

Rockchip Solutions DDR SDRAM Support List

Ver 2.36

2019/1/21

◆ Revision History

Revision No.	History	Date
2.00	ORs.	2012.12.24
2.01	Add some supporting messages	2013.01.28
2.02	Add some supporting messages	2013.05.17
2.03	Add some supporting messages	2013.10.07
2.04	Add some supporting messages	2014.01.08
2.05	Add some supporting messages	2014.03.21
2.06	Add some supporting messages	2014.05.09
2.07	Add some supporting messages	2014.06.10
2.08	Add some supporting messages	2014.09.16
2.09	Add some supporting messages	2015.03.16
2.10	Add some supporting messages	2015.04.13
2.11	Add some supporting messages	2015.05.06
2.12	Add some supporting messages	2015.07.17
2.13	Add some supporting messages	2015.10.10
2.14	Add some supporting messages	2015.12.17
2.15	Add some supporting messages	2016.03.01
2.16	Add some supporting messages	2016.03.31
2.17	Add some supporting messages	2016.06.24
2.18	Add some supporting messages	2016.07.29
2.19	Add some supporting messages	2016.08.31
2.20	Add some supporting messages	2016.10.20
2.21	Add some supporting messages	2016.11.07
2.22	Add some supporting messages	2016.12.05
2.23	Add some supporting messages	2016.12.09
2.24	Add some supporting messages	2016.12.29
2.25	Add some supporting messages	2017.03.30
2.26	Add some supporting messages	2017.05.24
2.27	Add some supporting messages	2017.07.05
2.28	Add some supporting messages	2017.08.24
2.29	Add some supporting messages	2017.11.24
2.30	Add some supporting messages	2018.01.24
2.31	Add some supporting messages	2018.03.26
2.32	Add some supporting messages	2018.05.25
2.34	Add some supporting messages	2018.10.17
2.35	Add some supporting messages	2018.12.11
2.36	Add some supporting messages	2019.01.21

♦ Symbol

Symbol	Description
V	Fully Tested and Mass production
T/A	Fully Tested and Applicable
N/A	Not Applicable

♦The Latest Reference Circuits Version

Chip	DRAM Support Type	RK Reference Circuit Version
RK281x	DDR2	RK2818_REF_V1.3
RK2906	DDR2/DDR3/DDR3L	RK2906_PMIC_REF_V20_0418
RK2918	DDR2/DDR3/DDR3L	RK2918_REF_V13_20110517
RK2926/RK3026	DDR3/DDR3L	2926_86v_v1.2_20121109
RK2928/RK3028/RK3028A	DDR3/DDR3L	RK2928-DDR3P208SD4-V10-20120712LX.pcb
RK3066	DDR3/DDR3L/LPDDR2	RK3066_REF_TP5659102_V12_20121024_1CELL
PX2	DDR3/DDR3L/LPDDR2	PX2_CAR_V11.pcb
RK3168/RK3188	DDR3/DDR3L/LPDDR2	RK3188-DDR3P416SD4-V10-20130607WF.pcb
RK3126	DDR3/DDR3L	2926_86v_v1.2_20121109
RK3128	DDR3/DDR3L/LPDDR2	RK3128-DDR3P216SD4-V10-20140912HJH.pcb
RK3288	DDR3/DDR3L/LPDDR2/LPDDR3	RK3288-DDR3P416SD6-V11-20140305HJH
RK3368	DDR3/DDR3L/LPDDR2/LPDDR3	R88(RK3368)_V01_20150313
RK3036	DDR3/DDR3L	RK3036_SDK_V1.0_20140528
RK3036G	DDR3/DDR3L	DONGLE_RK3036-G_20150408J.pcb
RK3228A/RK3228B/RK3229	DDR3/DDR3L/LPDDR2/LPDDR3	RK3228A_BOX_R88_DISCRETEPOWER_DDR3P216SD4_V1.0_20151129.pcb
PX3	DDR3/DDR3L/LPDDR2	RK_SDK_MAIN_PX3_CAR_V10_20160607
RK3399	DDR3/DDR3L/LPDDR3/LPDDR4	RK3399_VR&Tablet_V10_20160620
PX5	DDR3/DDR3L/LPDDR2/LPDDR3	RK_SDK_MAIN_PX5_CAR_V10_20160714_CGC
RK3228H	DDR3/DDR3L/DDR4/LPDDR3	RK_Demo_RK3228H_BOX_RK805-1_DDR3P216SD2_V02_20161128
RK3328	DDR3/DDR3L/DDR4/LPDDR3	RK_EVB_RK3328_BOX_RK805-1_DDR3P416DD6_V11_20161116
RV1108	DDR3/DDR3L/DDR2/LPDDR2	RK_EVB_MAINBOARD_RV1108_V12_20160930
PX3-SE	DDR3/DDR3L/LPDDR2	RK_SDK_MAIN_PX3SE_CAR_V11
RK3326	DDR3/DDR3L/DDR4/LPDDR2	RK_EVB_RK3326_LP3S178P132SD4_V11_20180301FZB
PX30	DDR3/DDR3L/DDR4/LPDDR2	RK_EVB_PX30_DDR4P416DD6_V10_20180301_FZB
RK3308	DDR3/DDR3L/DDR2/LPDDR2	RK_EVB_RK3308_DDR3P116SD4_V10_20180301
RK3399PRO	DDR3/DDR3L/LPDDR2/LPDDR3/LPDDR4	RK3399Pro_Layout_Template_LP3S178P232_LP3S178P132_SD8_V10_20181120

Application Note:

[1] Because lack of Address pin A15 in package, following SoCs do not support the 512M*8 DDR3:

RK2906-6,RK2906-8,RK3066.

[2]The DRAM Part Number usually consists of two parts divided by '-', which the first part contains memory type, density, organization, package, and the second part usually means data rate.

We don't care about the second part.

[3]RockChip platform can support all the chips that match the first part of Part Number which marks 'V' or 'T/A', and do not need to care the second part. If you want your system running more effective, you may need to find out the exact data rate in DRAM datasheet and config in kernel menuconfig.

[4]Please copy the Rockchip reference design model of DRAM area PCB Layout directly without any modification and follow the PCB layout rules from Rockchip.

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[5]Only support for RK3128.

[6]The maximums frequency of H9CCNNNB/JTMLAR run on the RK3399 is 800Mhz.

[7]The DRAM's VDD and VDDQ should powered by 1.5V when it used on these SoCs.

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK30 28A/RK3128/ PX3-SE	RK2926/RK3026/ RK3036/RK3036G /RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/ RK3228B/RK3229/ PX5	RV1108 /RK330 8	RK3228H	RK3399	RK3328	RK3326/ PX30	RK3399PRO CPU RAM NPU RA M	与双兼容情况
Elpida	E1116AEBG-8E-F	1G bit	64M×16	DDR2	84ball	√												除个别老款颗粒如： EDJ2108DBG对pcb要求 偏高外总体兼容情况 良好
	EDJ1108D1BG	1G bit	128M x 8	DDR3	78ball	√												
	EDJ2108DEBG	2G bit	256M×8	DDR3	78ball	√	T/A	T/A	√	√								
	EDJ2108BDBG	2G bit	256M×8	DDR3	78ball	√	T/A	N/A	√	√								
	EDJ2108EDBG	2G bit	256M×8	DDR3L	78ball				T/A	T/A								
	EDJ2116DEBG	2G bit	128M×16	DDR3	96ball	√												
	EDJ2116EEBG	2G bit	128M×16	DDR3L	96ball	T/A												
	EDJ4208B8BG	4G bit	512M×8	DDR3	78ball		T/A	T/A	T/A ⁽¹⁾	T/A								
	EDJ4208FBG	4G bit	512M×8	DDR3L	78ball		T/A	T/A	T/A ⁽¹⁾	T/A								
	EDJ4208EBBG	4G bit	512M×8	DDR3L	78ball		T/A	N/A	T/A ⁽¹⁾	T/A								
	EDJ4216B8AE	4G bit	256M×16	DDR3	96ball	√												
	EDJ4216B8BG	4G bit	256M×16	DDR3	96ball	√			√	√								
	EDJ4216EBBG	4G bit	256M×16	DDR3L	96ball	T/A			T/A	T/A								
	EDJ4216FBG	4G bit	256M×16	DDR3L	96ball	T/A	T/A	T/A	T/A	T/A								
	EDB4032B2MA	4Gb/2CS	64M×32×2pcs	LPDDR2	134ball				T/A	T/A								
	EDB8132B3MA	8Gb/2CS	128M×32×2pcs	LPDDR2	134ball				T/A	T/A								
	EDBM164B1PD-1D-I	12Gb/2channel	256M×32+128M×32	LPDDR2	220ball				N/A	T/A								
	EDF8132A3MA-GD-F-D	8Gb	256M×32	LPDDR3	178ball					T/A								
	EDF8132A1MC-GD-F-D	8Gb	256M×32	LPDDR3	178ball					T/A								
	FA232A1MA-GD-F	16Gb	512M×32	LPDDR3	178ball					T/A								
	EDFA232A2MA-GD-F-D	16Gb	512M×32	LPDDR3	178ball					T/A								
Micron	MT47H64M16HR-25	1G bit	64M×16	DDR2	84ball	√												兼容性好
	MT41J128M8JP-15E.G(D9MNL)	1G bit	128M x 8	DDR3	78ball	√												
	MT41K128M8DA-107.J(D9RDJ)	1G bit	128M x 8	DDR3L	78ball				T/A									
	MT41K64M16TW-107.J (D9SFT)	1G bit	64M×16	DDR3L	96ball							T/A						
	MT41J128M16HA-15E.D(D9LGQ)	2G bit	128M×16	DDR3	96ball	√												
	MT41J256M8HX-15E.D(D9LGK)	2G bit	256M×8	DDR3	78ball	√	T/A	T/A	T/A	T/A								
	MT41K256M8DA-125.K(D9PSH)	2G bit	256M×8	DDR3L	78ball	√	T/A	T/A	T/A	T/A								
	MT41K256M8DA-125.M(D9PFJ)	2G bit	256M×8	DDR3L	78ball	T/A	T/A	T/A	T/A	T/A								
	MT41K128M16HA-15E.D(D9LJM)	2G bit	128M×16	DDR3L	96ball	√												
	MT41K128M16JT-125.K(D9PTK)	2G bit	128M×16	DDR3L	96ball	√	T/A	T/A	T/A	T/A	T/A	T/A						
	MT41K128M16JT-107.K (D9PSZ)	2G bit	128M×16	DDR3L	96ball												T/A	
	MT41K512M8RH-125.E(D9QBJ)	4G bit	512M×8	DDR3L	78ball		T/A	T/A	T/A ⁽¹⁾	T/A								
	MT41K512M8RG-107.N(D9RVX)	4G bit	512M×8	DDR3L	78ball				T/A									
	MT41K512M8DA-107.P(D9SGQ)	4G bit	512M×8	DDR3L	78ball				T/A									
	MT41K256M16RE-15E.D(D9PBF)	4G bit	256M×16	DDR3L	96ball	√												
	MT41K256M16HA-125.E(D9PKV)	4G bit	256M×16	DDR3L	96ball	√	T/A	T/A	T/A	T/A								
	MT41K256M16LY-107.N(D9SDQ)	4G bit	256M×16	DDR3L	96ball		T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	MT41K256M16TW-107.P(D9SHD)	4G bit	256M×16	DDR3L	96ball				T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	MT41K256M16TW-107.IT(PD9SHG)	4G bit	256M×16	DDR3L	96ball				T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	MT41K512M16HA-125.A(D9STQ)	8G bit	512M×16	DDR3L	96ball													
	MT41K512M16HA-107.A(D9SDQ)	8G bit	512M×16	DDR3L	96ball				T/A	T/A								
	MT40A256M16GE-083E.B(D9TGO)	4G bit	256M×16	DDR4	96ball								T/A		T/A			
	MT40A512M16JY-083E.B(D9TBK)	8G bit	512M×16	DDR4	96ball								T/A		T/A			
	MT40A1616WBU-083E.B(D9TPH)	16G bit	1G×16	DDR4	96ball								T/A		T/A			
	MT42L128M32D1GU-25.WT.A(D9QHG)	4G bit	128M×32	LPDDR2	134ball				T/A	T/A								
	MT42L256M16D1GU-18.WT.A(D9RLT)	4G bit	256M×16	LPDDR2	134ball							T/A						
	MT42L128M64D2LL-25.WT.A(D9QOQ)	8G bit	128M×32×2Ch	LPDDR2	216ball				N/A	T/A								
	MT52L256M32D1PF-107.WT.B(D9SRZ)	8G bit	256M×32	LPDDR3	178ball					T/A			T/A	T/A	T/A	T/A	T/A	
	MT52L512M32D2NP-107.WT.B(D9SFS)	16G bit	512M×32	LPDDR3	178ball					T/A			T/A	T/A	T/A	T/A	T/A	
	MT53B256M32D1NP-062.WT.C(D9TFT)	8G bit	256M×32	LPDDR4	200ball													
	MT53B512M32D2NP-062.WT.C(D9TFW)	16G bit	512M×32	LPDDR4	200ball													
	MT53D512M32D2DS-053.WT.D(D9WHZ)	16G bit	512M×32	LPDDR4	200ball													
	MT53B512M64D4NK-053.WT.C(D9TGF)	32G bit	512M×64	LPDDR4	366ball													

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK30 28A/RK3128/ PX3-SE	RK2926/RK3026/ RK3036/RK3036G /RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/ RK3228B/RK3229/ PX5	RV1108 /RK330 8	RK3228H	RK3399	RK3328	RK3326/ PX30	RK3399PRO CPU_RAM NPU_RAM	与版本兼容情况	
Hynix	H5PS1G63CFP	1G bit	64M×16	DDR2	84ball	✓												兼容性好	
	H5PS1G63EFR	1G bit	64M×16	DDR2	84ball	✓													
	H5TQ1G83DFR	1G bit	128M×8	DDR3	78ball	✓			T/A	T/A									
	H5TQ1G83TFR	1G bit	128M×8	DDR3	78ball	✓													
	H5TQ2G83CFR	2G bit	256M×8	DDR3	78ball	✓	✓	✓	✓	✓									
	H5TQ2G83BFR	2G bit	256M×8	DDR3	78ball	T/A	T/A	T/A	✓	✓									
	H5TQ2G83EFR	2G bit	256M×8	DDR3	78ball	T/A	T/A	T/A	T/A	T/A									
	H5TQ2G83FFR	2G bit	256M×8	DDR3	78ball			T/A											
	H5TQ2G83GFR	2G bit	256M×8	DDR3	78ball				T/A	T/A									
	H5TQ2G63BFR	2G bit	128M×16	DDR3	96ball	✓													
	H5TQ2G63CFR	2G bit	128M×16	DDR3	96ball		T/A	T/A											
	H5TQ2G63GFR	2G bit	128M×16	DDR3	96ball		T/A	T/A	T/A	T/A	T/A	T/A	T/A			T/A	T/A		
	H5TQ2G63GFR	2G bit	128M×16	DDR3L	96ball							T/A	T/A						T/A
	H5TQ2G63DFR	2G bit	128M×16	DDR3	96ball	✓				T/A	T/A								
	H5TQ4G83AFR	4G bit	512M×8	DDR3	78ball			T/A	T/A	T/A ⁽¹⁾	T/A								
	H5TQ4G83AFR	4G bit	512M×8	DDR3L	78ball					T/A ⁽¹⁾	T/A								
	H5TQ4G83MFR	4G bit	512M×8	DDR3	78ball			T/A	T/A	T/A ⁽¹⁾	T/A								
	H5TQ4G83BFR	4G bit	512M×8	DDR3L	78ball			T/A	T/A										
	H5TQ4G63MFR	4G bit	256M×16	DDR3	96ball	✓		T/A	T/A	T/A	T/A								
	H5TQ4G63AFR	4G bit	256M×16	DDR3	96ball	T/A		T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
	H5TQ4G63CFR	4G bit	256M×16	DDR3L	96ball			T/A	T/A	T/A	T/A								
	H5TQ4G63CFR	4G bit	256M×16	DDR3L	96ball					T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
	H5TQ4G63CFR	4G bit	256M×16	DDR3L	96ball					T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball					T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball			T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
	H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball														
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															
H5TQ4G63CFR	4G bit	256M×16	DDR3	96ball															

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK3028A/RK3128/PX3-SE	RK2926/RK3026/RK3036/RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/RK3228B/RK3229/PX5	RK3308	RK3228H	RK3399	RK3328	RK3326/PX30	RK3399PRO CPU RAM	NPU RAM	与RK兼容情况
Nanya	NT5TU32M16CG-3C	512M bit	32M×16	DDR2	84ball	√													兼容性好
	NT5TU64M16HG	1G bit	64M×16	DDR2	84ball							T/A							
	NT5CB64M16GP	1G bit	64M×16	DDR3	96ball			T/A			T/A	T/A							
	NT5CB128M8DN	1G bit	128M×8	DDR3	96ball	√													
	NT5CC128M8DN	1G bit	128M×8	DDR3L	78ball	√			T/A	T/A									
	NT5CB128M8FN	1G bit	128M×8	DDR3	78ball				T/A	T/A									
	NT5CC128M8GN	1G bit	128M×8	DDR3L	78ball				T/A	T/A									
	NT5CB256M8GN	2G bit	256M×8	DDR3	78ball	√	T/A	T/A	T/A	T/A									
	NT5CB256M8BN	2G bit	256M×8	DDR3	78ball	√	T/A	T/A	T/A	T/A									
	NT5CB256M8FN	2G bit	256M×8	DDR3	78ball	√	T/A	T/A	T/A	T/A									
	NT5CB256M8BN	2G bit	256M×8	DDR3	78ball						T/A	T/A	T/A		T/A	T/A			
	NT5CC256M8BN	2G bit	256M×8	DDR3L	78ball				T/A		T/A	T/A	T/A		T/A	T/A			
	NT5CB128M16BP	2G bit	128M×16	DDR3	96ball	√	T/A	T/A	T/A	T/A									
	NT5CB128M16HP	2G bit	128M×16	DDR3	96ball	T/A			T/A	T/A									
	NT5CC128M16BP	2G bit	128M×16	DDR3L	96ball	√													
	NT5CB128M16FP	2G bit	128M×16	DDR3	96ball	√	T/A	T/A	T/A	T/A									
	NT5CC128M16BP	2G bit	128M×16	DDR3L	96ball		T/A	T/A	T/A	T/A	T/A	T/A							
	NT5CB128M16IP	2G bit	128M×16	DDR3	96ball		T/A	T/A	T/A	T/A		T/A	T/A						
	NT5CC128M16JR	2G bit	128M×16	DDR3L	96ball					T/A	T/A	T/A	T/A					T/A	
	NT5CB512M8DN	4G bit	512M×8	DDR3	78ball						T/A	T/A	T/A		T/A	T/A			
	NT5CB512M8BN	4G bit	512M×8	DDR3	78ball		T/A	T/A	T/A ⁽¹⁾	T/A									
	NT5CC512M8CN	4G bit	512M×8	DDR3L	78ball		T/A	T/A	T/A ⁽¹⁾	T/A									
	NT5CC512M8DN	4G bit	512M×8	DDR3L	78ball				T/A		T/A	T/A	T/A		T/A	T/A			
	NT5CC512M8EN	4G bit	512M×8	DDR3L	78ball						T/A	T/A							
	NT5CB256M16BP	4G bit	256M×16	DDR3	96ball	√	T/A	T/A	T/A	T/A									
	NT5CB256M16CP	4G bit	256M×16	DDR3	96ball		T/A	T/A	T/A	T/A									
	NT5CB256M16DP	4G bit	256M×16	DDR3	96ball					T/A									
	NT5CB256M16EP	4G bit	256M×16	DDR3	96ball						T/A								
	NT5CC256M16CP	4G bit	256M×16	DDR3L	96ball	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	NT5CC256M16DP	4G bit	256M×16	DDR3L	96ball		T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	NT5CC256M16EP	4G bit	256M×16	DDR3L	96ball					T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	NT5CC256M16ER	4G bit	256M×16	DDR3L	96ball					T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	
	NT5CC256M16ER-EKI	4G bit	256M×16	DDR3L	96ball									T/A					
	NT6TL128M32AQ	4G bit	128M×32	LPDDR2	168ball				T/A	T/A									
	NT6TL256F32AI	8G bit	256M×32	LPDDR2	134ball				T/A	T/A									
	NT6TL256T32AI	8G bit	256M×32	LPDDR2	134ball				T/A	T/A									
	NT6TL256T32AQ	8G bit	256M×32	LPDDR2	168ball				T/A	T/A									
	NT6CL128M32BM	4G bit	128M×32	LPDDR3	178ball														
	NT6CL128M32CM	4G bit	128M×32	LPDDR3	178ball									T/A				T/A	
	NT6CL256T32CM	8G bit	256M×32	LPDDR3	178ball								T/A	T/A	T/A	T/A	T/A	T/A	
	NT6CL256T32BM	8G bit	256M×32	LPDDR3	178ball					T/A		N/A	T/A	T/A	T/A	T/A	T/A	T/A	
	NT6CL256T32AQ	8G bit	256M×32	LPDDR3	168ball						T/A	N/A							
	NT5AD256M16B2	4G bit	256M×16	DDR4	96ball								T/A		T/A				
	NT5AD256M16D4	4G bit	256M×16	DDR4	96ball										T/A	T/A			

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK3028A/RK3128/ PX3-SE	RK2926/RK3026/ RK3036/RK3036G/ RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/ RK3228B/RK3229/ PX5	RV1108 /RK3308	RK3228H	RK3399	RK3328	RK3326/ PX30	RK3399PRO CPU RAM NPU RAM	与R兼容情况
Samsung	K4T1G164QE	1G bit	64M×16	DDR2	84ball	✓												兼容性好 K3PE0E000M R2Q需要改为150ohm K3PE0E000A-XGC2 R2Q需要改为NC
	K4B1G0846G	1G bit	128M×8	DDR3	78ball	✓												
	K4B1G1646I-xCxx	1G bit	64M×16	DDR3	96ball	✓			T/A	T/A			T/A					
	K4B2G0846C	2G bit	256M×8	DDR3	78ball	✓												
	K4B2G0846F-xYxx	2G bit	256M×8	DDR3L	78ball				T/A	T/A								
	K4B2G1646C	2G bit	128M×16	DDR3	96ball	✓												
	K4B2G1646E	2G bit	128M×16	DDR3	96ball	T/A												
	K4B2G1646Q	2G bit	128M×16	DDR3	96ball	T/A	T/A	T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B2G1646F-xYxx	2G bit	128M×16	DDR3L	96ball				T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G0846E-xCxx	4G bit	512M×8	DDR3	78ball			T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G1646B-xCxx	4G bit	256M×16	DDR3	96ball	✓		T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G1646Q-xYxx	4G bit	256M×16	DDR3L	96ball			T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G1646D-xYxx	4G bit	256M×16	DDR3L	96ball			T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G1646D-xCxx	4G bit	256M×16	DDR3	96ball			T/A	T/A	T/A	T/A							
	K4W4G1646Q-xCxx	4G bit	256M×16	DDR3	96ball				T/A	T/A	T/A							
	K4B4G1646E-xYxx	4G bit	256M×16	DDR3L	96ball			T/A	T/A	T/A	T/A		T/A	T/A		T/A	T/A	
	K4B4G1646E-xCxx	4G bit	256M×16	DDR3	96ball			T/A	T/A	T/A	T/A							
	K4B4G1646E-BMMA	4G bit	256M×16	DDR3L	96ball								T/A	T/A		T/A	T/A	
	K4B8G1646D-xYxx	8G bit	512M×16	DDR3L	96ball								T/A	✓	T/A	T/A	T/A	
	K4A4G165WE-xCxx	4G bit	256M×16	DDR4	96ball								T/A		T/A	T/A		
	K4A8G165WB-xCxx	8G bit	512M×16	DDR4	96ball								T/A		T/A	T/A		
	K3PE0E000A-XGC2	16Gb/2Channel	256M×32x2Ch	LPDDR2	220ball				N/A	T/A								
	K3PE0E000M-XGC2	16Gb/2Channel	256M×32x2Ch	LPDDR2	216ball				N/A	T/A								
	K4E8E304ED-EGCC	8Gb	256M×32	LPDDR3	178ball					T/A	T/A	N/A						
	K4E8E304EE-EGCE	8Gb	256M×32	LPDDR3	178ball					T/A				T/A			T/A	
	K4E8E324EB-AGCF	8Gb	256M×32	LPDDR3	168ball						T/A	N/A						
	K4E8E324EB-EGCF	8Gb	256M×32	LPDDR3	178ball						T/A	T/A	N/A	T/A	T/A	T/A	T/A	
	K3QF1F10DM-AGCE	8Gb/2Channel	128M×32x2Ch	LPDDR3	253ball						T/A							
	K3QF1F10EM-8GCF	8Gb	128M×32x2Ch	LPDDR3	216ball						T/A							
	K4E6E304EE-EGCE	16Gb	512M×32	LPDDR3	178ball					T/A	T/A	N/A	T/A		T/A	T/A		
	K4E6E304ED-EGCE	16Gb	512M×32	LPDDR3	178ball					T/A								
	K4E6E304EB-EGCF	16Gb	512M×32	LPDDR3	178ball					T/A	T/A	N/A	T/A	T/A	T/A	T/A	T/A	
	K4E6E304EC-EGCF	16Gb	512M×32	LPDDR3	178ball								T/A	T/A	T/A	T/A	T/A	
	K4E8E304EC-EGCF	32Gb	1024M×32	LPDDR3	178ball													
	K3QF3F30BM-QGCF	16Gb	256M×32x2Ch	LPDDR3	216ball					T/A								
	K3QF3F30BM-8GCF	16Gb	256M×32x2Ch	LPDDR3	216ball					T/A								
	K4F8E304HB-MGxx	8G bit	256M×32	LPDDR4	200ball									T/A			T/A	
	K4F6E3S4HM-MGxx	16Gb	512M×32	LPDDR4	200ball									T/A			T/A	
SPECTEK	PE918-15E (PRN256M8V79DG8GQF-15E)	2G bit	256M×8	DDR3	78ball	T/A	T/A	T/A	T/A	T/A								MICRON子品牌，兼容性良好
	PE936-15E (PRN256M8V89CG8GQF-15E)	2G bit	256M×8	DDR3	78ball	T/A	T/A	T/A	N/A	N/A								
	PEB08-15E (PRN512M8V80AG8RHF-15E)	4G bit	512M×8	DDR3	78ball		T/A	T/A	T/A ^[1]	T/A								
	PEB15-15E (PRN256M16V80AG8GPF-15E)	4G bit	256M×16	DDR3	96ball	T/A	T/A	T/A	T/A	T/A								
	PEB16-15E (PRM256M16V80AG8GPF-15E)	4G bit	256M×16	DDR3	96ball		T/A	T/A	T/A	T/A								
	PE017 (SUU256M16V90BG8LY-125TP)	4G bit	256M×16	DDR3	96ball			T/A										
	PE039 (SUU256M16V90BG8LY-125TP)	4G bit	256M×16	DDR3	96ball						T/A	T/A						
	Z9QH4 (SM128MX32U80MD11GU-25FT)	4G bit	128M×32	LPDDR2	134ball				T/A	T/A								
	PB047 (SS256M32V01MD11PF-1078T)	8G bit	256M×32	LPDDR3	178ball								N/A	N/A	N/A	N/A		
	PB008 (SM512M322E0FD4LH)	8G bit	256M×32	LPDDR3	178ball									T/A			T/A	
	PS007 (SU512M32Z01MD28NP)	16G bit	512M×32	LPDDR4	200ball									T/A			T/A	
	PS004 (SM512M64Z91MD48NK)	32Gbit	512M×64	LPDDR4	366ball									T/A			T/A	
	PS035 (SU512M64Z01MD48NK)	32Gbit	512M×64	LPDDR4	366ball									T/A			T/A	
	PS013 (SM512M64Z01MD48NK)	32Gbit	512M×64	LPDDR4	366ball									T/A			T/A	
Elixir	N2TU1G16GG-AC	1G bit	64M×16	DDR2	84ball	✓												NANYA子品牌，兼容性良好，特供指定渠道及客户使用。南亚科技指定经销商：彩虹奥特姆 (Aotom)、AVT、雷姆 (FHL)、芯智(SMC)、伟世科技 (WEISHI)、世平 (WPI)，提供正品保固及售后服务
	N2CB1G80GN-CG	1G bit	128M×8	DDR3	78ball	✓												
	N2CB2G80GN	2G bit	256M×8	DDR3	78ball	✓			✓	✓								
	N2CB2G16BP-CG	2G bit	128M×16	DDR3	96ball	✓												
	N2CB2G16FP-DI	2G bit	128M×16	DDR3	96ball		T/A	T/A	T/A	T/A								
	N2CB4G08DN-CG	4G bit	512M×8	DDR3	78ball		T/A	T/A	T/A	T/A ^[1]	T/A							
	N2CB4G16BP-DI	4G bit	256M×16	DDR3	96ball		T/A	T/A	T/A	T/A								
	N2CC4G16DP	4G bit	256M×16	DDR3L	96ball		T/A	T/A	T/A	T/A								

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK30 28A/RK3128/ PX3-SE	RK2926/RK3026/ RK3036/RK3036G /RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/ RK3228B/RK3229/ PX5	RV1108 /RK330 8	RK3228H	RK3399	RK3328	RK3326/ PX30	RK3399PRO CPU_RAM NPU_RA M	与RK兼容性情况
Eorex	EM47DM1688SBA	2G bit	128M×16	DDR3	96ball	N/A												台湾颗粒厂商， 兼容性较好
	EM47EM0888SBA-150	2G bit	256Mx8	DDR3	78ball	T/A	N/A	N/A	T/A	T/A								
	EM47EM1688SBA-150	4G bit	256Mx16	DDR3	96ball	T/A												
	EM47EM1688SBB-150A	4G bit	256Mx16	DDR3	96ball		T/A	T/A	T/A	T/A								
	EM47FM0888SBA-150	4G bit	512Mx8	DDR3	78ball		T/A	T/A										
	EM47FM0888SBA-150A	4G bit	512Mx8	DDR3	78ball		T/A	T/A										
	EM47EM3288MBA-125	8G bit	256Mx32	DDR3	136ball				T/A	T/A								
	EM45FM3288LBA-187F	16Gb/2Channel	256Mx32x2Ch	LPDDR2	220ball				N/A	T/A								
Etron Tech	EM68816CWWPA-25H	512M bit	32M×16	DDR2	84ball	√												台湾颗粒厂商，兼容性 较好
	EM6GC16EWKG-12H	1G bit	64Mx16	DDR3	96ball						T/A	T/A						
	EM6GD16EWKG-12H	2G bit	128Mx16	DDR3	96ball						T/A	T/A						
	EM6GD16EWXF-12H	2G bit	128Mx16	DDR3	96ball						T/A	T/A						
	EM6GD16EWBH-12H	2G bit	128Mx16	DDR3	96ball												T/A	
	EM6GE16EW5B-15H	4G bit	256Mx16	DDR3	96ball	T/A	T/A	T/A	T/A	T/A								
	EM6GE08EW8C-12H	4G bit	512Mx8	DDR3	78ball		T/A	T/A										
	EM6GE16EWXC-12H	4G bit	256Mx16	DDR3	96ball		T/A	T/A	T/A	T/A								
ESMT	M15T1G1664A-DEBG2C	1G bit	64Mx16	DDR3	96ball							T/A						
	M15T1G1664A-DEBG2CS	1G bit	64Mx16	DDR3	96ball			T/A										
	M15T2G16128A-DEBG2L	2G bit	128Mx16	DDR3	96ball						T/A	T/A						
	M15T4G16256A-DEBG2L	4G bit	256Mx16	DDR3	96ball								T/A	T/A	T/A			
	M15F4G16256A-DEBG2L	4G bit	256Mx16	DDR3	96ball						T/A	T/A	T/A	T/A	T/A	T/A		
MIRA	P3R1GE4CF-F-G8E	1G bit	64M×16	DDR2	84ball	√												256M16在RK3066， RK31xx平台上需要添加 定频相关补丁。并且对 参考层完整性要求较 高，需要严格遵照我们 的布板要求布板。
	P3R1GE3FG-F-G8E	1G bit	128M×8	DDR2	84ball	√												
	P2P2GF4ALF-GGN	2G bit	128Mx16	DDR3	96ball						T/A	T/A						
	P3P4GF38LF-GGN	4G bit	512M×8	DDR3	78ball		T/A	N/A	N/A	N/A								
	P3P4GF48LF-GGN	4G bit	256Mx16	DDR3	96ball		T/A		T/A	T/A	T/A	T/A	T/A	T/A	T/A			
UnitC	SCB15H1G160CF-13K	1G bit	64M×16	DDR3	96ball							T/A						
	SCN13H2G160AF-13K	2G bit	128M×16	DDR3	96ball		T/A											
	SCB13H2G160AF-11M	2G bit	128M×16	DDR3L	96ball						T/A	T/A						
	SCB13H4G160AF-11M	4G bit	256Mx16	DDR3L	96ball						T/A	T/A	T/A		T/A	T/A		
	HXB15H4G800AF-13K	4G bit	512M×8	DDR3	78ball						T/A	T/A	T/A					
	HXB13H4G160AF-13KT	4G bit	256Mx16	DDR3	96ball		T/A	T/A			T/A	T/A						
SCSemicon	HXB18T1G160AF-25D	1G bit	64M×16	DDR2	84ball	√												256M16在RK3066， RK31xx平台上需要添加 定频相关补丁。并且对 参考层完整性要求较 高，需要严格遵照我们 的布板要求布板。
	HXB18T2G160AF-25D	2G bit	128M×16	DDR2	84ball	√												
	HXB15H2G800BF-15H	2G bit	256M×8	DDR3	78ball	N/A	T/A	N/A	T/A	T/A								
	HXB15H2G160CF-13K	2G bit	128M×16	DDR3	96ball		T/A											
	HXB15H4G800BF-15H	4G bit	512M×8	DDR3	78ball	N/T ⁽¹⁾	T/A	N/A	T/A ⁽¹⁾	T/A								
	HXB15H4G160BF-15H	4G bit	256Mx16	DDR3	96ball	T/A			T/A	T/A								
ADATA	3CCD-1211A EL1250V	2G bit	256Mx8	DDR3	78ball	N/A	T/A	N/A	T/A	T/A								使用Elpidio晶圆兼容性 一般。PCB不允许有参 考层有割断的现象。
	D2ND-1211A EL1345V	4G bit	256Mx16	DDR3	96ball		T/A	T/A	T/A	T/A								
	D2ND-1211A NA1518V	4G bit	256Mx16	DDR3L	96ball		T/A	T/A	T/A	T/A								
ANOR	AM43Q2G08AFP-150C	2G bit	256Mx8	DDR3	78ball	N/A	T/A	N/A	T/A	T/A								使用Elpidio晶圆兼容性 一般。PCB不允许有参 考层有割断的现象。
	AM43Q4G08AFP-150C	4G bit	512Mx8	DDR3	78ball		T/A	N/A										
Zentel	A3R12E40DBF-AH	512M bit	32M×16	DDR2	84ball							T/A						
	A3T1GF40CBF-HP	1G bit	64M×16	DDR3	96ball													
	A3T1GF40CBF-GM	1G bit	64M×16	DDR3	96ball													
ProMOS	V59C1G01168QBASXJ25	1G bit	64M×16	DDR2	84ball	√												
	V73CAG01808RA J19	1G bit	128M×8	DDR3	78ball	√												
	V59C1G02168QB	2G bit	128M×16	DDR2	84ball	√												

Manufacturer	Part Number	Density	Organization	Type	package	RK290x RK2918	RK2928/RK3028A/RK3128/PX3-SE	RK2926/RK3026/RK3036/RK3036G/RK3126	RK3066/RK3066A/PX2 RK3168/RK3188/PX3	RK3288	RK3368/RK3228A/RK3228B/RK3229/PX5	RV1108/RK3308	RK3228H	RK3399	RK3328	RK3326/PX30	RK3399PRO CPU RAM NPU RAM	与RK兼容情况
SMART	S4B2G0846C-HYH9	2G bit	256Mx8	DDR3	78ball				T/A	T/A								巴西颗粒，国内用的不多
	S4B2G0846D-HYK0	2G bit	256Mx8	DDR3	78ball				T/A	T/A								
nPM	PMF510816ABR-G8DN	1G bit	64Mx16	DDR3	96ball	✓												
	PMF511816ABR-G8DN	2G bit	128Mx16	DDR3	96ball	✓												
	PMF511816DBR-KADN	2G bit	128Mx16	DDR3	96ball				T/A	T/A								
	PMF512816B8R-KADN	4G bit	256Mx16	DDR3	96ball				T/A	T/A								
	PMF512816DBR-KADN	4G bit	256Mx16	DDR3	96ball		T/A	T/A	T/A	T/A								
	PMF412816FBR-KADN	4G bit	256Mx16	DDR3L	96ball					T/A								
MT.MOSET	ED3E25608CE-P9	2G bit	256Mx8	DDR3	78ball	T/A	T/A	N/A	T/A	T/A								
WINS	VPSTQ1G0835-F9	1G bit	128Mx8	DDR3	78ball	✓												
	VPSTQ2G1635FFP-F9	2G bit	128Mx16	DDR3	96ball	✓	N/A	N/A										
	VPSTQ2G0835L-F9	2G bit	256Mx8	DDR3	78ball	✓												
Kingston	D5128EETBPGGBU	4G bit	512Mx8	DDR3	78ball		T/A	T/A	T/A	T/A								256M16在RK3066，RK31xx平台上需要添加定额相关补丁。并且对参考层完整性要求较高，需要严格遵照我们的布板要求布板。
	D2516EC4BXGGB	4G bit	256Mx16	DDR3L	96ball		T/A [7]	T/A [7]	T/A [7]	T/A [7]	T/A [7]	T/A [7]						
	D2516ECMDXGJD	4G bit	256Mx16	DDR3L	96ball								T/A		T/A	T/A		
	D2516JC4BXGJD	4G bit	256Mx16	DDR3	96ball					T/A								
	D2532LA6MLGJA	8G bit	256Mx32	LPDDR3	178ball								T/A		T/A	T/A		
	KB23AADL3E08G	8G bit	512Mx16	LPDDR3	178ball					T/A								
	D2516PCICDGPLR	8G bit	256Mx32	LPDDR4	200ball									T/A		T/A		
	Q5116PH1MDGPAR	16G bit	512Mx32	LPDDR4	200ball									T/A		T/A		
ISSI	IS43TR16640B-125KBL	1G bit	64Mx16	DDR3	96ball							T/A						
	IS43TR1612BC-125KBL	2G bit	128Mx16	DDR3	96ball						T/A	T/A						
axeme	H2A301G1656BC6C	1G bit	64Mx16	DDR2	84ball							T/A						
	H2A401G1666BFBC	1G bit	64Mx16	DDR3	96ball							T/A						
	H2A402G1666BFBC	2G bit	128Mx16	DDR3	96ball		T/A	T/A										
	H2A404G1666CFMC	4G bit	256Mx16	DDR3	96ball								T/A		T/A	T/A		
	H2A404G0866CD8C	4G bit	512Mx8	DDR3	78ball				T/A	T/A								
ISDT	IL28R20E8H	16G bit/2Channel	256Mx32x2Ch	LPDDR2	220ball					T/A								
Winbond	W971GG65B-18	1G bit	64Mx16	DDR2	84ball							T/A						
	W631GG6KB-12	1G bit	64Mx16	DDR3	96ball						T/A	T/A						
	W631GG6MB-12	1G bit	64Mx16	DDR3	96ball							T/A						
	W632GG6KB-15	2G bit	128Mx16	DDR3	96ball		T/A	T/A	T/A	T/A								
	W632GG6NB-12	2G bit	128Mx16	DDR3	96ball								T/A		T/A	T/A		
Goldkey	GH4061600HRL-1833	4G bit	256Mx16	DDR3L	96ball								T/A		T/A	T/A		
BIWIN	BW52L512M32D2PF	16G bit	512Mx32	LPDDR3	178ball						T/A							
	BWMD4X32H2A-16Gb	16G bit	512Mx32	LPDDR4	200ball									T/A			T/A	
FORSEE	NCLD3B2256M32	8G bit/ 2cs	256Mx32	LPDDR3	178ball					T/A				T/A			T/A	
	NCLD4C1MA256M32	8G bit	256Mx32	LPDDR4	200ball									T/A			T/A	
	NCLD4C2MA512M32	16G bit	512Mx32	LPDDR4	200ball									T/A			T/A	
Essencore	ISTQ4G63EFR	4G bit	256Mx16	DDR3	96ball								T/A		T/A	T/A		
TMTc	TM8G32MD4LSA1-14	8G bit	256Mx32	LPDDR4	200ball									T/A			T/A	
	TH16G32MD4LQM1-14	16G bit	512Mx32	LPDDR4	200ball									T/A			T/A	