Allwinner Technology CO., Ltd.

Allwinner Axx SDRAM Support List V1.14

General Description:

1. The purpose of this document is the guide of DDR seclection for customer using our solution.

2. There are some DDRs that not mentioned here. Since DDR is an universal device. So you can test it by yourself before mass production or send the sample to us for testing.

3. Since DDR is high speed device. Please directly copy our PCB DRAM Part Template and follow our PCB Layout Guide.

Abbr. and Definition of Status:

Abbr.	Definition
X	Do Not Support
D/S	Datasheet Support
S/T	Sample Tested
√	Sample Tested and Mass Production

Vendor	Part Number	Type	package	Density	Organization	A80	H8	H3
Hynix	H5TQ2G83CFR-xxC	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TQ2G83DFR-xxC	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TQ2G63DFR-xxC	DDR3	FBGA 96	2Gb	128Mx16	D/S	D/S	
	H5TQ2G83EFR-xxC	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TQ2G83FFR-xxC	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TQ2G63FFR-xxC	DDR3	FBGA 96	2Gb	128Mx16	S/T	S/T	S/T
	H5TQ4G83MFR-xxC	DDR3	FBGA 78	4Gb	512Mx8	D/S	D/S	
	H5TQ4G63MFR-xxC	DDR3	FBGA 96	4Gb	256Mx16	D/S	S/T	
	H5TQ4G83AFR-xxC	DDR3	FBGA 78	4Gb	512Mx8	D/S	D/S	
	H5TQ4G63AFR-xxC	DDR3	FBGA 96	4Gb	256Mx16	S/T	S/T	
	H5TQ4G63AFR-RDC	DDR3	FBGA 96	4Gb	256Mx16	S/T	S/T	S/T
	H5TC2G83EFR-xxA	DDR3L	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TC2G83FFR-xxA	DDR3L	FBGA 78	2Gb	256Mx8	D/S	D/S	
	H5TC2G63FFR-xxA	DDR3L	FBGA 96	2Gb	128Mx16	S/T	S/T	S/T
	H5TC4G83AFR-xxA	DDR3L	FBGA 78	4Gb	512Mx8	D/S	D/S	
	H5TC4G63AFR-xxA	DDR3L	FBGA 96	4Gb	256Mx16	S/T	S/T	S/T
	H5TC4G83BFR-PBA	DDR3L	FBGA 78	4Gb	512Mx8	D/S	D/S	
	H5TC2G83EFR-xxR	DDR3L-RS	FBGA 78	2Gb	256Mx8	D/S	D/S	

	Part Number	Type	Package	Density	Organization			
	H5TC2G63DFR-xxR	DDR3L-RS	FBGA 96	2Gb	128Mx16	D/S	D/S	
	H5TC2G63FFR-xxR	DDR3L-RS	FBGA 96	2Gb	128Mx16	D/S	D/S	
	H5TC4G83AFR-xxR	DDR3L-RS	FBGA 78	4Gb	512Mx8	D/S	D/S	
	H5TC4G63AFR-xxR	DDR3L-RS	FBGA 96	4Gb	256Mx16	D/S	D/S	
	H5TC8G63AMR-PBA	DDR3L	FBGA 96	8Gb	256Mx16x2CS	S/T	S/T	
	H5TC8G83AMR-PBA	DDR3L	FBGA 78	8Gb	512Mx8x2CS	D/S	D/S	
	H5TC4G63CFR-PBA	DDR3L	FBGA 96	4Gb	256Mx16	D/S	S/T	S/T
	H9TKNNN8JDAPLR-NGN	LPDDR2		8Gb	128Mx32x2CS	D/S	D/S	
	H9CCNNN8JTALAR-NTD	LPDDR3	FBGA 178	8Gb	128Mx32x2CS	S/T	S/T	
	H9CCNNNBLTALAR-NTM	LPDDR3	FBGA 178	16Gb	256Mx32x2CS		S/T	
	H9CKNNN8GTMPLR-NUH	LPDDR3	POP 168	8Gb	128Mx32x2CS		S/T	
	H9CCNNNBJTMLAR-NUM	LPDDR3	FBGA 178	16Gb	256Mx32x2CS			
	H9CCNNN8GTMLAR-NUM	LPDDR3	FBGA 178	8Gb	128Mx32x2CS			
Nanya（南亚）	NT5CB128M8DN-xx	DDR3	FBGA 78	1Gb	128Mx8	X	D/S	
	NT5CB256M8GN-xx	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	NT5CB256M8FN-xx	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	NT5CB128M16HP-xx	DDR3	FBGA 96	2Gb	128Mx16	S/T		S/T
	NT5CB128M16FP-xx	DDR3	FBGA 96	2Gb	128Mx16	D/S	S/T	
	NT5CB256M16BP-xx	DDR3	FBGA 96	4Gb	256Mx16	S/T	D/S	S/T
	NT5CC512M8CN-xx	DDR3L	FBGA 78	4Gb	512Mx8	D/S	D/S	
	NT5CC256M16CP-xx	DDR3L	FBGA 96	4Gb	256Mx16	D/S	D/S	
	NT5CC256M16CP-DI	DDR3L	FBGA 96	4Gb	256Mx16		S/T	S/T
	NT6CL256T32AQ-H2	LPDDR3	POP 168	8Gb	128Mx32x2CS		S/T	
	NT6CL128M32AQ-H2	LPDDR3	POP 168	4Gb	128Mx32x1CS		D/S	
	NT5CC256M16DP-DI	DDR3L	FBGA 96	4Gb	256Mx16	S/T	S/T	S/T
	NT5CC128M16IP-DI	DDR3L	FBGA 96	2Gb	128Mx16		S/T	S/T
	NT5CB64M16FP-DH	DDR3	FBGA 96	1Gb	64Mx16			
	NT6TL256T32AQ-G1	LPDDR2	POP 168	8Gb	128Mx32x2CS		S/T	S/T
	NT6TL128M32AQ-G0	LPDDR2	POP 168	4Gb	128Mx32x1CS		S/T	S/T
	NT5CC64M16GP-DI	DDR3L	FBGA 96	1Gb	64Mx16			
	NT6TL256T32AQ-G0	LPDDR2	POP 168	8Gb	128Mx32x2CS			
	NT5CC256M16DP-DII	DDR3L	FBGA 96	4Gb	256Mx16		S/T	
	EDJ2108BDBG-DJ-F	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	EDJ4216EFBG-GN-F	DDR3	FBGA 96	4Gb	256Mx16	S/T	D/S	

	Part Number	Type	Package	Density	Organization			
Elpida	EDJ4208EFBG-GNL-F	DDR3L	FBGA 78	4Gb	512Mx8	D/S	D/S	
	EDJ4208EFBG-GN-F	DDR3	FBGA 78	4Gb	512Mx8	D/S	D/S	
	EDJ4216EFBG-GNL-F	DDR3L	FBGA 96	4Gb	256Mx16	D/S	D/S	
	J2108DEBG-DJ-F	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	EDB8132B3MC-8D-F	LPDDR2		8Gb	128Mx32x2CS	S/T	D/S	
	EDB8132B2MA-8D-F	LPDDR2		8Gb	128Mx32x2CS	S/T	D/S	
	EDFA232A1MA-GD-F	LPDDR3		16Gb	256Mx32x2CS	D/S	D/S	
Micron	MT41K256M8DA-125	DDR3L	FBGA 78	2Gb	256Mx8	D/S	D/S	
	MT41K128M16JT-125	DDR3L	FBGA 96	2Gb	128Mx16	X	D/S	
	MT41J128M16JT-107	DDR3	FBGA 96	2Gb	128Mx16	X	D/S	
	MT41K256M16HA-125	DDR3L	FBGA 96	4Gb	256Mx16	S/T	D/S	
	MT41K512M8RH-125	DDR3L	FBGA 78	4Gb	512Mx8	D/S	D/S	
	MT41J256M8HX-15	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	MT41K512M16HA-125	DDR3L	FBGA 96	8Gb	512Mx16			
	MT42L64M64D2	LPDDR2	FBGA 240	4Gb	64Mx64		D/S	D/S
	MT42L128M64D2	LPDDR2	FBGA 240	8Gb	128Mx64		D/S	D/S
	MT42L256M64D4	LPDDR2	FBGA 240	16Gb	256Mx64		D/S	D/S
SAMSUNG	K4B4G1646B-HCK0	DDR3	FBGA 96	4Gb	256Mx16	D/S	S/T	
	K4B2G1646E-BCK0	DDR3	FBGA 96	2Gb	128Mx16	D/S		S/T
	K4B2G0846D-HCK0	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	K4B2G1646Q-BCK0	DDR3	FBGA 96	2Gb	128Mx16	D/S	D/S	S/T
	K4B4G1646D-BCMA	DDR3	FBGA 96	4Gb	256Mx16		S/T	
	K4B4G1646Q-HYK0	DDR3L	FBGA 96	4Gb	256Mx16	S/T	S/T	S/T
	K4B8G1646Q-MYK0	DDR3L	FBGA96	8Gb	256Mx16x2CS	D/S	S/T	D/S
	K4B4G1646D-BCK0	DDR3	FBGA96	4Gb	256Mx16			S/T
	K4E8E304ED-EGCF	LPDDR3	FBGA 178	8Gb	128Mx32x2CS	S/T	S/T	
	K4E8E304ED-EGCE	LPDDR3	FBGA 178	8Gb	128Mx32x2CS	D/S	S/T	
	K4E8E304ED-EGCC	LPDDR3	FBGA 178	8Gb	128Mx32x2CS	S/T	S/T	
	K4E4E324ED-EGCF	LPDDR3	FBGA 178	4Gb	128Mx32x1CS	D/S	D/S	
	K4P8G304EG-AGC2	LPDDR2	POP 168	8Gb	128Mx32x2CS	D/S	D/S	
	K4E8E304EE-EGCE	LPDDR3	FBGA 178	8Gb	128Mx32x2CS	S/T	S/T	
	K4E6E304EE-EGCE	LPDDR3	FBGA 178	16Gb	256Mx32x2CS		S/T	
	K4P8G304EQ-AGC2	LPDDR2	POP 168	8Gb	128Mx32x2CS		S/T	S/T
	K4E8E304EE-AGCE	LPDDR3	POP 168	8Gb	128Mx32x2CS		S/T	

	K4E4E164EB-EGCE	LPDDR3	FBGA 178	4Gb	128Mx32x1CS		S/T	D/S
	K4B4G1646E-BCMA	DDR3	FBGA96	4Gb	256Mx16			
	KLB3PMVCF-KUK-28A	LPDDR2	PBAG 168	4G	128Mx32		D/S	D/S
Kingston（金士顿）	D2516EC4BXGGB	DDR3	FBGA 96	4Gb	256Mx16	D/S	S/T	
PSC/Mira (力晶)	P3P4GF3BLF-GGN	DDR3	FBGA 78	4Gb	512Mx8	D/S	D/S	
	P3P4GF4BLF-GGN	DDR3	FBGA 96	4Gb	256Mx16	D/S	D/S	S/T
	P3P4GF4BLF-GDJ	DDR3	FBGA 96	4Gb	256Mx16	D/S	D/S	
	P3P2GF3BLF-AGGN	DDR3	FBGA 78	2Gb	256Mx8			
Etron（钰创）	EM6GE16EW5B-15H	DDR3	FBGA 96	4Gb	256Mx16	D/S	D/S	
	EM6GD08EWUA-15H	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	EM6GD08EWUA-12H	DDR3	FBGA 78	2Gb	256Mx8	D/S	D/S	
	EM6GD16EWXC-12H	DDR3	FBGA 96	2Gb	128Mx16			
	EM6GE16EWXC-12H	DDR3	FBGA 96	4Gb	256Mx16		D/S	
	EM6GD08EWUC-12H	DDR3	FBGA 78	2Gb	256Mx8		D/S	
	EM6GE08EW8C-12H	DDR3	FBGA 78	4Gb	512Mx8		D/S	
	EM6GE16EWXD-12H	DDR3	FBGA 96	4Gb	256Mx16			
SCSemicon（华芯）	HXB15H2G800BF-15H	DDR3	FBGA 78	2Gb	256Mx8	D/S		
	HXB15H2G160BF-15H	DDR3	FBGA 96	2Gb	128Mx16	X		S/T
	HXB15H4G160BF-15H	DDR3	FBGA 96	4Gb	256Mx16	D/S		S/T
	HXB15H4G800BF-15H	DDR3	FBGA 78	4Gb	512Mx8	D/S		
	HXB15H4G800AF-15H	DDR3	FBGA 78	4Gb	512Mx8	D/S		
	HXB13H4G160BF(L)-13K	DDR3L	FBGA 96	4Gb	256Mx16	D/S	S/T	S/T
	HXB15H2G800BF-13K	DDR3	FBGA 78	2Gb	256Mx8			
	HXB15H2G160BF-13K	DDR3	FBGA 96	2Gb	128Mx16			S/T
	HXB15H4G160AF-13K	DDR3	FBGA 96	4Gb	256Mx16		S/T	
	HXB15H4G160CF-13K	DDR3	FBGA 96	4Gb	256Mx16		S/T	S/T
PL（礼王）	PMF511808DBR-KADN	DDR3	FBGA 78	2Gb	256Mx8	D/S		
	PMF512816BBR-KADN	DDR3	FBGA 96	4Gb	256Mx16	D/S	S/T	
	PMF511808BBR	DDR3	FBGA 78	2Gb	256Mx8	D/S		

PT（种丁）	PMF510816CBR-KADC	DDR3	FBGA 96	1Gb	64Mx16			
	PMF512816CBR-KAIN	DDR3	FBGA 96	4Gb	256Mx16		S/T	
eorex（森富）	EM47DM0888SBA-150	DDR3	FBGA 78	1Gb	128Mx8	X		
	EM47EM0888SBA-150	DDR3	FBGA 78	2Gb	256Mx8	D/S		
	EM47CM1688SBB-150	DDR3	FBGA 96	1Gb	64Mx16	X		
	EM47EM1688SBA-150	DDR3	FBGA 96	4Gb	256Mx16	D/S		
	EM47EM3288SBA-150	DDR3		8Gb	256Mx32	X		
	EM47CM1688SBB-125A	DDR3	FBGA 96	1Gb	64Mx16			
	EM47EM1688SBB-150A	DDR3	FBGA 96	4Gb	256Mx16			
	EM47EM1688SBB-125A	DDR3	FBGA 96	4Gb	256Mx16			
	EM47FM1688MCA-150A	DDR3	FBGA 96	8Gb	256Mx16x2CS			
GT（创芯）	GT8UB128M16HP	DDR3	FBGA 96	2Gb	128Mx16	D/S		
	GT8UB128M16BP	DDR3	FBGA 96	2Gb	128Mx16	D/S		
	GT8UB256M16BP	DDR3	FBGA 96	4Gb	256Mx16	D/S	S/T	S/T
	GT8UB256M8EN-BG	DDR3	FBGA 78	2Gb	256Mx8	D/S		
	GT8UB512M8EN-BG	DDR3	FBGA 78	4Gb	512Mx8	D/S		
EG	EG1L256M88BA12LH	DDR3	FBGA 78	2Gb	256Mx8	D/S		
Elixir	N2CB2G80GN	DDR3	FBGA 78	2Gb	256Mx8	D/S		
	N2CB4G16CP-DI	DDR3	FBGA 96	4Gb	256Mx16	D/S		
华聆 xeme	H2A402G1666ADBC	DDR3	FBGA 96	2Gb	128Mx16			
	H2A402G0866CD3C	DDR3	FBGA 78	2Gb	256Mx8			
	H2A404G0866ED9C	DDR3	FBGA 78	4Gb	512Mx8			
	H2C402G1666ADBC	DDR3	FBGA 96	2Gb	128Mx16			
	H2C402G0866CD3C	DDR3	FBGA 78	2Gb	256Mx8			
	H2C402G0866BD3C	DDR3	FBGA 78	2Gb	256Mx8			
	H2C404G0866ADEC	DDR3	FBGA 78	4Gb	512Mx8			
	H2C404G1666ADFC	DDR3	FBGA 96	4Gb	256Mx16		S/T	
	H2C404G0866CD8C	DDR3	FBGA 78	4Gb	512Mx8			
	H2C402G1666BDBC	DDR3	FBGA 96	2Gb	128Mx16			
	H2A402G0866CD3C	DDR3	FBGA 78	2Gb	256Mx8			
	GDB41A32ED7-D1S	LPDDR2	POP 168	4Gb	128Mx32x1CS			S/T

GCAI	GDB42A32ED7-D1S(25nm)	LPDDR2	POP 168	8Gb	128Mx32x2CS			S/T
	GDB42A32ED7-D1S(30nm)	LPDDR2	POP 168	8Gb	128Mx32x2CS			S/T
SPECTEK	PE015-125TP	DDR3	FBGA96	4Gb	32Mx16x8		S/T	
	PE905-I5E	DDR3	FBGA96	4Gb	32Mx16x8			S/T
FORSEE	LD3E508G	LPDDR3	POP 168	8Gb	128Mx32x2CS		S/T	
	NCLD3B2256M32	LPDDR3	FBGA 178	8Gb	128Mx32x2CS			

&G Allwinner Technology CO., Ltd.

Allwinner Axx eMCP Support List V1.14

General Description:

1. The purpose of this document is the guide of eMCP seclection for customer using our solution.

2. There are some eMCPs that not mentioned here. Since eMCP is an universal device. So you can test it by yourself before mass production or send the sample to us for testing.

3. Since eMCP is high speed device. Please directly copy our PCB DRAM Part Template and follow our PCB Layout Guide.

Abbr. and Definition of Status:

Abbr.	Definition
X	Do Not Support
D/S	Datasheet Support
S/T	Sample Tested
√	Sample Tested and Mass Production

Vendor	Part Number	package	DRAM Type	Density	Organization	Density	Version	Cell	H8
SAMSUNG	KMQ8X000SA-B414	FBGA 221	LPDDR3	8Gb	128Mx32x2CS	16GB	V5.0	TLC	S/T
	KMQ7X000SA-B315	FBGA 221	LPDDR3	8Gb	128Mx32x2CS	8GB	V5.0	TLC	S/T
Hynix	H9TQ17ABJTMCUR-KUM	FBGA 221	LPDDR3	16Gb	256Mx32x2CS	16GB		MLC	S/T
	H9TQ64ABJTMCUR-KUM	FBGA 221	LPDDR3	16Gb	256Mx32x2CS	8GB		MLC	S/T
	H9TQ64A8GTMCUR-KUM	FBGA 221	LPDDR3	8Gb	128Mx32x2CS	8GB		MLC	S/T

3. Since MCP is high speed device. Please directly copy our PCB DRAM Part Template and follow our PCB Layout Guide.
Abbr. and Definition of Status:

Abbr.	Definition
X	Do Not Support
D/S	Datasheet Support
S/T	Sample Tested
√	Sample Tested and Mass Production

Vendor	Part Number	package	DRAM Type	DRAM Density	DRAM Organization	nand Density	CE NUM	H8	H3
Micron	MT29RZ4C8DZZMHLJ-18	FBGA 240	LPDDR2	8Gb	28Mx32x2C	4Gb	1	D/S	D/S

Allwinner Support List History Version V1.14

Version	Date	Section/ Page	Author	Changes compared to previous issue
V1.14	2015-8-3	eorex		MT42L64M64D2 MT42L128M64D2 MT42L256M64D4 KLB3PMVCF-KUK-28A
V1.14-1	2015-8-4			K4B4G1646D-BCMA PE015-125TP NT5CB128M16FP-DI add
	2016-1-29			SMG128M16V69AG8GPF-0126 add on H3