz 1200 MHz	2666 Mbps 2400 Mbps	Commercial, Industrial	AS4C256M16D4-75BxN AS4C256M16D4-83BxN
4Gb	512M x 8	1.2V	78-ball FBGA(7.5x10.6mm)	1333 MHz 1200 MHz	2666 Mbps 2400 Mbps	Commercial, Industrial	AS4C512M8D4-75BxN AS4C512M8D4-83BxN
4Gb	256M x 16	1.2V	96-ball FBGA (7.5x13mm)	1600 MHz 1333 MHz	3200 Mbps 2666 Mbps	Commercial, Industrial	AS4C256M16D4A-62BxN AS4C256M16D4A-75BxN
4Gb	512M x 8	1.2V	78-ball FBGA(7.5x11mm)	1333 MHz	2666 Mbps	Commercial, Industrial	AS4C512M8D4A-75BxN
8Gb	512M x 16	1.2V	96-ball FBGA(7.5x13mm)	1600 MHz	3200 Mbps	Commercial, Industrial	AS4C512M16D4A-62BxN
8Gb	1G x 8	1.2V	78-ball FBGA(7.5x12mm)	1600 MHz	3200 Mbps	Commercial, Industrial	AS4C1G8D4A-62BxN
8Gb	512M x 16	1.2V	96-ball FBGA(7.5x13mm)	1600 MHz	3200 Mbps	Commercial	AS4C512M16D4B-62BCN
8Gb	1G x 8	1.2V	78-ball FBGA(7.5x11mm)	1600 MHz	3200 Mbps	Commercial	AS4C1G8D4B-62BCN
8Gb	512M x16	1.2V	96-ball FBGA (7.5 x 12mm)	1600 MHz	3200 Mbps	Commercial	AS4C512M16D4C-62BCN
8Gb	512M x16	1.2V	96-ball FBGA	1600 MHz	3200 Mbps	Commercial	AS4C512M16D4D-62BCN
8Gb	1G x 8	1.2V	78-ball FBGA	1600 MHz	3200 Mbps	Commercial	AS4C1G8D4D-62BCN
8Gb	512M x16	1.2V	96-ball FBGA (7.5 x 13mm)	1600 MHz	3200 Mbps	Commercial	MT40A512M16TD-062E:R
8Gb	1G x 8	1.2V	78-ball FBGA(7.5x11mm)	1600 MHz	3200 Mbps	Commercial	MT40A1G8AG-062E:R
16Gb	1G x 16	1.2V	96-ball FBGA(9x13mm)	1600 MHz	3200 Mbps	Commercial	MT40A1G16KH-062E:E MT40A1G16KD-062E:E
16Gb	1G x 16	1.2V	96-ball FBGA(7.5x13mm)	1600 MHz	3200 Mbps	Commercial	MT40A1G16TD-062E:F
16Gb	1G x 16	1.2V	96-ball FBGA(9x13mm)	1600 MHz	3200 Mbps	Commercial	AS4C1G16D4-062BCN
16Gb	1G x 16	1.2V	96-ball FBGA(7.5x13mm)	1600 MHz	3200 Mbps	Commercial	AS4C1G16D4A-62BCN
16Gb	2G x 8	1.2V	78-ball FBGA(7.5x11mm)	1600 MHz	3200 Mbps	Commercial	AS4C2G8D4A-62BCN
16Gb	2G x 8	1.2V	78-ball FBGA(9x11mm)	1600 MHz	3200 Mbps	Commercial	MT40A2G8JC-062E:E MT40A2G8JE-062E:E
16Gb	2G x 8	1.2V	78-ball FBGA(7.5x11mm)	1600 MHz	3200 Mbps	Commercial	MT40A2G8AG-062E:F
32Gb	2G x 16	1.2V	96-ball FBGA(7.5x13mm)	1600 MHz	3200 Mbps	Commercial	AS4C2G16D4-62BCN
32Gb	4G x 8	1.2V	78-ball FBGA(7.5x11mm)	1600 MHz	3200 Mbps	Commercial	AS4C4G8D4-62BCN

DDR4 Cross Reference

DENSITY	ORG	ALLIANCE	MICRON	NANYA	SAMSUNG	HYNIX	ISSI
4Gb	256M x 16	AS4C256M16D4-83BxN AS4C256M16D4-75BxN	MT40A256M16GE	NT5AD256M16D4-HR/I/T NT5AD256M16E4-HR/I/T	K4A4G165WE-BxRC/PB/TD K4A4G165WF-BxTD	H5AN4G6NBJR-VKC H5AN4G6NBJR-VKI	IS43QR16256B-083RBL/I IS43QR16256B-075UBL/I
4Gb	512M x 8	AS4C512M8D4-83BxN AS4C512M8D4-75BxN	MT40A512M8RH	NT5AD512M8D3-HR/I/T NT5AD512M8E3-HR/I/T	K4A4G085WE-BxRC/PB/TD K4A4G085WF-BxTD	H5AN4G8NBJR-VKC H5AN4G8NBJR-VKI	IS43QR85120B-083RBL/I IS43QR85120B-075UBL/I
4Gb	256M x 16	AS4C256M16D4A-62BxN AS4C256M16D4A-75BxN	MT40A256M16GE	NT5AD256M16D4-HR/I/T NT5AD256M16E4-HR/I/T NT5AD256M16D4-JR/I/T NT5AD256M16E4-JR/I/T	K4A4G165WE-BxRC/PB/TD/WE K4A4G165WF-BxTD/WE K4A4G165WG-BxWE	H5AN4G6NBJR-VKC H5AN4G6NBJR-VKI	IS43QR16256B-083RBL/I IS43QR16256B-075UBL/I
4Gb	512M x 8	AS4C512M8D4A-75BxN	MT40A512M8RH	NT5AD512M8D3-HR/I/T NT5AD512M8D3-JR/I/T NT5AD512M8E3-HR/I/T NT5AD512M8E3-JR/I/T	K4A4G085WE-BxRC/PB/TD K4A4G085WF-BxTD/WE K4A4G085WF-BxWE	H5AN4G8NBJR-VKC H5AN4G8NBJR-VKI	IS43QR85120B-083RBL/I IS43QR85120B-075UBL/I
8Gb	512M x 16	AS4C512M16D4A-62BxN	MT40A512M16LY MT40A512M16JY MT40A512M16HA MT40A512M16TB	NT5AD512M16C4-HR/I/T NT5AD512M16C4-JR/I/T NT5AD512M16H4-HR/I/T NT5AD512M16H4-JR/I/T	K4A8G165WB-BxPB/RC/TD K4A8G165WC-BxTD/WE K4A8G165WG-BxWE	H5AN8G6NCJR-XNC/I H5AN8G6NCJR-WNC/I H5AN8G6NCJR-VNC H5AN8G6NDJR-WNC	IS43QR16512A-083TBL/I IS43QR16512A-075VBL/I
8Gb	1G x 8	AS4C1G8D4A-62BxN	MT40A1G8SA MT40A1G8WE MT40A1G8PM	NT5AD1024M8C3-HR/I/T NT5AD1024M8C3-JR/I/T NT5AD1024M8H3-HR/I/T NT5AD1024M8H3-JR/I/T	K4A8G085WB-BxPB/RC/TD K4A8G085WC-BxPB/RC/TD/WE K4A8G085WG-BxWE	H5AN8G8NCJR-XNC H5AN8G8NDJR-XNC H5AN8G8NCJR-VKC/WNC/I H5AN8G8NDJR-VKC/WNC/I	IS43QR81024A-083TBL/I IS43QR81024A-075VBL/I
8Gb	512M x 16	AS4C512M16D4B-62BCN AS4C512M16D4C-62BCN AS4C512M16D4D-62BCN	MT40A512M16LY MT40A512M16JY MT40A512M16HA MT40A512M16TB	NT5AD512M16C4-HR/JR NT5AD512M16H4-HR/JR	K4A8G165WB-BCPB/RC/TD K4A8G165WC-BCTD/WE K4A8G165WG-BCWE	H5AN8G6NCJR-XNC/VNC H5AN8G6NCJR-WNC H5AN8G6NDJR-WNC	IS43QR16512A-083TBL IS43QR16512A-075VBL
8Gb	512M x 16	MT40A512M16TD-062E:R	MT40A512M16LY MT40A512M16JY MT40A512M16HA MT40A512M16TB	NT5AD512M16C4-HR/JR NT5AD512M16H4-HR/JR	K4A8G165WB-BCPB/RC/TD K4A8G165WC-BCTD/WE K4A8G165WG-BCWE	H5AN8G6NCJR-XNC/VNC H5AN8G6NCJR-WNC H5AN8G6NDJR-WNC	IS43QR16512A-083TBL IS43QR16512A-075VBL
8Gb	1G x 8	AS4C1G8D4B-62BCN AS4C1G8D4D-62BCN MT40A1G8AG-062E	MT40A1G8SA MT40A1G8WE MT40A1G8PM	NT5AD1024M8C3-HR/JR NT5AD1024M8H3-HR/JR	K4A8G085WB-BCPB/RC/TD K4A8G085WC-BCPB/RC/TD/WE K4A8G085WG-BCWE	H5AN8G8NCJR-XNC H5AN8G8NDJR-XNC H5AN8G8NCJR-VKC/WNC H5AN8G8NDJR-VKC/WNC	IS43QR81024A-083TBL IS43QR81024A-075VBL
16Gb	1G x 16	AS4C1G16D4-062BCN MT40A1G16KH-062E MT40A1G16KD-062E MT40A1G16TD-062E	MT40A1G16KH/KB/RC MT40A1G16TB/TD/TBB		K4AAG165WA-BCWE K4AAG165WB-MCPB/RC/TD K4AAG165WC-BCWE	H5ANAG6NCMR-XNC H5ANAG6NCMR-WMC/VKC H5ANAG6NDMR-XNC H5ANAG6NDMR-WMC/VKC	
16Gb	1G x 16	AS4C1G16D4A-62BCN	MT40A1G16KH/KB MT40A1G16TB/TD MT40A1G16RC		K4AAG165WA-BCWE K4AAG165WB-MCPB/RC/TD K4AAG165WC-BCWE	H5ANAG6NCMR-XNC H5ANAG6NCMR-WMC/VKC H5ANAG6NDMR-XNC H5ANAG6NDMR-WMC/VKC	
16Gb	2G x 8	AS4C2G8D4A-62BCN MT40A2G8JC-062E MT40A2G8JE-062E MT40A2G8AG-062E	MT40A2G8AG MT40A2G8SA/VA MT40A2G8JC/JE		K4AAG085WA-BCWE/TD K4AAG085WB-BCWE K4AAG085WB-MCPB/RC K4AAG085WC-BCWE	H5ANAG8NCMR-XNC H5ANAG8NCMR-VKC/WMC H5ANAG8NDMR-XNC H5ANAG8NDMR-VKC/WMC	IS43QR8K02S2A-083TBL
32Gb	2G x 16	AS4C2G16D4-62BCN	MT40A2G16TBB MT40A2G16SKL		K4ABG165WA-MCTD K4ABG165WA-MCWE K4ABG165WB-MCWE	H5ANBG6NAMR-XNC H5ANBG6NAMR-WNC H5ANBG6NAMR-VKC	
32Gb	4G x 8	AS4C4G8D4-62BCN	MT40A4G8NEA MT40A4G8BAF		K4ABG085WA-MCWE K4ABG085WA-MCTD	H5ANBG8NABR-XNC H5ANBG8NABR-WNC H5ANBG8NABR-VKC	

MOBILE LOW POWER SDRAM

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY	TEMPERATURE OPTIONS	ALLIANCE
128Mb	8M x 16	1.7V ~ 1.95V	54-ball FBGA (8x8mm)	166 MHz	Industrial -40°C to 85°C	AS4C8M16MSA-6BIN AS4C8M16MSB-6BIN
256Mb	16M x 16	1.7V ~ 1.95V	54-ball FBGA (8x8mm)	166 MHz	Industrial -40°C to 85°C	AS4C16M16MSA-6BIN AS4C16M16MSB-6BIN
256Mb	8M x 32	1.7V ~ 1.95V	90-ball FBGA (8x13mm)	166 MHz	Industrial -40°C to 85°C	AS4C8M32MSB-6BIN
512Mb	32M x 16	1.7V ~ 1.95V	54-ball FBGA (8x8mm)	166 MHz	Industrial -40°C to 85°C	AS4C32M16MSA-6BIN AS4C32M16MSB-6BIN
512Mb	16M x 32	1.7V ~ 1.95V	90-ball FBGA (8x13mm)	166 MHz	Industrial -40°C to 85°C	AS4C16M32MSA-6BIN AS4C16M32MSB-6BIN

MOBILE LOW POWER SDRAM Cross Reference

DENSITY	ALLIANCE	MICRON	ISSI	NANYA	WINBOND
128Mb	AS4C8M16MSA-6BIN AS4C8M16MSB-6BIN		IS42VM16800H		W987D6HBGX
256Mb	AS4C16M16MSA-6BIN AS4C16M16MSB-6BIN	MT48H16M16LFBF (EOL)	IS42VM16160K		W988D6FBGX
256Mb	AS4C8M32MSB-6BIN	MT48H8M32LFB5 (EOL)	IS42VM32800K		W988D2FBJX
512Mb	AS4C32M16MSA-6BIN AS4C32M16MSB-6BIN	MT48H32M16LFB4-6 IT	IS42VM16320E	NT6SM32M16BG-S1	W989D6DBGX
512Mb	AS4C16M32MSA-6BIN AS4C16M32MSB-6BIN	MT48H16M32LFB5-6 IT (EOL)	IS42VM32160E	NT6SM16M32BK-S1	W989D2DBJX

MOBILE LOW POWER DDR1

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
256Mb	16M x 16	1.8V	60-ball FBGA (8x9mm)	166 MHz	333Mbps	Extended -30°C to 85°C	AS4C16M16MD1-6BCN
512Mb	32M x 16	1.8V	60-ball FBGA (8x9mm)	200 MHz	400Mbps	Industrial -40°C ~ +85°C	AS4C32M16MD1B-5BIN
512Mb	16M x 32	1.8V	90-ball FBGA (8x13mm)	200 MHz	400Mbps	Extended -25°C to 85°C Industrial -40°C to 85°C	AS4C16M32MD1B-5BIN
2Gb	64M x 32	1.8V	90-ball FBGA (8x13mm)	200 MHz	400Mbps	Extended -25°C to 85°C Industrial -40°C to 85°C	AS4C64M32MD1-5BxN
2Gb	64M x 32	1.8V	90-ball FBGA (8x13mm)	200 MHz	400Mbps	Industrial -40°C to 85°C	AS4C64M32MD1A-5BIN

MOBILE LOW POWER DDR1 Cross Reference

DENSITY	ALLIANCE	MICRON	SAMSUNG	ISSI	HYNIX	NANYA	ELITE (ESMT)	WINBOND
256Mb	AS4C16M16MD1-6BCN	MT46H16M16LFBF-6 (EOL)	K4X56163SPN	IS43LR16160	HY5MS5B6/ H5MS2562	NT6DM16M16AD-T1	M53D2561616A-6BG2F	W948D6FBHX
512Mb	AS4C32M16MD1B-5BIN	MT46H32M16LFBF-5	K4X51163PI	IS43R16320B	HY5MS7B6/ H5MS5162	NT6DM32M16A(B)D-T1	M53D5121632A-5BG2T	W949D6DBHX
512Mb	AS4C16M32MD1B-5BIN	MT46H16M32LFB5-5	K4X51323PI	IS43LR32160B	H5MS5132/ H5MS5122	NT6DM16M32A(B)C-T1	M53D5123216A-5BG2S	W949D2DBJX
2Gb	AS4C64M32MD1-5BxN	MT46H64M32LFKQ-5	K4X2G323PC	IS43LR32640A	H5M52G22			
2Gb	AS4C64M32MD1A-5BIN	MT46H64M32LFKQ-5	K4X2G323PC	IS43LR32640A	H5M52G22			

MOBILE LOW POWER DDR2

DENSITY	ORG	VCC	PACKAGE	CLOCK FREQUENCY (MHz)	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE
256Mb	8M x 32	1.2V/1.8V	134-ball FBGA	400 MHz	800Mbps	Extended -25°C to 85°C	AS4C8M32MD2A-25BCN
256Mb	8M x 32	1.2V/1.8V	168-ball POP FBGA	400 MHz	800Mbps	Extended -25°C to 85°C	AS4C8M32MD2A-25BPCN
1Gb	64M x 16	1.2V/1.8V	134-ball FBGA	400 MHz	800Mbps	Industrial -40°C to 85°C	AS4C64M16MD2A-25BIN
1Gb	32M x 32	1.2V/1.8V	134-ball FBGA	400 MHz	800Mbps	Industrial -40°C to 85°C	AS4C32M32MD2A-25BIN
2Gb	128M x 16	1.2V/1.8V	134-ball FBGA	400MHz	800Mbps	Industrial -40°C to 85°C	AS4C128M16MD2A-25BIN
2Gb	64M x 32	1.2V/1.8V	134-ball FBGA	400 MHz	800Mbps	Industrial -40°C to 85°C	AS4C64M32MD2A-25BIN
4Gb	128M x 32	1.2V/1.8V	134-ball FBGA	533 MHz	1066Mbps	Industrial -40°C to 85°C	AS4C128M32MD2A-18BIN
4Gb	128M x 32	1.2V/1.8V	134-ball FBGA	400 MHz	800Mbps	Industrial -40°C to 85°C	AS4C128M32MD2A-25BIN

MOBILE LOW POWER DDR2 Cross Reference

DENSITY	ALLIANCE	MICRON	SAMSUNG	ISSI	HYNIX	NANYA	ELITE (ESMT)	WINBOND
256Mb	AS4C8M32MD2A-25B(P)CN			IS43LD32800A-25BLx IS43LD32800B-25BLx				W978H2KBVX2E
1Gb	AS4C64M16MD2A-25BIN	MT42L64M16D1HE-25		IS43LD16640C/A		NT6TL64M16BA(I)-G0		W97AH6KBVX2
1Gb	AS4C32M32MD2A-25BIN	MT42L32M32D1HE-25		IS43LD32320C/A		NT6TL32M32BI(A)-G0		W97AH2KBVX2
2Gb	AS4C128M16MD2A-25BIN	MT42L128M16D1TK-25		IS43LD16128B		NT6TL128M16CI(A)-G0		W97BH6KBVX2
2Gb	AS4C64M32MD2A-25BIN	MT42L64M32D1TK-25		IS43LD32640B		NT6TL64M32CI(A)-G0		W97BH2KBVX2
4Gb	AS4C128M32MD2A-18BIN	MT42L128M32D1GU-18		IS43LD32128A		NT6TL128M32BI(A)-G0		
4Gb	AS4C128M32MD2A-25BIN	MT42L128M32D1GU-18		IS43LD32128A		NT6TL128M32BI(A)-G0		

LPDDR4

DENSITY	ORG	VDD1 / VDD2 / VDDQ	PACKAGES	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE	REMARKS
2Gb	128M x 16	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C128M16MD4-062BAN	With ECC
2Gb	64M x 32	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C64M32MD4-062BAN	With ECC
4Gb	128M x 32	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C128M32MD4-062BAN	With ECC
4Gb	256M x 16	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C256M16MD4-062BAN	With ECC
8Gb	256M x 32	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C256M32MD4-062BAN	With ECC
4Gb	128M x 32	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	3200 Mbps	Industrial (-40°C to 85°C)	AS4C128M32MD4A-062BIN	With ECC
4Gb	256M x 16	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	4266 Mbps	Industrial (-40°C to 85°C)	AS4C256M16MD4A-046BIN	Without ECC
8Gb	256M x 32	1.8V / 1.1V / 1.1V	200b TFBGA (10x14.5mm)	1600 MHz	4266 Mbps	Industrial (-40°C to 85°C)	AS4C256M32MD4A-046BIN	Without ECC

LPDDR4X

DENSITY	ORG	VDD1 / VDD2 / VDDQ	PACKAGES	CLOCK FREQUENCY	DATA RATE	TEMPERATURE OPTIONS	ALLIANCE	REMARKS
2Gb	128M x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C128M16MD4V-062BAN	With ECC
4Gb	128M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	1600 MHz	3200 Mbps	Industrial (-40°C to 85°C)	AS4C128M32MD4VA-062BIN	With ECC
4Gb	256M x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C256M16MD4V-062BAN	With ECC
4Gb	256M x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 85°C)	AS4C256M16MD4VA-046BIN	Without ECC
8Gb	256M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	1600 MHz	3200 Mbps	Automotive A2 (-40°C to 105°C)	AS4C256M32MD4V-062BAN	With ECC
8Gb	256M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x14.5mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 85°C)	AS4C256M32MD4VA-046BIN	Without ECC
8Gb	512M x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	1866 MHz	3733 Mbps	Industrial (-40°C to 95°C)	AS4C512M16MD4V-053BIN	without ECC
8Gb	512M x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 85°C)	AS4C512M16MD4VA-046BIN	without ECC
16Gb	1G x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 95°C)	AS4C1G16MD4V-046BIN	without ECC
16Gb	1G x 16	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 85°C))	AS4C1G16MD4VA-046BIN	without ECC
16Gb	512M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	1866 MHz	3733 Mbps	Industrial (-40°C to 95°C)	AS4C512M32MD4V-053BIN	without ECC
16Gb	512M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 95°C)	AS4C512M32MD4V-046BIN	without ECC
16Gb	512M x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 95°C)	AS4C512M32MD4VA-046BIN*	without ECC
32Gb	1Gb x 32	1.8V / 1.1V / 0.6V	200b TFBGA(10x15mm)	2133 MHz	4266 Mbps	Industrial (-40°C to 95°C)	AS4C1G32MD4V-046BIN	without ECC

** NEW PRODUCT COMING SOON*

LPDDR4 Cross Reference

DENSITY	ORG	ALLIANCE	MICRON	SAMSUNG	HYNIX	NANYA	ISSI	WINBOND	IM
2Gb	128M x 16	AS4C128M16MD4-062BAN	MT53E128M16D1DS		H9HCNNNBKUMLXR/HR	NT6AN128M16AV	IS43/46LQ16128A IS43/46LQ16128EA	W66BL6NBU W66BP6NBU	
2Gb	64M x 32	AS4C64M32MD4-062BAN					IS43/46LQ32640A IS43/46LQ32640EA	W66CL2NQU W66CP2NQU W66CP2NQQ	
4Gb	128M x 32	AS4C128M32MD4-062BAN AS4C128M32MD4A-062BIN	MT53B128M32D1DS MT53E128M32D2DS MT53E128M32D2FW	K4F4E3S4HF-GFCJ K4F4E3S4HF-GHCJ		NT6AN128T32AV	IS43/46LQ32128A IS43/46LQ32128EA	W66CL2NQU W66CP2NQU	IME4G32L4HABG
4Gb	256M x 16	AS4C256M16MD4-062BAN AS4C256M16MD4A-046BIN	MT53E256M16D1DS MT53E256M16D1FW		H9HCNNN4KUMLHR	NT6AN256M16AV	IS43/46LQ16256A IS43/46LQ16256EA	W66CP6NBU W66CL6NBU	
8Gb	256M x 32	AS4C256M32MD4-062BAN AS4C256M32MD4A-046BIN	MT53B256M32D1DS MT53E256M32D2DS MT53E256M32D2FW	K4F8E304HB-MGCJ K4F8E3S4HB-MFCJ K4F8E3S4HB-MHCJ	H9HCNNN8KUMLHR	NT6AN256T32AV	IS43/46LQ32256A IS43/46LQ32256EA	W66DP2NQU W66DL2NQU	IME8G32L4HADG

LPDDR4X Cross Reference

DENSITY	ORG	ALLIANCE	MICRON	SAMSUNG	HYNIX	NANYA	ISSI	WINBOND	IM
2Gb	128M x 16	AS4C128M16MD4V-062BAN					IS43/46LQ16128AL IS43/46LQ16128EA	W66BQ6NBU	
4Gb	256M x 16	AS4C256M16MD4V-062BAN AS4C256M16MD4VA-046BIN	MT53E256M16D1DS MT53E256M16D1FW	K4U8E3S4AD-GFCL K4U8E3S4AD-GHC	H9HCNNN4KMMLHR	NT6AP256M16AV	IS43/46LQ16256AL IS43/46LQ16256EA	W66CQ6NQU	IM4G16L4JCBG
4Gb	128M x 32	AS4C128M32MD4VA-062BIN	MT53B128M32D1DS MT53E128M32D2DS MT53E128M32D2FW	K4U4E3S4x		NT6AP128T32AV	IS43/46LQ32128AL	W66CQ2NQU	IME4G32L4JCBG
8Gb	256M x 32	AS4C256M32MD4V-062BAN AS4C256M32MD4VA-046BIN	MT53B256M32D1DS MT53E256M32D2DS MT53E256M32D2FW	K4U8E3S4Ax		NT6AP256T32AV	IS43/46LQ32256AL IS43/46LQ32256EAL	W66DQ2NQU	IM8G32L4JCBG
8Gb	512M x 16	AS4C512M16MD4V-053BIN AS4C512M16MD4VA-046BIN	MT53D512M16D1DS MT53E512M16D1FW			NT6AP512M16AV	IS43LQ16512AL		IM8G16L4JCBG-046
16Gb	1G x 16	AS4C1G16MD4V-046BIN AS4C1G16MD4VA-046BIN	MT53E1G16D1ZW-046			NT6AT1024M16AV			IMAG16L4HBBG
16Gb	512M x 32	AS4C512M32MD4V-053BIN	MT53D512M32D2Dx MT53D512M32D1ZW MT53D512M32D2FW	K4U6E3S4Ax	H9HCNNNBPUMLHR	NT6AP512T32BY			IMAG32L4JCBG-046
16Gb	512M x 32	AS4C512M32MD4V-046BIN AS4C512M32MD4VA-046BIN	MT53D512M32D2Dx MT53E512M32D2FW MT53E512M32D1ZW	K4U6E3S4Ax	H9HCNNNBKMMLXR H9HCNNNBPUMLHR	NT6AP512T32BY			IMAG32L4JCBG-046
32Gb	1G x 32	AS4C1G32MD4V-046BIN	MT53D1024M32D4Dx MT53E1G32D2FW MT53E1G32D2Nx	K4UBE3D4Ax	H9HCNNNCPMMLXR H9HCNNNCPMMLXR	NT6AP1024F32B			IMBG32L4KBBG IMBG32L4KDDG

5V FAST ASYNCHRONOUS SRAM

DENSITY	ORG	VCC	PACKAGES	TEMPERATURE	SPEED (NS)	ALLIANCE
64Kb	8K x 8	5V	28pin SOJ (300mils),Skinny 28pin PDIP (300mils)	Commercial 0°C to 70°C Industrial -40°C to 85°C	15	AS7C164A
256Kb	32K x 8	5V	28pin SOJ (300mils), 28pin TSOP I (8x13.4mm)	Commercial 0°C to 70°C Industrial -40°C to 85°C	10/12/15/20	AS7C256A
256Kb	32K x 8	5V	28pin PDIP (300mils)	Commercial 0°C to 70°C	15	AS7C256C
512Kb	32K x 16	5V	44pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial 0°C to 70°C	12/15	AS7C513B
1Mb	128K x 8	5V	32pin TSOP I (8x13.4mm) Corner Vcc & Gnd	Commercial 0°C to 70°C Industrial -40°C to 85°C	12/15/20	AS7C1024B
1Mb	128K x 8	5V	32pin SOJ (300mils & 400mils) Corner Vcc & Gnd	Industrial -40°C to 85°C	12	AS7C1024D
1Mb	128K x 8	5V	32pin SOJ (300mils & 400mils), Center Vcc & Gnd	Commercial 0°C to 70°C Industrial -40°C to 85°C	10/12/15	AS7C1025B
1Mb	64K x 16	5V	44pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial 0°C to 70°C Industrial -40°C to 85°C	10/12/15/20	AS7C1026B
4Mb	512K x 8	5V	36pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial 0°C to 70°C Industrial -40°C to 85°C	10/12/15/20	AS7C4096A
4Mb	256K x 16	5V	44pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial 0°C to 70°C Industrial -40°C to 85°C	10/12/15/20	AS7C4098A

3.3V FAST ASYNCHRONOUS SRAM

DENSITY	ORG	VCC	PACKAGES	TEMPERATURE	SPEED (NS)	ALLIANCE
256Kb	32K x 8	3.3V	28pin SOJ (300mils), 28pin TSOP I (8x13.4mm)	Commercial Industrial	10,12,15,20	AS7C3256A
512Kb	32K x 16	3.3V	44pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial	10,12,15,20	AS7C3513B
1Mb	128K x 8	3.3V	32pin SOJ (300 & 400mils), 32pin TSOP I (8x13.4mm), Corner Vcc & Gnd	Commercial	10,12,15,20	AS7C31024B
1Mb	128K x 8	3.3V	32pin SOJ (300 & 400mils), Center Vcc & Gnd	Commercial Industrial	10,12,15,20	AS7C31025B
1Mb	64K x 16	3.3V	44pin SOJ (400mils), 44pin TSOP II (400mils)	Commercial Industrial	10,12,15,20	AS7C31026B
2Mb	128K x 16	3.3V	44pin TSOP II (400mils)	Commercial Industrial	10,12,15,20	AS7C32098A
2Mb	256K x 8	3.3V	44pin TSOP II (400mils)	Commercial Industrial	10,12,15,20	AS7C32096A
4Mb	512K x 8	3.3V	36pin SOJ (400mils), 44pin TSOP II (400mils), 36b TFBGA (6x8mm)	Commercial Industrial	8,10,12,15,20	AS7C34096A / B
4Mb	256K x 16	3.3V	44pin SOJ (400mils), 44pin TSOP II (400mils), 48b TFBGA (6x8mm, 8x10mm)	Commercial Industrial	8,10,12,15,20	AS7C34098A / B
8Mb	1M x 8	3.3V	44pin TSOP II (400mils), 48b TFBGA (6x8mm)	Industrial	10	AS7C38096A / B
8Mb	512K x 16	3.3V	44pin TSOP II (400mils), 48b TFBGA (6x8mm)	Industrial	10	AS7C38098A
8Mb	256K x 32	3.3V	90b TFBGA (8x13mm)	Industrial	10	AS7C325632
16Mb	512K x32	3.3V	90b TFBGA (9x13mm)	Industrial	10	AS7C351232
16Mb	1M x 16	3.3V	48b TFBGA (6x8mm), 48pin TSOP I (12x20mm), 54pin TSOP II (400mils)	Industrial	10	AS7C316098A / B
16Mb	2M x 8	3.3V	48b TFBGA (6x8mm), 48pin TSOP I (12x20mm), 44pin TSOP II, 54pin TSOP II	Industrial	10	AS7C316096A / B / C
32Mb	2M x 16	1.65V ~ 3.6V	48b FBGA (6x8mm)	Industrial	10	AS7CW2M16-10BIN

1.8V/2.5V/3.3V FAST ASYNCHRONOUS SRAM

DENSITY	ORG	VCC	PACKAGES	TEMPERATURE	SPEED (NS)	ALLIANCE
32Mb	2M x 16	1.65V ~ 3.6V	48b FBGA (6x8mm)	Industrial	10	AS7CW2M16-10BIN

FAST ASYNCHRONOUS SRAM Cross Reference

64K FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS (EOL)	IDT	ISSI
8K x 8	5V	28pin SOJ (300mil)	15	AS7C164A-15JxN		CY7C185-xxVI/VC (EOL)	7164SxxYG 7164LxxYG	IS61C64AL-xxJLI (EOL)
8K x 8	5V	28pin Skinny PDIP 300mil	15	AS7C164A-15PxN		CY7C185-xxPC (EOL)	7164S20TPG	

256K FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS (EOL)	IDT	ISSI
32K x 8	5V	28pin SOJ	10,12,15,20	AS7C256A-xxJCN/JIN	K6E0808C1E-J (EOL)	CY7C199D-10VXI(EOL) CY-7C199CN–xxVXI/VXC(EOL)	71256LxxYG 71256SAxxYG	IS61C256AL-xxJL/JLI
32K x 8	5V	28pin TSOP I	10,12,15,20	AS7C256A-xxTCN/TIN	K6E0808C1E-T (EOL)	CY7C199D-10ZXI(EOL) CY-7C199CN–xxZXC/ZXI(EOL)	71256SAxxPZG	IS61C256AL-xxTL/TLI
32K x 8	3.3V	28pin SOJ	10,12,15,20	AS7C3256A-xxJCN/JIN	K6E0808V1E-J (EOL)	CY7C1399BN-xxVXC(EOL)	71V256SAxxYG	IS61LV256AL-10JL/JLI
32K x 8	3.3V	28pin TSOP I	10,12,15,20	AS7C3256A-xxTCN/TIN	K6E0808V1E-T (EOL)	CY7C1399BN-xxZXI/ZXC(EOL)	71V256SAxxPZG	IS61LV256AL-10TL/TLI
32K x 8	5V	28pin DIP	15	AS7C256C-xxPCN		CY7C199CN-15/25PXC (EOL)	71256LxxTDB 71256SxxTDB 71256SAxxTPG	

512K FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI
32K x 16	5V	44pin SOJ (400mil)	15	AS7C513B-xxJCN		CY7C1020D-10VXI(EOL)		IS61C3216AL-12KLI
32K x 16	5V	44pin TSOP II (400mil)	12,15	AS7C513B-xxTCN		CY7C1020D-10ZSXI		IS61C3216AL-12TLI
32K x 16	3.3V	44pin TSOP II (400mil)	12,15,20	AS7C3513B-xxTCN		CY7C1020DV33-10ZSXI		IS61WV3216BLL-xxTLI
32K x 16	3.3V	44pin SOJ (400mil)	10,12,15	AS7C3513B-xxJCN		CY7C1020DV33-10VXI		

1M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG (EOL)	CYPRESS	IDT	ISSI	GSI
128K x 8	5V	32pin SOJ (400mil)	12,15,20	AS7C1025B-xxJCN/JIN	K6R1008C1D-KI10	CY7C1019D-10VXI(EOL)	71124SxxYG(EOL)		
128K x 8	3.3V	32pin SOJ (400mil)	10,12,15,20	AS7C31025B-xxJCN/JIN	K6R1008V1D-KI10	CY7C1019DV33-10VXI	71V124SAxxYG	IS63LV1024-xxK/KI (EOL)	
128K x 8	5V	32pin SOJ (300mil)	10,12,15,20	AS7C1025B-xxTJCN					
128K x 8	3.3V	32pin SOJ (400mil)	12	AS7C31025B-xxJIN		CY7C1019DV33-10VXI			
128K x 8	3.3V	32pin SOJ (300mil)	10,12,15,20	AS7C31025B-xxTJCN/-12TJIN		CY7C1018DV33-10VXI(EOL)	71V124SAxxTYG	IS63WV1288DBLL-xxJLI IS63LV1024L-10JLI(EOL)	
128K x 8	5V	32pin SOJ (400mil)	12	AS7C1024D-12JIN		CY7C109D-10VXI	71024SxxYG	IS61C1024AL-12KLI (EOL)	

FAST ASYNCHRONOUS SRAM Cross Reference

1M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG (EOL)	CYPRESS	IDT	ISSI	GSI
128K x 8	5V	32pin TSOP I	12,15,20	AS7C1024B-xxTCN		CY7C109D-10ZXI		IS61C1024AL-12TLI	
128K x 8	5V	32pin SOJ (300mil)	12	AS7C1024D-12TJIN		CY7C1009D-10VXI(EOL)	71024SxxTYG	IS61C1024AL-12JLI	
128K x 8	3.3V	32pin SOJ (400mil)	12,15,20	AS7C31024B-xxJCN					
128K x 8	3.3V	32pin TSOP I	10,12,15,20	AS7C31024B-xxTCN					
128K x 8	3.3V	32pin SOJ (300mil)	10,12,15,20	AS7C31024B-xxTJCN					
64K x 16	5V	44pin SOJ (400mil)	10,12,15,20	AS7C1026B-xxJCN/JIN	K6R1016C1D-KI10	CY7C1021D-10VXI	71016SxxYG	IS61C6416AL-12KLI	
64K x 16	5V	44pin TSOP II (400mil)	10,12,15,20	AS7C1026B-xxTCN/TIN	K6R1016C1D-UI10	CY7C1021D-10ZSXI/A(EOL)	71016SxxPHG	IS61C6416AL-12TLI	
64K x 16	3.3V	44pin SOJ (400mil)	10,12,15,20	AS7C31026B-xxJCN/TIN	K6R1016V1D-KI10	CY7C1021DV33-10VXI	71V016SAxxYG	IS61WV6416DBLL-xxKLI- IS61LV6416-xxKL/KLI	
64K x 16	3.3V	44pin TSOP II (400mil)	10,12,15,20	AS7C31026B-xxTCN/TIN	K6R1016V1D-UI10	CY7C1021DV33-10ZSXI CY7C1021DV33-10ZSXA(EOL)	71V016SAxxPHG	IS61WV6416DBLL-xxTLI IS61WV6416EEBLL-xxTLI IS61LV6416-xxT/TL/TI/TLI	GS71116AGP-xx

2M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	GSI
128K x 16	3.3V	44pin TSOP II	10,12,15,20	AS7C32098A-xxTxN		CY7C1011G30-10ZSXA CY7C1011DV33-10ZSXI		IS61WV12816EDBLL-xxTLI IS64WV12816EDBLL-10CTLA1 IS61WV12816EFBLL-10TLI IS61WV12816FBLL-10TLI IS61WV12816DBLS-35TLI(EOL) IS61WV12816DBLL-10TL/TLI/TI(EOL)	GS72116AGP-xx GS72116ATP-xx(EOL)
256K x 8	3.3V	44pin TSOP II	10,12,15,20	AS7C32096A-xxTxN				IS61WV2568EDBLL-xxTLI IS64WV2568EDBLL-10CTLA1 IS61WV2568EFBLL-10TLI IS61WV2568FBLL-10TLI	GS72108AGP-xx GS72108ATP-xx(EOL)

4M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	GSI
512K x 8	5V	36pin SOJ (400mil)	10,12,15,20	AS7C4096A-xxJxN	K6R4008C1D-KI10	CY7C1049D-10VXI(EOL) CY7C1049G-10VXI CY7C1049GN-10VXI	R1RP0408DGE-2LR(PI/PR)#B1	IS61C5128AL-10KLI	
512K x 8	5V	44pin TSOP II (400mil)	10,12,15,20	AS7C4096A-xxTxN	K6R4008C1D-UI10	CY7C1049G-10ZSXI		IS61C5128AL-10TLI	

FAST ASYNCHRONOUS SRAM Cross Reference

4M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	GSI
512K x 8	3.3V	36pin SOJ (400mil)	8,10,12,15,20	AS7C34096A-xxJxN	K6R4008V1D-KI10	CY7C1049DV33-10VXI (EOL) CY7C1049G30-10VXI CY7C1049GN30-10VXI	71V424LxxYG 71V424SxxYG R1RW0408DGE-2LR(PI/PR)#B1	IS61WV5128FBLL-10KLI IS64WV5128EFBLL-10KLA3 IS61WV5128EDBLL-10KLI/KLA1 IS61WV5128BLL-10KLI	
512K x 8	3.3V	44pin TSOP II (400mil)	10,12,15,20	AS7C34096A-xxTxN	K6R4008V1D-UI10	CY7C1049DV33-10ZSXI(EOL) CY7C1049G30-10ZSXI CY7C1049GN30-10ZSXI	71V424LxxPHG 71V424SxxPHG	IS61WV5128FBLL-10TLI IS64WV5128EFBLL-10CTLA3 IS61WV5128EDBLL-10TLI IS64WV5128EDBLL-10CTA1/CTLA1 IS61WV5128BLL-10TL/TLI IS61WV5128BLS-25TLI	
512K x 8	2.7 ~ 3.6V	44pin TSOP II	10	AS7C34096B-10TIN		CY7C1049G30-10ZSXI CY7C1049GN30-10ZSXI	71V424LxxPHG 71V424SxxPHG	IS61WV5128FBLL-10TLI IS64WV5128EFBLL-10CTLA3 IS61WV5128EDBLL-10TLI IS64WV5128EDBLL-10CTA1/CTLA1 IS61WV5128BLL-10TL/TLI IS61WV5128BLS-25TLI	
512K x 8	2.7 ~ 3.6V	36ball TFBGA	10	AS7C34096B-10BIN				IS61WV5128FBLL-10BI/BLI IS64WV5128EFBLL-10BA3/BLA3 IS61WV5128EDBLL-10BI/BLI IS64WV5128EDBLL-10BA1/BLA1 IS61WV5128BLL-10BI/BLI	
256K x 16	5V	44pin SOJ (400mil)	10,12,15,20	AS7C4098A-xxJxN	K6R4016C1D-KI10	CY7C1041D-10VXI(EOL) CY7C1041G-10VXI	R1RP0416DGE-2LR(PI/PR)#B1	IS61C25616AL-10KLI IS61C25616AS-25KLI	
256K x 16	5V	44pin TSOP II (400mil)	10,12,15,20	AS7C4098A-xxTxN	K6R4016C1D-UI10	CY7C1041D-10ZSXI(EOL) CY7C1041G-10ZSXI CY7C1041GN-10ZSXI	R1RP0416DSB-0PI(PR)#D1 R1RP0416DSB-2LR(PI/PR/SR)#D1 R1RP0416DSB-2LR(PR)#S1	IS61C25616AL-10TL/TLI IS61C25616AS-25TLI	
256K x 16	3.3V	44pin SOJ (400mil)	10,12,15,20	AS7C34098A-xxJxN	K6R4016V1D-KI10	CY7C1041DV33-10VXI (EOL) CY7C1041GN30-10VXI(EOL) CY7C1041G30-10VXI	71V416LxxYG 71V416SxxYG R1RW0416DGE-2LR(PI/PR)#B1	IS61WV25616BLL-xxKLI(EOL)	
256K x 16	3.3V	44pin TSOP II (400mil)	8,10,12,15,20	AS7C34098A-xxTxN	K6R4016V1D-UI10	CY7C1041DV33-10ZSXI(EOL) CY7C1041G30-10ZSXI/A	71V416LxxPHG 71V416SxxPHG R1RW0416DSB-0PI(PR)#D1 R1RW0416DSB-0PI(PR)#S1 R1RW0416DSB-2LR(PI/PR/SR)#D1 R1RW0416DSB-2PI(PR)#S1	IS61WV25616EDBLL-xxTLI/CTLA1 IS61WV25616EFBLL-10TLI IS61WV25616FBLL-10TL IS61WV25616BLL-xxTL/TLI(EOL) IS61WV25616BLS-25TLI(EOL)	GS74116AGP-xx
256K x 16	3.3V	48ball TFBGA	10	AS7C34098A-xxBIN		CY7C1041DV33-10BVXI(EOL) CY7C1041G30-10BVJXI	71V416LxxBE 71V416SxxBE	IS61WV25616EDBLL-xxBLI/BLA1 IS61WV25616EFBLL-10BLI IS61WV25616FBLL-10BI/BLI- IS61WV25616BLL-xxBLI (EOL)	GS74117AX-xx GS74117AGX-xx
256K x 16	2.7 ~ 3.6V	44pin TSOP II	10	AS7C34098B-10TIN		CY7C1041DV33-10ZSXI(EOL) CY7C1041G30-10ZSXI/A	71V416LxxPHG 71V416SxxPHG R1RW0416DSB-0PI(PR)#D1 R1RW0416DSB-0PI(PR)#S1 R1RW0416DSB-2LR(PI/PR/SR)#D1 R1RW0416DSB-2PI(PR)#S1	IS61WV25616EDBLL-xxTLI/CTLA1 IS61WV25616EFBLL-10TLI IS61WV25616FBLL-10TL IS61WV25616BLL-xxTL/TLI(EOL) IS61WV25616BLS-25TLI(EOL)	GS74116AGP-xx
256K x 16	2.7 ~ 3.6V	48ball TFBGA	10	AS7C34098B-10BIN		CY7C1041DV33-10BVXI(EOL) CY7C1041G30-10BVJXI	71V416LxxBE 71V416SxxBE	IS61WV25616EDBLL-xxBLI/BLA1 IS61WV25616EFBLL-10BLI IS61WV25616FBLL-10BLI- IS61WV25616BLL-xxBLI (EOL)	GS74117AX-xx GS74117AGX-xx

FAST ASYNCHRONOUS SRAM Cross Reference

8M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	
512K x 16	3.3V	44pin TSOP II	10	AS7C38098A-10TIN		CY7C1051DV33-10/12ZSXI(EOL) CY7C1051H30-10ZSXI		IS61WV51216EEBLL-xxTLI IS61WV51216BLL-xxTLI	IS61WV51216EDBLL-xxTLI
512K x 16	3.3V	48ball TFBGA	10	AS7C38098A-10BIN		CY7C1051DV33-10BAXI (EOL) CY7C1051H30-10BVXI		IS61WV51216EEBLL-xxBLI IS61WV51216BLL-xxMLI	IS61WV51216EDBLL-xxBLI
256K x 32	3.3V	90ball TFBGA	10	AS7C325632-10BIN				IS61WV25632BLL-10BLI	
1M x 8	3.3V	44pin TSOP II	10	AS7C38096A-10TIN		CY7C1059DV33-10ZSXI(EOL) CY7C1059DV33-12ZSXI/Q(EOL) CY7C1059H30-10ZSXI		IS61WV10248BLL-xxTL IS61WV10248EDBLL-xxTLI	IS61WV10248EEBLL-8TLI
1M x 8	3.3V	48ball TFBGA (different pinout)	10	AS7C38096A-10BIN					
1M x 8	3.3V	48ball TFBGA (different pinout)	10	AS7C38096B-10BIN				IS61WV10248BLL-xxMLI IS61WV10248EDBLL-xxBLI	IS61WV10248EEBLL-xxBLI

16M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	
1M x 16	3.3V	48pin TSOP I	10	AS7C316098A-10TIN		CY7C1061GN30-10ZXI CY7C1061G30-10ZXI		IS61WV102416BLL-xxTLI(EOL) IS62WV102416BLL-25TLI IS61WV102416FBLL-xxTLI	IS61WV102416DALL-12TLI IS61WV102416EDBLL-10TL/TLI
1M x 16	3.3V	48ball TFBGA	10	AS7C316098A-10BIN		CY7C1061GN30-10BV1XI (EOL) CY7C1061G30-10BV1X		IS61WV102416BLL-10MLI(EOL) IS61WV102416EDBLL-10BL/BLI	IS61WV102416DALL-12BLI IS61WV102416FBLL-xxBLI
1M x 16	3.3V	54pin TSOP II	10	AS7C316098B-10TIN		CY7C1061GN30-10ZSXI CY7C1061G30-10ZSXI CY-7C10612G30-10ZSXI		IS61WV102416FBLL-xxT2LI	
1M x 16	3.3V	48ball TFBGA	10	AS7C316098B-10BIN		CY7C1061GN30-10BVJXI CY7C1061GN30-10BVXI CY7C1061G30-10BVJXI		IS62WV102416BLL-25MLI IS61WV102416FBLL-xxB2LI	
2M x 8	3.3V	48pin TSOP I	10	AS7C316096A-10TIN					
2M x 8	3.3V	54pin TSOP II	10	AS7C316096B-10TIN		CY7C1069DV33-10ZSXI (EOL) CY7C1069GN30-10ZSXI CY7C1069G30-10ZSXI		IS61WV20488FBLL-xxT2LI	
2M x 8	3.3V	44pin TSOP II	10	AS7C316096C-10TIN				IS61WV20488FBLL-xxTLI IS62WV20488BLL-25TLI	IS61WV20488BLL-xxTLI (EOL)
2M x 8	3.3V	48ball TFBGA (1CE)	10	AS7C316096C-10BIN				IS61WV20488BLL-xxMLI(EOL)	IS61WV20488FBLL-xxBLI
2M x 8	3.3V	48ball TFBGA (2CE)	10	AS7C316096B-10BIN		CY7C1069GN30-10BVXI CY7C1069G30-10BVXI CY7C1069DV33-10BVXI(EOL)			
512K x 32	3.3V	90ball TFBGA	10	A7C351232-10BIN				IS61WV51232BLL-10BLI	

32M FAST

ORG	VCC	PACKAGE	SPEED (NS)	ALLIANCE	SAMSUNG	CYPRESS	IDT	ISSI	
2M x 16	1.8V/2.5V/3.3V	48b FBGA (6x8mm)	10	AS7CW2M16-10BIN		CY7C1071DV33-12BAXI (3.3V)		IS61WV204816ALL-10BL/I (1.8V)	IS61WV204816BLL-10BL/I (3.3V)

2.7V- 3.6V LOW POWER SRAMS

DENSITY	ORG	VCC	PACKAGES	SPEED (NS)	ALLIANCE
256Kb	32K x 8	2.5 ~ 3.6V	28pin SOP (330mm)	70	AS62V256A-70SIN
1Mb	64K x16 with ECC	2.7 ~ 3.6V	44pin TSOP II (400mils)	45	AS6CE1016A-45ZIN
2Mb	256K x 8	2.7 ~ 3.6V	32pin SOP(450mils), 32pin TSOP I (8x20mm), 32pin STSOP (8x13.4mm), 36ball TFBGA (6x8mm)	55	AS6C2008
4Mb	256K x 16	2.7 ~ 3.6V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	45	AS6C4016B
4Mb	256K x16 with ECC	2.7 ~ 3.6V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	45	AS6CE4016B
8Mb	1M x 8	2.7 ~ 3.6V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	45/55	AS6C8008B
8Mb	512K x 16	2.7 ~ 3.6V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	45/55	AS6C8016B
16Mb	1M x 16	2.7 ~ 3.6V	48pin TSOP I (12x20mm), 48ball TFBGA (6x8mm)	45/55	AS6C1616B
16Mb	1M x 16 / 2M x 8	2.7 ~ 3.6V	48pin TSOP I (12x20mm)	45	AS6C1616C-45TIN
16Mb	2M x 8	2.7 ~ 3.6V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	45	AS6C1608B
32Mb	2M x 16 / 4M x8	2.7 ~ 3.6V	48pin TSOP I (12x20mm) , 48ball TFBGA (8x10mm)	55	AS6C3216A
64Mb	4M x 16 / 8M x8	2.7 ~ 3.6V	48pin TSOP I (12x20mm), 48ball TFBGA (8x10mm) (dual chip select)	55	AS6C6416

2.7V - 5.5V LOW POWER SRAMS

DENSITY	ORG	VCC	PACKAGES	SPEED (NS)	ALLIANCE
64Kb	8K x 8	2.7 ~ 5.5V	28pin PDIP (600mils), 28pin SOP (330mils), 28pin sTSOP (8x13.4mm)	55	AS6C6264
256Kb	32K x 8	2.7 ~ 5.5V	28pin PDIP (600mils), 28pin SOP (330mils), 28pin sTSOP (8x13.4mm)	55	AS6C62256
1Mb	64K x 16	2.7 ~ 5.5V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	55	AS6C1016
1Mb	128K x 8	2.7 ~ 5.5V	32p SOP (450mils), 32p TSOP I (8x20mm), 32p sTSOP (8x13.4mm), 36b TFBGA (6x8mm), 32p PDIP (600mils)	55	AS6C1008
2Mb	256K x 8	2.7 ~ 5.5V	32p SOP (450mils), 32p TSOP I (8x20mm), 32p sTSOP (8x13.4mm), 36b TFBGA (6x8mm)	55	AS6C2008A
2Mb	128K x 16	2.7 ~ 5.5V	44pin TSOP II (400mils), 48b TFBGA (6x8mm)	55	AS6C2016
4Mb	512K x 8	2.7 ~ 5.5V	32p SOP (450mils), 32p TSOP I (8x20mm), 32p sTSOP (8x13.4mm), 36b TFBGA (6x8mm), 32p TSOP II (400mils)	55	AS6C4008
4Mb	512K x 8	2.7 ~ 5.5V	32p SOP (450mils)	70	AS6C4008-70SAN
4Mb	256K x 16	2.7 ~ 5.5V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	55	AS6C4016
8Mb	1M x 8	2.7 ~ 5.5V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm)	55	AS6C8008
8Mb	512K x 16	2.7 ~ 5.5V	44pin TSOP II (400mils), 48ball TFBGA (6x8mm) one chip select pins:B5**	55	AS6C8016
8Mb	512K x 16	2.7 ~ 3.6V	48pin TSOP I (12x20mm)	55	AS6C8016-55TIN

LOW POWER SRAM Cross Reference

64K LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	ZMD (EOL)	CYPRESS (EOL)	HITACHI (EOL)	NEC (EOL)	HYNIX (EOL)
8K x 8	2.7V ~ 5.5V	28pin 600mil DIP	AS6C6264-55PCN / PIN	U6264BDC07LLG1		HM6264BLP		HY6264P
8K x 8	2.7V ~ 5.5V	28pin 330mil SOP	AS6C6264-55SCN / SIN	U6264BS2C07LLG1	CY6264-55SNXC/I(EOL) CY6264-70SNXC/I(EOL)	HM6264BLFP	uPD4464	HY6264G
8K x 8	2.7V ~ 5.5V	28pin STSOP (8 x 13.4 mm)	AS6C6264-55STCN					

256K LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	ZMD	SAMSUNG (EOL)	CYPRESS (EOL)	RENESAS	BRILLIANCE (EOL)	ISSI
32K x 8	2.7V ~ 5.5V	28pin 600mil DIP	AS6C62256-55PCN	U62256ADC07LLG1	K6X0808C1D-DF55	CY62256NLL-70PXC(EOL)		BS62LV256PCP-55	
32K x 8	2.7V ~ 5.5V	28pin 330mil SOP	AS6C62256-55SxN	U62256AS2C07LLG1	K6X0808C1D-BF55	CY62256NLL-55SNXI(EOL) CY62256NLL-70SNXA(EOL) CY62256NVLL-70SNXI(EOL)	R1LP5256ESP-5SI R1LV5256ESP-5SI	BS62LV256SCP-55	IS62C256AL-xxULI/UL IS62LV256AL-45ULI
32K x 8	2.4V ~ 3.6V	28pin 330mil SOP	AS62V256-70SIN			CY62256NVLL-70SNXI(EOL)	R1LV5256ESP-5SI	BS62LV256SCP-55	IS62LV256AL-45ULI
32K x 8	2.7V ~ 5.5V	28pin STSOP (8 x 13.4 mm)	AS6C62256-55STxN		K6X0808C1D-LF55	CY62256NLL-70ZRXI(EOL) CY62256NLL-55ZXI/A(EOL) CY62256VNLL-70ZXC/I(EOL)	R1LP5256ESA-5SI R1LV5256ESA-5SI	BS62LV256STCP-55	IS62LV256AL-xxTL/TL IS62C256AL-45TL/TLI

1M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	SAMSUNG (EOL)	CYPRESS	RENESAS	BRILLIANCE (EOL)	NEC (EOL)	ISSI
128K x 8	2.7V ~ 5.5V	32pin 600mil DIP	AS6C1008-55PCN / PIN	K6X1008C2D-DB55			BS62LV1027PCP-55	uPD431000ACZ-70L	
128K x 8	2.7V ~ 5.5V	32pin 450mil SOP	AS6C1008-55SIN	K6X1008C2D-GF55(Lead)/BF	CY62128ELL-45SXI/A CY62128EV30LL-45SXI	M5M51008DFP-55HI R1LP0108ESN-5SIR1LV0108ESN-5SI	BS62LV1027SIP-55	uPD431000AGW-70L	IS62C1024AL-35QLI IS62WV1288FBLL-45QLI IS62WV1288BLL-45/55QLI (EOL) IS62WV1288DBLL-45QLI(EOL)
128K x 8	2.7V ~ 5.5V	32pin TSOP I (8 x 20 mm)	AS6C1008-55TIN	K6X1008C2D-TF55 or PF	CY62128ELL-45ZXI/A CY62128EV30LL-45ZXI	M5M51008DVP-55HI R1LP0108ESF-5SI R1LV0108ESF-5SI	BS62LV1027TIP-55	uPD431000AGZ-70LL-KKH	IS62C1024AL-35TLI IS62WV1288FBLL-45TLI IS62WV1288BLL-45/55TLI(EOL) IS65WV1288BLL-55TLA1(EOL) IS62WV1288DBLL-45TLI(EOL)
128K x 8	2.7V ~ 5.5V	32pin STSOP (8 x 13.4 mm)	AS6C1008-55STIN		CY62128EV30LL-45ZAXI CY62128ELL-45ZAXI(EOL)	M5M51008DKV-55HI R1LP0108ESA-5SI R1LV0108ESA-5SI	BS62LV1027STIP-55	uPD431000AGU-B10-9JH	IS62WV1288FBLL-45HLI IS62WV1288BLL-45/55HLI(EOL) IS65WV1288BLL-55HLA1(EOL) IS62WV1288DBLL-45HLI(EOL)
64K x 16	2.7V ~ 5.5V	48ball TFBGA	AS6C1016-55BIN	K6F1016U4C-EF55	CY62126EV30LL-45BVXI		BS616LV1010AI-70		IS62WV6416FBLL-45BLI IS62WV6416DBLL-45BLI(EOL) IS62WV6416BLL-45/55BLI(EOL)
64K x 16	2.7V ~ 5.5V	44pin TSOP II	AS6C1016-55ZIN		CY62126EV30LL-45ZSXI/A		BS616LV1010EI-70		IS62WV6416FBLL-45TLI IS62WV6416DBLL-45TLI(EOL) IS62WV6416BLL-45/55TLI(EOL)
64K x 16	2.7V ~3.6V	44pin TSOP II	AS6CE1016A-45ZIN						IS61WV6416EEBLL

LOW POWER SRAM Cross Reference

2M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	SAMSUNG (EOL)	CYPRESS	RENESAS	BRILLIANCE (EOL)	ISSI
256K x 8	2.7V ~ 3.6V	32pin 450mil SOP	AS6C2008-55SIN		CY62138FLL-45SXI CY62138FV30LL-45SXI(EOL)		BS62LV2006SIP-55	
256K x 8	2.7V ~ 3.6V	32pin TSOP I (8 x 20 mm)	AS6C2008-55TIN		CY62138FV30LL-45ZXI		BS62LV2006TIP-55	IS62WV2568BLL-45/55TLI IS62WV2568EBLL-45TLI IS62WV2568FBLL-45TLI
256K x 8	2.7V ~ 3.6V	32pin STSOP (8 x 13.4 mm)	AS6C2008-55STIN	K6F2008V2E-LF70000	CY62138FV30LL-45ZAXI/A	M5M5V208AKV-55HI R1LV0208BSA-5SI	BS62LV2006STIP-55	IS62WV2568BLL-45/55HLI IS62WV2568EBLL-45HLI IS62WV2568FBLL-45HLI
256K x 8	2.7V ~ 3.6V	36ball TFBGA (6mm x 8mm)	AS6C2008-55BIN		CY62138FV30LL-45BVXI			IS62WV2568BLL-45/55BLI IS62WV2568EBLL-45BLI IS62WV2568FBLL-45BLI
128K x 16	2.7V ~ 5.5V	44pin TSOP II	AS6C2016-55ZIN		CY62136VLL-70ZSXI(EOL) CY62136E/FV30LL-55ZSXI CY62136E/FV30LL-45ZSXI CY62137FV30LL-45ZSXI	M5M5V216ATP-70HI R1LV0216BSB-5SI	BS616LV2016EIP-55	IS62WV12816BLL-45/55TLI IS62WV12816EBLL-45/55TLI IS62WV12816FBLL-45TLI IS62WV12816DBLL-35/45/55TLI
128K x 16	2.7V ~ 3.6V	48ball TFBGA	AS6C2016-55BIN	K6F2016U4E-EF55000	CY62136E/FV30LL-45BVXI CY62137FV30LL-45BVXI CY62137EV30LL-45BVXI(EOL)		BS616LV2019AIG-55	IS62WV12816BLL-45/55BLI IS62WV12816EBLL-45/55BLI IS62WV12816FBLL-45BLI IS62WV12816DBLL-35/45/55BLI
256K x 8	2.7V ~ 5.5V	32pin 450mil SOP	AS6C2008A-55SIN		CY62138FLL-45SXI CY62138FV30LL-45SXI(EOL)		BS62LV2006SIP-55	
256K x 8	2.7V ~ 5.5V	32pin TSOP I (8 x 20mm)	AS6C2008A-55TIN		CY2138FV30LL-45ZXI		BS62LV2006TIP-55	IS62WV2568BLL-45/55TLI IS62WV2568EBLL-45TLI IS62WV2568FBLL-45TLI
256K x 8	2.7V ~ 5.5V	36ball TFBGA (6mm x 8mm)	AS6C2008A-55BIN		CY62138FV30LL-45BVXI			IS62WV2568BLL-45/55BLI IS62WV2568EBLL-45BLI IS62WV2568FBLL-45BLI

4M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	SAMSUNG (EOL)	CYPRESS	RENESAS	BRILLIANCE (EOL)	ISSI
512K x 8	2.7V ~ 5.5V	32pin 600mil DIP	AS6C4008-55PCN	K4X4008C1F-DB55			BS62LV4006PCP-55	
512K x 8	2.7V ~ 5.5V	32pin 450mil SOP	AS6C4008-55SIN	K6X4008C1F-GF55 or BF	CY62148ELL-55SXI CY62148EV30LL-55SXI- CY62148G30-45SXI CY62148G-45SXI(EOL)	R1LP0408DSP-5SI RMLV0408EGSP-4S2	BS62LV4006SIP-55	IS62C5128EL-45QLI IS62WV5128EBLL-45QLI IS62WV5128DBLL-45QLI IS62WV5128BLL-55QLI
512K x 8	2.7V ~ 5.5V	32pin STSOP (8 x 13.4mm)	AS6C4008-55STIN		CY62148ESL-55ZAXI/A	RMLV0408EGSA-4S2	BS62LV4006STIP-55	IS62C5128EL-45HLI IS62WV5128EBLL-45HLI IS62WV5128EHBLL-45HLI/HL IS62WV5128DBLL-45HLI IS62WV5128BLL-55HLI
512K x 8	2.7V ~ 5.5V	32pin TSOP I (8 x 20mm)	AS6C4008-55TIN					IS62WV5128DBLL-45TLI IS62WV5128EHBLL-45TLI/TL IS62WV5128EBLL-45TLI IS62WV5128BLL-55TLI
512K x 8	2.7V ~ 5.5V	32pin TSOP II	AS6C4008-55ZIN	K6X4008C1F-VF55	CY62148ELL-45ZSXI CY62148EV30LL-45ZSXI CY62148G30-45ZSXI CY62148G-45ZSXI(EOL) CY62148GN-45ZSXIT(EOL) CY62148GN30-45ZSXIT(EOL)	R1LP0408DSB-5SI RMLV0408EGSB-4S2	BS62LV4006ECP55	IS62WV5128DBLL-45T2LI IS62C5128EL-45TLI IS62WV5128EBLL-45T2LI IS62WV5128EHBLL-45T2LI/T2L IS62WV5128BLL-55T2LI

LOW POWER SRAM Cross Reference

4M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	SAMSUNG (EOL)	CYPRESS	RENESAS	BRILLIANCE (EOL)	ISSI
512K x 8	2.7V ~ 5.5V	36pin TFBGA (6mm x 8mm)	AS6C4008-55BIN		CY62148EV30LL-45BVXI			IS62WV5128EBLL-45BLI IS62WV5128EHBLL-45BLI/BL IS62WV5128DBLL-45BLI IS62WV5128BLL-55BLI
256K x 16	2.7V ~ 5.5V	44pin TSOP II	AS6C4016-55ZIN	K6X4016C3F-TF70000	CY62146ELL-45ZSXI CY62146ESL-45ZSXI CY62146EV30LL-45ZSXI CY62147EV30LL-45ZSXI CY62146G-45ZSXI CY62147G-45ZSXI CY62147G30-45ZSXI/A CY62147GN30-45ZSXI CY62146GN-45ZSXI(EOL) CY62147GE-45ZSXI(EOL)	RMLV0414EGSB-4S2 RMLV0416EGSB-4S2	BS616LV4017EIP-55	IS62WV25616BLL-55TLI IS65WV25616DBLL-45CTLA1 IS65WV25616EBLL-45CTLA1 IS62WV25616DBLL-45/55TLI IS62WV25616EBLL-45/55TLI
256K x 16	2.7V ~ 3.6V	44pin TSOP II	AS6C4016B-45ZIN	K6X4016T3F-TF70000	CY62146EV30LL-45ZSXI CY62147EV30LL-45ZSXI CY62147G30-45ZSXI/A CY62147GN30-45ZSXI CY62146GN30-45ZSXI(EOL)	RMLV0414EGSB-4S2 RMLV0416EGSB-4S2	BS616LV4017EIP-55	IS62WV25616BLL-55TLI IS65WV25616DBLL-45CTLA1 IS65WV25616EBLL-45CTLA1 IS62WV25616DBLL-45/55TLI IS62WV25616EBLL-45/55TLI
256K x 16	2.7V ~ 3.6V	48ball TFBGA	AS6C4016B-45BIN	K6F4016U6G-EF70000	CY62146EV30LL-45BVXI CY62147EV30LL-45BVXI CY62147G30-45BVXI CY62147G30-45BVXA(EOL) CY62146GN30-45BVXI (EOL) CY62147GN30-45BVXI(EOL)	RMLV0416EGBG-4S2	BS616LV4017AIP-55	IS62WV25616BLL-55BLI IS62WV25616EBLL-45/55BLI IS62WV25616DBLL-45BLI IS65WV25616EBLL-45BLA1
256K x 16	2.7V ~ 3.6V	44pin TSOP II	AS6CE4016B-45ZIN	K6X4016T3F-TF70000	CY62146G30-45ZSXI CY62146G-45ZSXA CY62147G30-45ZSXA CY621472G30-45ZSXI/A CY62147GE30-45ZSXI(EOL)	RMLV0414EGSB-4S2 RMLV0416EGSB-4S2	BS616LV4017EIP-55	IS62WV25616EHBLL-45TL/TLI IS65WV25616EHBLL- 45CTLA1
256K x 16	2.7V ~ 3.6V	48ball TFBGA	AS6CE4016B-45BIN	K6F4016U6G-EF70000	CY62146G30-45BVXI CY62147EV30LL-45BVXI CY62146GE30-45BVXI(EOL)	RMLV0416EGBG-4S2	BS616LV4017AIP-55	IS62WV25616EHBLL-45BLI

8M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	SAMSUNG (EOL)	CYPRESS	RENESAS	BRILLIANCE	ISSI
1M x 8	2.7 ~ 5.5V	44pin TSOP II	AS6C8008-55ZIN	K6X8008(C/T)2B-UF55	CY62158EV30LL-45ZSXI CY62158G30-45ZSXI CY62158ELL-45ZSXI	RMLV0808BGSB-4S2 HM62V8100LTTI-5SL	BS62LV8001ECP-55	IS62C10248AL-55TLI IS62WV10248EFBLL-45TLI IS62WV10248DBLL-55TLI IS62WV10248EBLL-45/55TLI IS62WV10248HBLL-45TL/TLI
1M x 8	2.7 ~ 5.5V	44pin TSOP II	AS6C8008B-45/55ZIN	K6X8008(C/T)2B-UF55	CY62158EV30LL-45ZSXI CY62158G30-45ZSXI CY62158ELL-45ZSXI	RMLV0808BGSB-4S2 HM62V8100LTTI-5SL	BS62LV8001ECP-55	IS62C10248AL-55TLI IS62WV10248EFBLL-45TLI IS62WV10248DBLL-55TLI IS62WV10248EBLL-45/55TLI IS62WV10248HBLL-45TL/TLI
1M x 8	2.7 ~ 5.5V	48ball TFBGA	AS6C8008-55BIN		CY62158EV30LL-45BVXI CY62158G30-45BVXI CY62158GE30-45BVXI	HM62V8100LBPI-5SL	BS62LV8001ECP-55	IS62C10248AL-55MLI IS62WV10248EFBLL-45BLI IS62WV10248DBLL-55MLI IS62WV10248EBLL-45/55BLI IS62WV10248HBLL-45B2L/B2LI IS62WV10248BLL-55BLI
1M x 8	2.7 ~ 3.6V	48ball TFBGA	AS6C8008B-45BIN		CY62158EV30LL-45BVXI	HM62V8100LBPI-5SL	BS62LV8001FIP-55	IS62WV10248EBLL-45/55BLI IS62WV10248HBLL-45B2L/B2LI IS62WV10248BLL-55BLI IS62WV10248EFBLL-45BLI IS62WV10248DBLL-55MLI
512K x 16	2.7 ~ 5.5V	48ball TFBGA (6 x 8mm)*	AS6C8016-55BIN*	K6F8016U6G-FF55		M5M5W816WG-55HI	BS616LV8017ECP55	IS62WV51216HBLL-45BL/BLI
512K x 16	2.7 ~3.6V	48ball TFBGA (6 x 8mm)**	AS6C8016B-45/55BIN		CY62157EV30LL-45BVXI/A CY62157G30-45BVXI	RMLV0816BGBG-4S2		IS62WV51216EBLL-45/55BLI IS62WV51216HBLL-45B2L/B2LI IS62WV51216EFBLL-45/55BLI
512K x 16	2.7 ~ 5.5V	44pin TSOP II	AS6C8016 -55ZIN	K6X8016(C/T)3B-UF55	CY62157EV30LL-45ZSXI/A CY62157ESL-45ZSXI CY62157ELL-45ZSXI CY62157G30-45ZSXI	RMLV0816BGSB-4S2 HM62165I14LTT-5SL M5M5W816TP-55HI	BS616LV8017FCP70	IS62C51216AL-55TLI IS62WV51216EFBLL-45/55TLI IS62WV51216EBLL-45/55TLI IS62WV51216HBLL-45/55TL
512K x 16	2.7 ~3.6V	44pin TSOP II	AS6C8016B-45/55ZIN		CY62157EV30LL-45ZSXI/A CY62157ESL-45ZSXI CY62157EV30LL-45ZSXI CY62157G30-45ZSXI	RMLV0816BGSB-4S2		IS62WV51216EFBLL-45/55TLI IS62WV51216HBLL-45TL/TLI
512K x 16	2.7 ~ 5.5V	48pin TSOP I	AS6C8016-55TIN		CY62157EV30LL-45ZXI/A CY62157G30-45ZXI	RMLV0816BGSA-4S2		IS62WV51216GBLL-45TLI

* =one chip select pin:B5 ** =two chip select pins:B5 and A6

LOW POWER SRAM Cross Reference

16M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	CYPRESS	RENESAS	BRILLIANCE (EOL)	ISSI
1M x 16	2.7 ~ 3.6V	48pin TSOP I	AS6C1616B-45/55TIN	CY62167E30LL-45/55ZXI CY62167EV30LL-45/55ZXI CY62167DV30LL-55ZXI CY62167EV30LL-45ZXI/A CY62167G30-45ZXI/A CY62167GN30-45ZXI	RMLV1616AGSA-4/5U2 RMLV1616AGBG-5S2 RMLV1616AGSA-5S2 R1LV1616RSA-5/7/8S(EOL)	BS6216LV1611TCP55	IS62WV102416DBLL-45/55TLI IS62WV102416GBLL-45TLI
1M x 16	2.7 ~ 3.6V	48pin TSOP I	AS6C1616C-45TIN	CY62167E30LL-45/55ZXI CY62167EV30LL-45/55ZXI CY62167DV30LL-55ZXI CY62167EV30LL-45ZXI/A CY62167G30-45ZXI/A CY62167GN30-45ZXI	RMLV1616AGSA-4/5U2 RMLV1616AGBG-5S2 RMLV1616AGSA-5S2 R1LV1616RSA-5/7/8S(EOL)	BS6216LV1611TCP55	IS62WV102416DBLL-45/55TLI IS62WV102416GBLL-45TLI
1M x 16	2.7 ~ 3.6V	48ball TFBGA	AS6C1616B-45/55BIN	CY62167DV30LL-70BVXI(EOL) CY62167DV30LL-55BVXI CY62167EV30LL-45BVXI/A CY62167G30-45BVX/A CY62167GN30-45BVXI	R1LV1616HBG-4/5SI(EOL) RMLV1616AGBG-4/5U2 RMLV1616AGBG-5S2	BS6216LV1611FCP70	IS62WV102416FBLL-45/55BLI IS62WV102416EBLL-45/55BLI
2M x 8	2.7 ~ 3.6V	44pin TSOP I	AS6C1608B-45TIN			BS6216LV1600EIP55	
2M x 8	2.7 ~ 3.6V	48ball TFBGA	AS6C1608B-45BIN	CY62168EV30LL-45BVXI CY62168G30-45BVXI CY62168GN30-45BVXI			IS62WV20488EBLL-45/55BLI IS62WV20488FBLL-45/55BLI

32M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	CYPRESS			RENESAS	
2M x 16	2.7 ~ 3.6V	48pin TSOP I	AS6C3216A-55TIN*	CY62177EV30LL-55ZXI	CY62177G30-55ZXI		RMLV3216AGSA-5S2	R1LV3216RSA-5/7S(EOL)
2M x 16	2.7 ~ 3.6V	48ball TFBGA	AS6C3216A-55BIN	CY62177EV30LL-55BAXI	CY62177G30-55BAXI	CY62177G30-55BKXI	RMWV3216AGBG-5S2	RMLV3216AGBG-5S2

*48pin TSOP I (please note: dual chip select 4Mx16 or 8Mx8)

64M LOW POWER

ORG	VCC	PACKAGE	ALLIANCE	CYPRESS		RENESAS	
4M x 16	2.7V ~ 3.6V	48pin TSOP I	AS6C6416-55TIN			RMWV6416AGSA-5S2	R1WV6416RSA-5/7S(EOL)
4M x 16	2.7V ~ 3.6V	48ball BGA	AS6C6416-55BIN	CY62187EV30LL-55BAXI	CY62187G30-55BAXI	RMWV6416AGBG-5S2	R1WV6416RBG-5/7S(EOL)

*48pin TSOP I (please note: dual chip select 4Mx16 or 8Mx8)

Parallel 5V NOR Flash

DENSITY	BUS WIDTH	VCC	PACKAGES	TEMPERATURE RANGE	SPEED (NS)	ALLIANCE	REMARKS
1Mb	x8	5V	PLCC 32	-40°C to 85°C	55	AS29CF010-55CCIN	Uniform Sector, Industrial Grade
4Mb	x8	5V	PLCC 32	-40°C to 85°C	55	AS29CF040-55CCIN	Uniform Sector, Industrial Grade
4Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	M29F400FT5AN6E2	Top Boot, Automotive Grade3
4Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	M29F400FB55N3E2 M29F400FB55N3F2	Bottom Boot, Automotive Grade1
8Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	AS29CF800T-55TIN	Top Boot, Industrial Grade
8Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	AS29CF800B-55TIN	Bottom Boot, Industrial Grade
8Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	M29F800FB5AN6E2 M29F800FB5AN6F2	Bottom Boot, Automotive Grade3
8Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 125°C	55	M29F800FT55N3E2	Top Boot, Automotive Grade1
16Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	AS29CF160B-55TIN	Bottom Boot, Industrial Grade
16Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	AS29CF160T-55TIN	Top Boot, Industrial Grade
16Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 85°C	55	M29F160FB5AN6F2	Bottom Boot, Automotive Grade3
16Mb	x8 , x16	5V	TSOP(I) 48pin	-40°C to 125°C	55	M29F160FT55N3E2	Top Boot, Automotive Grade1

FOR WAFER SALES / KGD, CONTACT ALLIANCE SALE REPRESENTATIVE

*Alliance Memory has collaborated with Micron for exclusive rights to continue to supply M29FX marked parts - SOLD NCNR - immediate delivery

Parallel 5V NOR Flash Cross Reference

DENSITY	VCC	PACKAGE	SPEED (NS)	ALLIANCE	MICRON	CYPRESS / SPANSION	MACRONIX
1Mb	5V	PLCC 32	55	AS29CF010-55CCIN		AM29F010B* (EOL)	
4Mb	5V	PLCC 32	55	AS29CF040-55CCIN	M29F040	AM29F040B	MX29F040C
4Mb	5V	TSOP 48pin	55	M29F400FT5AN6E2	M29F400F	AM29F400BT* (EOL)	MX29F400CTT
4Mb	5V	TSOP 48pin	55	M29F400FB55N3E2 M29F400FB55N3F2	M29F400F	AM29F400BB* (EOL)	MX29F400CBT
8Mb	5V	TSOP 48pin	55	AS29CF800T-55TIN	M29F800F	AM29F800BT* (EOL)	MX29F800C T/B
8Mb	5V	TSOP 48pin	55	AS29CF800B-55TIN	M29F800F	AM29F800BB* (EOL)	MX29F800C T/B
8Mb	5V	TSOP 48pin	55	M29F800FB5AN6E2 M29F800FB5AN6F2	M29F800F	AM29F800BB* (EOL)	MX29F800CBT
8Mb	5V	TSOP 48pin	55	M29F800FT55N3E2	M29F800F	AM29F800BT* (EOL)	MX29F800CTT
16Mb	5V	TSOP 48pin	55	AS29CF160T-55TIN	M29F160F	AM29F160DT* (EOL)	
16Mb	5V	TSOP 48pin	55	AS29CF160B-55TIN	M29F160F	AM29F160DB* (EOL)	
16Mb	5V	TSOP 48pin	55	M29F160FB5AN6F2	M29F160F	AM29F160DB* (EOL)	
16Mb	5V	TSOP 48pin	55	M29F160FT55N3E2	M29F160F	AM29F160DT* (EOL)	

SLC Parallel NAND Flash

DENSITY	BUS WIDTH	VCC	PACKAGES	TEMPERATURE RANGE	SPEED (NS)	ALLIANCE	REMARKS
1Gb	x8	3.3V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	25ns	AS9F31G08SA-25BIN	4bit ECC, 2K page, 64B Spare
2Gb	x8	3.3V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	25ns	AS9F32G08SA-25BIN	4bit ECC, 2K page, 128B Spare
4Gb	x8	3.3V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	25ns	AS9F34G08SA-25BIN	4bit ECC, 2K page, 128B Spare
8Gb	x8	3.3V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	25ns	AS9F38G08SA-25BIN	4bit ECC, 2K page, 128B Spare
4Gb	x8	1.8V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	45ns	AS9F14G08SA-45BIN	4bit ECC, 2K page, 128B Spare
8Gb	x8	1.8V	63b FBGA (9x11mm)	Industrial (-40°C to 85°C)	45ns	AS9F18G08SA-45BIN	4bit ECC, 2K page, 128B Spare, DDP
4Gb	x8	1.8V	63b FBGA (9x11mm)	Automotive Grade2 (-40°C to 105°C)	45ns	AS9F14G08SA-45BAN	4bit ECC, 2K page, 64B Spare
8Gb	x8	1.8V	63b FBGA (9x11mm)	Automotive Grade2 (-40°C to 105°C)	45ns	AS9F18G08SA-45BAN	4bit ECC, 2K page, 128B Spare, DDP

SLC Parallel NAND Flash Cross Reference

DENS.	VCC	TEMP.	ALLIANCE	MICRON	SKY HIGH	CYPRESS	WINBOND	MACRONIX	KIOXIA	ISSI	GIGA DEVICES	ESMT
1Gb	3.3V	-40°C to 85°C	AS9F31G08SA-25BIN	MT29F1G08ABADAH4 MT29F1G08ABAEAH4	S34SL01G200BFI S34ML01G200BFI S34ML01G300BFI	S34ML01G100BFI	W29N01HV W29N01GV	MX30LF1G18AC	TC58NVG0S3HBA	IS34ML01G084	GD9FU1G8F3AL	F59L1G81MB
2Gb	3.3V	-40°C to 85°C	AS9F32G08SA-25BIN	MT29F2G08ABAEAH4 MT29F2G08ABAGAH4	S34SL02G200BFI S34ML02G200BFI S34ML02G300BFI	S34ML02G100BFI	W29N02GV W29N02KV	MX30LF2G18AC	TC58NVG1S3HBA	IS34ML02G084	GD9FU2G8F2AL	F59L2G81A F59L2G81KA
4Gb	3.3V	-40°C to 85°C	AS9F34G08SA-25BIN	MT29F4G08ABADAH4 MT29F4G08ABAEAH4 MT29F4G08ABAFAH4	S34SL04G200BFI S34ML04G200BFI	S34ML04G100BFI	W29N04GV	MX30LF4G18AC	TC58NVG2S0HBA	IS34ML04G084	GD9FU4G8F2AL	F59L4G81XB
8Gb	3.3V	-40°C to 85°C	AS9F38G08SA-25BIN	MT29F8G08ADACAH4	S34ML08G201BFI	S34ML08G101BFI	W29N08GV	MX60LF8G18AC	TH58NVG3S0HBA	IS34ML08G088 IS34ML08G168	GD9FU8G8E2AL	F59D4G81XB F59D4G-81KA
4Gb	1.8V	-40°C to 85°C	AS9F14G08SA-45BIN	MT29F4G08ABBDAH4 MT29F4G08ABBEAH4 MT29F4G08ABBFAH4	S34MS04G200BFI	S34MS04G100BFI	W29N04GZ W29N04GW	MX30UF4G18AC	TC58NYG2S0HBA	IS34MW04G164	GD9FS4G8F2AL	F59D8G81XB
8Gb	1.8V	-40°C to 85°C	AS9F18G08SA-45BIN	MT29F8G08ADBCAH4 MT29F8G08ADBDAH4 MT29F8G08ABBCAH4 MT29F8G08ABBDAH4	S34MS08G201BFI	S34MS08G101BFI	W29N08GW W29N08GZ	MX60UF8G18AC	TH58NYG3S0HBA	IS34MW08G088 IS34MW08G168	GD9FS8G8E2AL	
4Gb	1.8V	-40°C to 105°C	AS9F14G08SA-45BAN	MT29F4G08ABBDAH4-A MT29F4G08ABBEAH4-A	S34MS04G200BFI	S34MS04G100BFV	W29N04GZ W29N04GW			IS35MW04G084	GD9FS4G8F2AL	
8Gb	1.8V	-40°C to 105°C	AS9F18G08SA-45BAN	MT29F8G08ADBDAH4-A	S34MS08G201BFA	S34MS08G101BFA	W29N08GW W29N08GZ				GD9FS8G8E2AL	

Serial NOR Flash

DENSITY	BUS WIDTH	VCC	PACKAGES	TEMPERATURE RANGE	SPEED (MHz)	ALLIANCE	REMARKS
2Mb	x1	3.3V	8pin SOIC (150mils)	-40°C to 85°C	75	M45PE20-VMN6P	PAGE ERASABLE, 2Mb Serial Flash (256K x 8bits, 1024 pages, 4 Sectors), Industrial Grade
8Mb	x1	3.3V	8pin DFN (6x5mm)	-40°C to 85°C	75	M45PE80-VMP6TG	PAGE ERASABLE 8Mb Serial Flash (1K x 8bits, 4096 pages, 16 Sectors), Industrial Grade, T&R
16Mb	x1	3.3V	8pin SOIC (208mils)	-40°C to 85°C	75	M45PE16-VMW6TG	PAGE ERASABLE, 16MB SERIAL FLASH (2K X 8BITS, 8192 PAGES, 32 SECTORS), INDUSTRIAL GRADE
4Mb	x1, x2	3.3V	8pin SOIC (150mils)	-40°C to 85°C	104	AS25F304MD-10S1IN	4Mb, 3.3V Serial NOR Flash, Dual IO, Industrial Grade, 8pin SOIC (150mils) package
16Mb	x1, x2, x4	3.3V	8pin SOIC (150mils)	-40°C to 85°C	104	AS25F316MQ-10S1IN	16Mb, 3.3V Serial NOR Flash, Multiple IO, Industrial Grade, 8pin SOIC (150mils) Package
32Mb	x1, x2, x4	3.3V	8pin DFN (4x3mm)	-40°C to 125°C	108	N25Q032A13EF4A0F	32Mb Serial NOR Flash, Multiple IO, 64 Sectors, 4KB Sector Erase, Automotive Grade T&R
32Mb	x1, x2, x4	3.3V	8pin SOIC (150mils)	-40°C to 85°C	108	N25Q032A13ESC40G	32Mb Serial NOR Flash, Multiple IO, 64 Sectors, 4KB Sector Erase, Industrial Grade, Tube
32Mb	x1, x2, x4	3.3V	8pin SOIC (150mils)	-40°C to 125°C	108	N25Q032A13ESCA0F	32Mb Serial NOR Flash, Multiple IO, 64 Sectors, 4KB Sector Erase, Automotive Grade, T&R
32Mb	x1, x2, x4	3.3V	16pin SOIC (300mils)	-40°C to 125°C	108	N25Q032A13ESFA0F	32Mb Serial NOR Flash, Multiple IO, 64 Sectors, 4KB Sector Erase, Automotive Grade, T&R
64Mb	x1, x2, x4	1.8V	8pin SOIC (208mils)	-40°C to 125°C	108	N25Q064A11ESEA0F	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Automotive Grade T&R
64Mb	x1, x2, x4	3.3V	8pin DFN (6x5mm)	-40°C to 85°C	108	N25Q064A13EF640E	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Industrial Grade, Tray
64Mb	x1, x2, x4	3.3V	8pin DFN (8x6mm)	-40°C to 125°C	108	N25Q064A13EF8A0E	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Automotive Grade Tray
64Mb	x1, x2, x4	3.3V	8pin DFN (8x6mm)	-40°C to 125°C	108	N25Q064A13EF8A0F	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Automotive Grade T&R
64Mb	x1, x2, x4	3.3V	8pin DFN (8x6mm)	-40°C to 85°C*	108	N25Q064A13EF8H0E	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Industrial Grade High Reliability, Tray
64Mb	x1, x2, x4	3.3V	16pin SOIC (300mils)	-40C to 125C	108	N25Q064A13ESFA0F	64Mb Serial NOR Flash, Multiple IO, 128 Sectors, 4KB Sector Erase, Automotive Grade T&R
64Mb	x1, x2, x4	3.3V	8pin SOIC (208mils)	-40°C to 85°C	104	AS25F364MQ-10SIN	64Mb, 3.3V Serial NOR Flash, Multiple IO, Default Feature1, Industrial Grade, 8SOIC Wide Body Package
64Mb	x1, x2, x4	3.3V	8L WSON (6x5mm)	-40°C to 85°C	104	AS25F364MQ-10WIN	64Mb, 3.3V Serial NOR Flash, Multiple IO, Default Feature1, Industrial Grade, 8WSON Package
128Mb	x1, x2, x4	1.8V	8pin SOIC (208mils)	-40°C to 85°C	133	AS25F1128MQ-70SIN	128Mb, 1.8V Serial NOR Flash, Multiple IO, Default Feature1, Industrial Grade, 8SOIC Wide Body Package
128Mb	x1, x2, x4	1.8V	8L WSON (6x5mm)	-40°C to 85°C	133	AS25F1128MQ-70WIN	128Mb, 1.8V Serial NOR Flash, Multiple IO, Default Feature1, Industrial Grade, 8WSON Package
128Mb	x1, x2, x4	3.3V	8pin SOIC (208mils)	-40°C to 85°C	166	AS25F3128MQ-6SIN	128Mb, 3.3V Serial NOR Flash, Multiple IO, 166MHz DTR, Industrial Grade, 8pin SOIC Wide Body Package, Tube
128Mb	x1, x2, x4	3.3V	8L WSON (6x5mm)	-40°C to 85°C	166	AS25F3128MQ-6WINTR	128Mb, 3.3V Serial NOR Flash, Multiple IO, 166MHz DTR, Industrial Grade, 8pad WSON (6x5mm) Package, T&R
256Mb	x1, x2, x4	3.3V	16pin SOIC (300mils)	-40°C to 85°C	133	AS25F3256MQ-7S2INTR	256Mb, 3.3V Serial NOR Flash, Multiple IO, 133MHz STR, Industrial Grade, 16pin SOIC (300mils) Package, T&R
256Mb	x1, x2, x4	3.3V	8L WSON (6x8mm)	-40°C to 85°C	133	AS25F3256MQ-7W2INTR	256Mb, 3.3V Serial NOR Flash, Multiple IO, 133MHz STR, Industrial Grade, 8pad WSON(6x8mm) Package, T&R
512Mb	x1, x2, x4	3.3V	16pin SOIC (300mils)	-40°C to 85°C	133	AS25F3512MQ-7S2INTR	512Mb, 3.3V Serial NOR Flash, Multiple IO, 133MHz STR, Industrial Grade, 16pin SOIC (300mils) Package, T&R
512Mb	x1, x2, x4	3.3V	8L WSON (6x8mm)	-40°C to 85°C	133	AS25F3512MQ-7W2INTR	512Mb, 3.3V Serial NOR Flash, Multiple IO, 133MHz STR, Industrial Grade, 8pad WSON (6x8mm) Package, T&R

Serial NOR Flash Cross Reference

DENS.	VCC	PACKAGES	ALLIANCE	MICRON	ADESTO	SPANSION	WINBOND	MACRONIX	ISSI	GIGA DEVICES
2Mb	3.3V	8pin SOIC (150mils)	M45PE20-VMN6P	M45PE20-VMN6	AT45DB021E					
8Mb	3.3V	8pin DFN (6x5mm)	M45PE80-VMP6G	M45PE80-VMP6	AT45DB081E					
8Mb	3.3V	8pin DFN (6x5mm)	M45PE80-VMP6TG	M45PE80-VMP6	AT45DB081E					
16Mb	3.3V	8pin SOIC (208mils)	M45PE16-VMW6TG	M45PE16-VMW6	AT45DB161E					
4Mb	3.3V	8pin SOIC (150mils)	AS25F304MD-10S1IN	M25P40-AVMN6	AT25SF041	S25FL040	W25Q40	MX25L40 / MX25V40	IS25LP040 / IS25LQ040	GD25Q40 / GD25B40 / GD25D40
16Mb	3.3V	8pin SOIC (150mils)	AS25F316MQ-10S1IN	M25P16-AVMN6 / M25PX16	AT25SF161 / AT25FF161	S25FL016	W25Q16	MX25L16 / MX25V16	IS25LP016 / IS25LQ016	GD25Q16 / GD25B16
32Mb	3.3V	8pin DFN (4x3mm)	N25Q032A13EF440F	N25Q032A13EF4	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
32Mb	3.3V	8pin DFN (4x3mm)	N25Q032A13EF4A0F	N25Q032A13EF4	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
32Mb	3.3V	8pin DFN (6x5mm)	N25Q032A13EF640F	N25Q032A13EF6	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
32Mb	3.3V	8pin SOIC (150mils)	N25Q032A13ESC40G	N25Q032A13ESC	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
32Mb	3.3V	8pin SOIC (150mils)	N25Q032A13ESCA0F	N25Q032A13ESC	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
32Mb	3.3V	16pin SOIC (300mils)	N25Q032A13ESFA0F	N25Q032A13ESF	AT25DF32/AT25SF32	S25FL032A/P	W25Q32	MX25L32	IS25LP032 / IS25LQ032	GD25Q32
64Mb	1.8V	8pin SOIC (208mils)	N25Q064A11ESEA0F	N25Q064A11ESE	AT25SL64/AT25QL64		W25Q64	MX25U64	IS25WP064	GD25LQ64
64Mb	3.3V	8pin DFN (6x5mm)	N25Q064A13EF640E	N25Q064A13EF6	AT25SF64/AT25QF64	S25FL064A/P	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	8pin DFN (8x6mm)	N25Q064A13EF8A0E	N25Q064A13EF8	AT25SF64/AT25QF64	S25FL064A/P	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	8pin DFN (8x6mm)	N25Q064A13EF8A0F	N25Q064A13EF8	AT25SF64/AT25QF64	S25FL064A/P	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	8pin DFN (8x6mm)	N25Q064A13EF8H0E	N25Q064A13EF8	AT25SF64/AT25QF64	S25FL064A/P	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	16pin SOIC (300mils)	N25Q064A13ESFA0F	N25Q064A13ESF	AT25SF64/AT25QF64	S25FL064A/P	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	8pin SOIC (208mils)	AS25F364MQ-10SIN	N25Q064A13ESE	AT25QF64	S25FL064	W25Q64	MX25L64	IS25LP064	GD25Q64
64Mb	3.3V	8L WSON (6x5mm)	AS25F364MQ-10WIN	N25Q064A13EF6	AT25QF64	S25FL064	W25Q64	MX25L64	IS25L064	GD25Q64
128Mb	1.8V	8pin SOIC (208mils)	AS25F1128MQ-70SIN	MT25QU128ABA1ESE	AT25SL128A-SUE	S25FS128SDSMFI	W25Q128JWSIM	MX25U12832FM2I	IS25WP128-JBLE	GD25LB128ESIG
128Mb	1.8V	8L WSON (6x5mm)	AS25F1128MQ-70WIN	MT25QU128ABA1EW7	AT25SL128A-MHE	S25FS128SDSNFI	W25Q128JWPIM	MX25U12832FZNI	IS25WP128-JKLE	GD25LB128EWIG
128Mb	3V	8pin SOP(208mils)	AS25F3128MQ-7SIN	MT25QL128ABA1ESE MT25QL128ABA8ESE	AT25QF128A-SHB	S25FL128LAGM	W25Q128JVSIQ	MX25L12833FM2I-10G MX25L12845GM2I-08G MX25L12873GM2I-08G	IS25LP128F-JBL	GD25B128ESIGR
128Mb	3V	8L WSON (6x5mm)	AS25F3128MQ-6WINTR	MT25QL128ABA1EW7	AT25QF128A-MHB	S25FL128LAGN	W25Q128JVPIQ	MX25L12833FZNI-10G MX25L12845GZNI-08G MX25L12873GZNI-08G	IS25LP128F-JKL	GD25B128EWIGR
256Mb	3V	16pin SOP (300mils)	AS25F3256MQ-7S2INTR	MT25QL256ABA8ESF	AT25SF2561C-SXUB AT25QF2561C-SXUB	S25FL256SAGM	W25Q256JVFIQ	MX25L25645GMI-08G MX25L25673GMI-10G	IS25LP256D-JML	GD25B256EFIGR
256Mb	3V	8L WSON (6x8mm)	AS25F3256MQ-7W2INTR	MT25QL256ABA1EW9	AT25SF2561C-MWUB AT25QF2561C-MWUB	S25FL256SAGN	W25Q256JVEIQ	MX25L25645GZ2I-08G MX25L25645GZ4I-10G	IS25LP256D-JJL	GD25B256EYIGR
512Mb	3V	16pin SOP (300mils)	AS25F3512MQ-7S2INTR	MT25QL512ABB8ESF			W25Q512JVFIQ	MX25L51245GMI-08G MX25L51273GMI-08G	IS25LP512M-JML	GD25B512MFFIGR
512Mb	3V	8L WSON (6x8mm)	AS25F3512MQ-7W2INTR	MT25QL512ABB1EW9			W25Q512JVEIQ	MX25L51245GZ2I-08G MX25L51273GZ4I-08G	IS25LP512M-JLL	GD25B512MFYIGR

Serial SLC NAND Flash

DENSITY	BUS WIDTH	SPEED (NS)	VCC	PACKAGES	TEMPERTURE RANGE	TYPE	ALLIANCE
1Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	4bit ECC, (2048 + 64) bytes × 64 pages × 1024 blocks	AS5F31G04SND-08LIN
2Gb	x1, x2, x4	100 Mhz	1.8V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (2048 + 128) bytes × 64 pages × 2048 blocks	AS5F12G04SND-10LIN
2Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (2048 + 128) bytes × 64 pages × 2048 blocks	AS5F32G04SNDA-08LIN
2Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	4bit ECC, (2048 + 128) bytes × 64 pages × 2048 blocks	AS5F32G04SNDB-08LIN
4Gb	x1, x2, x4	100 Mhz	1.8V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (2048 + 128) bytes × 64 pages × 4096 blocks	AS5F14G04SND-10LIN
4Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (2048 + 128) bytes × 64 pages × 4096 blocks	AS5F34G04SNDA-08LIN
4Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	4bit ECC, (2048 + 128) bytes × 64 pages × 4096 blocks	AS5F34G04SNDB-08LIN
8Gb	x1, x2, x4	100 Mhz	1.8V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (4096 + 256) bytes × 64 pages × 4096 blocks, t_Sleep 40ms	AS5F18G04SND-10LIN
8Gb	x1, x2, x4	100 Mhz	1.8V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (4096+256) bytes × 64 pages × 4096 blocks, t_Sleep 15ms	AS5F18G04SNDB-10LIN
8Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (4096 + 256) bytes × 64 pages × 4096 blocks	AS5F38G04SND-08LIN
8Gb	x1, x2, x4	120 Mhz	3.3V	8pin LGA (8x6mm)	Industrial (-40°C to 85°C)	8bit ECC, (4096 + 256) bytes × 64 pages × 4096 blocks	AS5F38G04SNDA-08LIN

Serial NAND Flash Cross Reference

DENS.	SPEED (NS)	VCC	ALLIANCE	MICRON	TOSHIBA/KIOXIA	WINBOND	MACRONIX	GIGA DEVICES	ISSI
1Gb	120Mhz	3V	AS5F31G04SND-08LIN	MT29F1G01ABAFDWB-IT	TC58CVG0S3HRAIJ	W25N01GV W25N01KV	MX35LF1GE4AB MX35LF1G24AD	GD5F1GQ4Ux GD5F1GQ5Ux GD5F1GM7Ux	IS37SML01G1-LLI IS37SML01G8A-JJLI
2Gb	100Mhz	1.8V	AS5F12G04SND-10LIN	MT29F2G01ABBGDWB-IT:G	TC58CYG1S3HRAIJ	W25N02JW W25M02GW	MX35UF2G14AC MX35UF2G24AD MX35UF2GE4AC MX35UF2GE4AD	GD5F2GQ4Rx GD5F2GQ5Rx GD5F2GM7Rx	IS37SMW02G8A-JJLI
2Gb	120Mhz	3V	AS5F32G04SNDA-08LIN AS5F32G04SNDB-08LIN	MT29F2G01ABAGDWB-IT	TC58CVG1S3HRAIJ	W25M02GV	MX35LF2G14AC MX35LF2GE4AD MX35LF2G24AD	GD5F2GQ4Ux GD5F2GQ5Ux GD5F2GM7Ux	IS37SML02G8A-JJLI
4Gb	100Mhz	1.8V	AS5F14G04SND-10LIN	MT29F4G01ABBFDWB-IT	TC58CYG2S0HRAIJ	W25N04KW	MX35UF4G24AD MX35UF4GE4AD	GD5F4GQ6Rx GD5F4GM8Rx	IS37SMW04G8A-JJLI
4Gb	120Mhz	3V	AS5F34G04SNDA-08LIN AS5F34G04SNDB-08LIN	MT29F4G01ABAFDWB	TC58CVG2S0HRAIJ	W25N04KV	MX35LF4G24AD MX35LF4GE4AD	GD5F4GQ6Ux GD5F4GM8Ux	IS37SML04G8A-JJLI
8Gb	100Mhz	1.8V	AS5F18G04SND-10LIN AS5F18G04SNDB-10LIN		TH58CYG3S0HRAIJ				IS37SMW08G8A-JJLI
8Gb	120Mhz	3V	AS5F38G04SND-08LIN AS5F38G04SNDA-08LIN		TH58CVG3S0HRAIJ				IS37SML08G8A-JJLI

eMMC

DENSITY	VCC	VCCQ	BUS WIDTH	MMC INTERFACE	CLOCK FREQUENCY	PACKAGES	NAND TYPE	TEMPERATURE OPTIONS	ALLIANCE
4GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	MLC	Industrial(-40°C to 85°C)	ASFC4G31MA-51BIN
5GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	pSLC (TLC)	Industrial(-40°C to 85°C)	ASFC5G31P3-51BIN
8GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	MLC	Industrial(-40°C to 85°C)	ASFC8G31MA-51BIN
8GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	MLC	Industrial(-40°C to 85°C)	ASFC8G31MB-51BIN*
10GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	pSLC (TLC)	Industrial(-40°C to 85°C)	ASFC10G31P3-51BIN
16GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	MLC	Ext.Commercial (-25°C to 85°C)	ASFC16G31TA-51BCN
32GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	TLC	Industrial(-40°C to 85°C)	ASFC32G31T3-51BIN
64GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	TLC	Industrial(-40°C to 85°C)	ASFC64G31T5-51BIN
128GB	2.7V~3.6V	1.8V / 3.3V	x1 , x4 , x8	v5.1	200 MHz	153b FBGA (11.5x13mm)	TLC	Industrial(-40°C to 85°C)	ASFC128G32T5-51BIN

** NEW PRODUCT COMING SOON*

eMMC Cross Reference

DENS.	PKG.	ALLIANCE	MICRON	SAMSUNG	KINGSTON	KIOXIA	ISSI	SANDISK	SK HYNIX	MACRONIX	SKY-HIGH	GREENLIANT
4GB	153ball FBGA (11.5x13mm)	ASFC4G31MA-51BIN	MTFC4GACAJCN (EOL) MTFC4GLGDQ (EOL) MTFC4GLWDM (EOL) MTFC4GMWDM (EOL)	KLM4G1GXXX (EOL)	EMMC04GMK27 EMMC04GM627 EMMC04G-W627	THGBMNG5D1LBA	IS21ES04G-JCLI IS21ES04G-BCLI	X	H26M31001HPR	MX52LM04A11X	S40FC004C1B	GLS85VM1004
5GB	153ball FBGA (11.5x13mm)	ASFC5G31P3-51BIN	MTFC4GACAJCN (EOL) MTFC4GLGDQ (EOL) MTFC4GLWDM (EOL) MTFC4GMWDM (EOL)	KLM4G1GXXX (EOL)	EMMC04GMK27 EMMC04GM627 EMMC04G-W627	THGBMNG5D1LBA	IS21ES04G-JCLI IS21ES04G-BCLI	X	H26M31001HPR	MX52LM04A11X	S40FC004C1B	GLS85VM1004
8GB	153ball FBGA (11.5x13mm)	ASFC8G31M-51BIN ASFC8G31MA-51BIN ASFC8G31MB-51BIN	MTFC8GACAENS (EOL) MTFC8GAKAJCN (EOL) MTFC8GAMALBH(EOL) MTFC8GAMALGT (EOL) MTFC8GLWDM (EOL)	KLM8G1GEUF KLM8G1GETF KLM8G1GESD (EOL)	EMMC08GML36	THGBMJG6C1LBA	IS21ES08GA-JCLI IS21ES08GA-BCLI	SDINBDG4-8G	H26M41208HPR	MX52LM08A11X	S40FC008C3B	GLS85VM1008C-M
10GB	153ball FBGA (11.5x13mm)	ASFC10G31P3-51BIN	MTFC8GACAENS (EOL) MTFC8GAKAJCN (EOL) MTFC8GAMALBH (EOL) MTFC8GAMALGT (EOL) MTFC8GLWDM (EOL)	KLM8G1GEUF KLM8G1GETF KLM8G1GESD (EOL)	EMMC08GML36	THGBMJG6C1LBA	IS21ES08GA-JCLI IS21ES08GA-BCLI	SDINBDG4-8G	H26M41208HPR	MX52LM08A11X	S40FC008C3B	GLS85VM1008E-S
16GB	153ball FBGA (11.5x13mm)	ASFC16G31TA-51BCN	MTFC16GAKAECN (EOL) MTFC16GAKAEJP (EOL) MTFC16GAPALBH (EOL)	KLMAG1JETD KLMAG2GEUF KLMAG2GESD (EOL)	EMMC16G-TB29 EMMC16G-IB29	THGBMUG7C1LBA THGAMVG7T13BA	IS21TF16G-JCLI IS21TF16G-BCLI	SDINBDA6-16G	H26M51002KPR	X	S40FC016C3B	GLS85VM1016C-M
32GB	153ball FBGA (11.5x13mm)	ASFC32G31T3-51BIN	MTFC32GAKAECN (EOL) MTFC32GAKAEJP (EOL) MTFC32GAZAQHD(EOL) MTFC32GAPALBH (EOL)	KLMBG2JETD KLMBG4GESD (EOL)	EMMC32G-TX29 EMMC32G-IX29	THGBMUG8C2LBA THGAMVG8T13BA THGBMJG88C4LBA	IS21TF32G-JCLI IS21TF32G-BCLI	SDINBDA6-32G SDINBDG4-32G	H26M62002JPR H26M64208EM	X	X	GLS85VM1032C-M
64GB	153ball FBGA (11.5x13mm)	ASFC64G31T5-51BIN	MTFC64GAZAQHD (EOL) MTFC64GAPALBH (EOL)	KLMCG2KCTA KLMCG2UCTA KLMCG4JEUD KLMCG2UCTB (EOL) KLMCG8GESD (EOL)	EMMC64G-TY29 EMMC64G-IY29	THGAMVG9T23BA THGBMJG9C8LBA	IS21TF64G-JCLI IS21TF64G-BCLI	SDINBDA6-64G SDINBDG4-64G	H26M74002HMR H26M78208CMR	X	X	GLS85VM1064C-M-I
128GB	153ball FBGA (11.5x13mm)	ASFC128G32T5-51BIN	MTFC128GAPALNS(EOL) MTFC128GAZAQJP(EOL)	KLMDG4UCTA KLMDG8JEUD KLMDG4UCT-B(EOL)	EMMC128-TY29 EMMC128-IY29	THGAMVT0T43BA	IS21TF128G-JCLI IS21TF128G-BCLI	SDINBDA6-128G	X	X	X	X

pSRAM PSEUDO SRAM

DENSITY	ORG	VCC	PACKAGE	TEMPERATURE	SPEED	ALLIANCE (EOL)
8Mb	512K x 16	1.8V	48 FPBGA (6x7mm)	Industrial (-30°C to 85°C)	70ns	AS1C512K16PL-70BIN
8Mb	512K x 16	3V	48 FPBGA (6x7mm)	Industrial (-40°C to 85°C)	70ns	AS1C512K16P-70BIN
16Mb	1M x 16	1.8V	48 FPBGA (6x7mm)	Industrial (-40°C to 85°C)	70ns	AS1C1M16PL-70BIN
16Mb	1M x 16	3V	48 FPBGA (6x7mm)	Industrial (-40°C to 85°C)	70ns	AS1C1M16P-70BIN
32Mb	2M x 16	3V	48 FPBGA (6x7mm)	Industrial (-40°C to 85°C)	70ns	AS1C2M16P-70BIN
64Mb	4M x 16	1.8V	49 FBGA (4x4mm)	Industrial (-30°C to 85°C)	70ns	AS1C4M16PL-70BIN***
128Mb (*2-stacked die)	8M x 16	1.8V	49 FBGA (4x4mm)	Industrial (-30°C to 85°C)	70ns	AS1C8M16PL-70BIN***

*** AS1C4M16PL-70BIN/ AS1C8M16PL-70BIN: EOLed, LTS date is 30April2025.

pSRAM Cross Reference

ORG	DENSITY	PACKAGE	COMMENTS/ PREV REV	ALLIANCE	JSC/JEJU	ISSI	FIDELIX	AP MEMORY
8Mb	512K x 16	48 FPBGA	page mode & Non-DPD	AS1C512K16PL-70BIN	EM784SP16BPP-70LF	IS66WV51216EALL-70BLI		
8Mb	512K x 16	48 FPBGA	Non-page mode & Non-DPD	AS1C512K16P-70BIN	JS784SU16BSP-70LFI	IS66/67WV51216EBLL-70BL	FMP0817CAx	
16Mb	1M X16	48 FPBGA	Non-page mode & Non-DPD	AS1C1M16PL-70BIN	EM7164SP16CSP-70LFI	IS66W1M16EALL-70BLI	FMP1617CCx	
16Mb	1M X16	48 FPBGA	Non-page mode & Non-DPD	AS1C1M16P-70BIN	JS164SU16BSP-70LFI	IS66/67WV1M16EBLL-70BL	FMP1617CAx	
32Mb	2M X16	48 FPBGA	Non-page mode & Non-DPD	AS1C2M16P-70BIN	JS7324SU16BSP-70LFI	IS66WVE2M16EBLL-70B	FMP3217CAx	
64Mb	4M X16	49 FBGA	DPD mode	AS1C4M16PL-70BIN	EMC643SP16CKDT-70LF			
128Mb (*2-stacked die)	8M X16	49 FBGA	DPD mode	AS1C8M16PL-70BIN	JSC283SP16ATDT-70LF			APS128XX

ALLIANCE PART NUMBERING SYSTEM

SRAM

Example
AS7C34098A-12JCNTR

AS	Brand	Alliance Memory
7C	Tech Type	7C = FAST Asynchronous SRAM ; 6C = Low Power Asynchronous SRAM ; 8C = Synchronous SRAM ; 1C = Psuedo SRAM
3	Voltage	Blank = 5V CMOS ; 3 = 3.3V CMOS
4098	Device number	4098 = 4Meg (x16) ; 4096 = 4Meg (x8)
A	Revision	'A', 'B' or 'C' denotes die revision / or PART Revision
12	Access time	Nanoseconds / Megahertz
J	Packages	J = SOJ 400 mil S = SOP B = TFBGA TJ = SOJ 300mil P = DIP Z = TSOP II T = TSOP QC= 100 pin TQFP ST = shrink TSOP (sTSOP)
C	Temp. Ranges	C = Commercial 0°C to 70°C (Extended Commercial -25°C to 85°C / -30°C to 85°C) ; I = Industrial -40°C to 85°C ; A = Automotive -40°C to 105°C
N	Compliance	N = ROHS Compliant lead free part
TR		Tape and Reel

DRAM

Example
AS4C16M16SA-7JCNTR

AS	Brand	Alliance Memory
4C	Tech Type	4C = DRAM
16M16	Depth	16M = 16 Meg / Width : 16 = x16 ; 8 = x8 ; 32 = x32
S	Product Line	S = SDRAM ; D1 = DDR ; D2 = DDR2 ; D3 = DDR3 ; D4 = DDR4 ; D3L = DDR3L ; MS = Mobile SDRAM ; MD1 = LPDDR1 ; MD2 = LPDDR2 ; MD4 = LPDDR4 ; MD4V = LPDDR4X
A	Revision	'A', 'B' or 'C' denotes die revision / or PART Revision
7	Access time	Nanoseconds / Megahertz
J	Packages	Packages: T = TSOP ; B = TFBGA
C	Temp. Ranges	C = Commercial ; I = Industrial ; A = Automotive
N	Compliance	N = ROHS Compliant lead free part
TR		Tape and Reel

ALLIANCE PART NUMBERING SYSTEM

Parallel NAND Flash

Example		
AS9F31G08SA-25BIN		
AS	Brand	Alliance Memory
9F	Tech Type	9F = Parallel NAND Flash
3	Voltage	3 = 3.3V ; 1 = 1.8V
1G	Density	1G = 1Gb ; 2G = 2Gb ; 4G = 4Gb ; 8G = 8Gb
08	Bud Width	08 = x8 ; 16 = x16 ; 32 = x32
S	Cell	S = SLC ; M = MLC ; T = TLC
A	Info	Version/ Generation/ ECC info
25	Speed	25 = 25ns ; 45 = 45ns
B	Package Code	B = FBGA
I	Temp. Grade	I = Industrial ; A = Automotive
N	Compliance	N = ROHS Green

Parallel NOR Flash

Example		
AS29CF800T-55TIN		
AS	Brand	Alliance Memory
29	Family	29 = Parallel NOR Flash Series
C	Voltage	5.0V (4.5V~5.5V)
F	Tech Type	Flash
800	Density	010=1Mb; 040=4Mb; 800=8Mb; 160=16Mb
T	Uniform Sector / Boot Type	Blank=Uniform Sector; T=Top Boot; B=Bottom Boot
55	Speed	55 = 55ns
T	Package	CC = PLCC(32) ; T = TSOP I(48)
I	Temp. Grade	I = Industrial (-40°C to 85°C)
N	Compliance	N = ROHS Compliant, Pb and Halogen Free

ALLIANCE PART NUMBERING SYSTEM

Serial NAND Flash

Example		
AS5F32G04SMND-08LIN		
AS	Brand	Alliance Memory
5F	Tech Type	5F = Serial NAND Flash
3	Voltage	3 = 3.3V ; 1 = 1.8V
2G	Density	1G = 1G-bits ; 2G = 2G-bits ; 4G = 4G-bits ; 8G = 8G-bits
04	Bud Width	01= Standard SPI ; 02 = Dual SPI ; 04 = Quad SPI
M	Cell	S = SLC ; M = MLC
ND	Architecture	ND = NAND Flash ; X = Flash Die Rev ; Blank = rev 0 ; A = rev A ; B = rev B
08	Speed	08 = 120MHz ; 10 = 100MHz
L	Package Code	L = LGA-8
I	Temp. Grade	I = Industrial (-40°C to 85°C)
N	Compliance	N = Pb Free & Halogen Free

Serial NOR Flash

Example		
AS25F3512Q-70S2IN		
AS	Brand	Alliance Memory
25F	Tech Type	25F = Serial NOR Flash Series
3	Voltage	3 = 3.3V ; 1 = 1.8V
512	Density	4M = 4Mb; 16M = 16Mb; 64M = 64Mb; 128M = 128Mb; 256M = 256Mb; 512M = 512Mb
Q	Serial IO	D = Dual SPI ; Q = Quad SPI
7	Speed	1 = 104MHz; 7 = 133MHz ; 6 = 166MHz
0	Feature	0 = Default (/W Enabled,)
S2	Package	S = 8SOIC 208mils ; W = WSON 6x5mm; S1 = 8SOIC 150mils ; S2 = 16SOIC ; W2 = WSON 6x8mm
I	Temp. Grade	I = Industrial (-40°C to 85°C)
N	Compliance	N = Pb Free & Halogen Free

ALLIANCE PART NUMBERING SYSTEM

eMMC

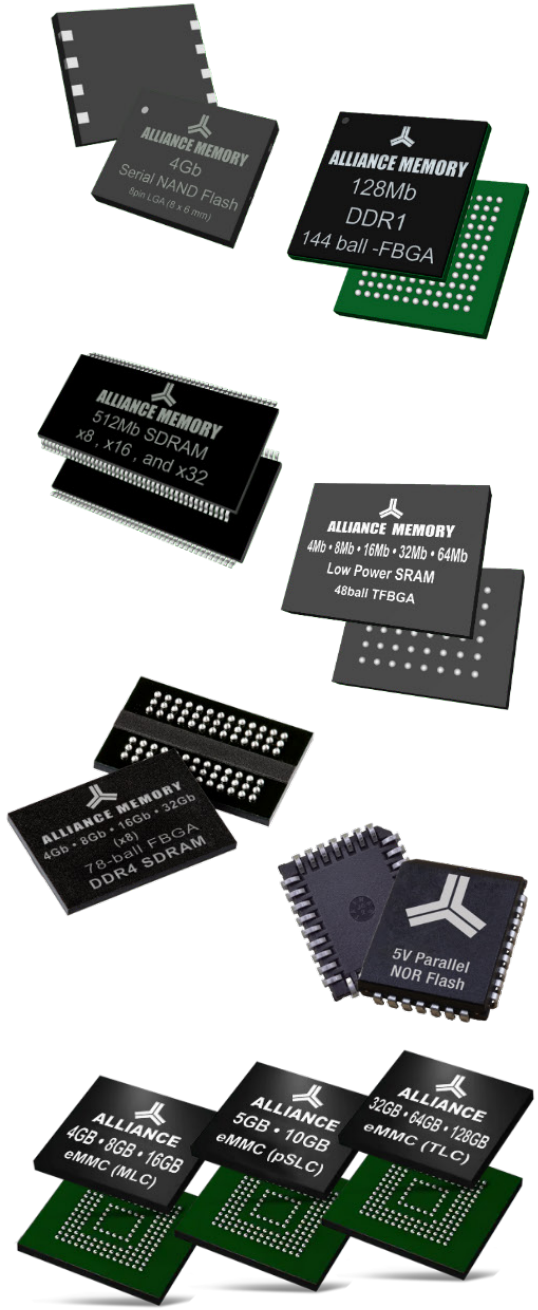
Example
ASFC4G31M-51BIN

AS	Brand	Alliance Memory
FC	Tech Type	eMMC (Flash + Controller)
4G	Density	4G = 4GB ; 8G = 8GB ; 32G = 32GB ; 64G = 64GB ; 128G = 128GB
3	Voltage	3 = 3.3V ; 1 = 1.8V
1	Die	1 = Single ; 2 = Dual Die
M	NAND Type	S = SLC ; M = MLC ; T = TLC ; P = pSLC
	Generation Code	Blank = rev0 ; A = revA ; B = revB (Change in controller or Flash will change Rev) ; 3 = TLC Gen3 ; 5 = TLC Gen5
51	Controller	51 = 5.1 Version
B	Package Type	B = 153b FBGA (11.5x13mm)
I	Temp. Grade	C = Commercial ; I = Industrial
N	Compliance	N = ROHS Compliant

WHY ENGAGE WITH ALLIANCE MEMORY?

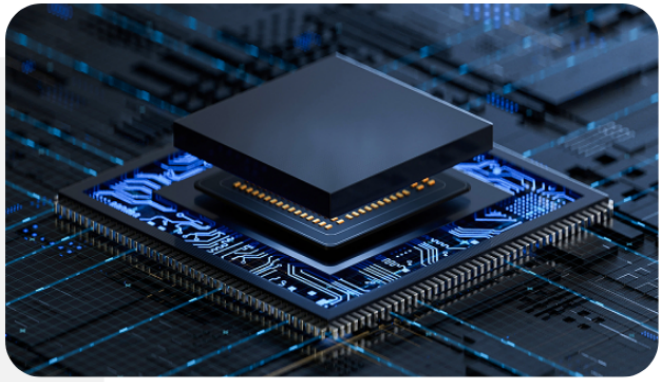
Secure Your Memory Supply Chain with Alliance Memory:

- Strong Supply Chain & Life cycle management
- Broad Memory portfolio
- Dependable Legacy DRAM partner as many suppliers are phasing out
- Balanced Inventory Management
- Competitive and Stable Pricing
- Minimal or No Die Shrinks
- Improved Lead times , Avg.6-to-8 weeks. Industry Best
- pin-to-pin drop-in replacements to mainstream suppliers
- Quick sample turnaround
- Prompt Application support (response <24hrs, >95%)
- Partnership & Collaboration with Micron & other Memory suppliers



COMMITMENT TO LEGACY & Critical Memory!

Alliance Memory's Longevity Commitment



Long-Term Availability for Critical Memory

Alliance Memory offers a longevity commitment for many of its products, guaranteeing availability for 7 to 10 years from launch. This commitment provides a secure supply of hard-to-find parts, allowing you to design and maintain your systems confidently. After longevity, products will be subject to Alliance Memory's standard product lifecycle policy and product change notification (PCN) process.

Quality at Alliance Memory: Our Promise to You

At Alliance Memory, quality is more than a policy; it's a core value.
We are passionate about exceeding customer expectations by providing:

- Reliable Products: High-quality, competitive memory solutions you can depend on.
- Timely Delivery: Meeting your deadlines with on-time delivery.
- Exceptional Support: Dedicated customer service that goes above and beyond.

We continuously improve our quality management system to ensure we consistently deliver on this promise and build long-lasting partnerships with our customers.

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