

Allwinner Technology CO., Ltd.

Allwinner Technology
eMMC/tSD/fSD Support List
V1.1
2015-6-12

Allwinner Technology CO., Ltd.

- History

Version	Date	Section/ Page	Author	Changes compared to previous issue
V1.1	2015/5/23	All	WJQ	1. Release for A64.

Allwinner Technology CO., Ltd.

- Note Introduction

Note	Description
D/S	Datasheet Support but no sample test
S/T	Support and sample test
√	Support and mass produce
X	Not support

Allwinner Technology CO., Ltd.

- Attention

This support list is based on the specified SD/eMMC driver version which includes sdk version and eMMC patch.

IC	SD/eMMC Version	SDK Version	eMMC_patch
H3	V1.01	homlet4.4.2-h3-v1.0rc2	NO
H8	V1.00	H8 V1.0	NO
A83	V1.01	A83-android4.4.4-v0.9rc1	NO
A80	V1.01	A80-v1.0-onda-rc3	NO
A23	V1.10	A23-Android4.2-V2.0	A23_Android4.2_V2.0_Android4.4_V1.0&V2.0_emmc_patch_20140525
		A23-Android4.4-V1.0	
		A23-Android4.4-V2.0	
A31(S)	V1.60	A31(S)-Android4.4	A31(S)_Android4.4_V4.4&V4.5&V4.6_nand2.0&emmc_patch_20140707.tar.gz
		A31(S)-Android4.2	A31(S)_Android4.2_V3.0&V3.2&V3.3_nand2.0&emmc_patch_20140625.tar.gz
A33	V1.01	A33-Android4.4.2-V1.0	NO
A20	V1.60	A20-Homlet-Android4.2.2-SDK V2.1rc3	NO
A64	V1.01	exdroid-5.1.1_r1-a64-v1.0rc3	NO

Allwinner Technology CO., Ltd.

• Support List

Vendor	Capacity (B)	Part Number	eMMC /SD	Cell&Process	Pkg Size (mm)	A20	A23	A31(S)	A33	A80	A83	R58	R16	A64	Remark	
						V1.60	V1.10	V1.60	V1.01	V1.01	V1.01	V1.01	V1.01	V1.01		
Samsung	8G	KLM8G1WE4A-A001	v4.41		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	16G	KLMAG2WE4A-A001	v4.41		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	4G	KLM4G1FE3B-B001	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	4G	KLM4G1YEMD-B031	v5.0	TLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	8G	KLM8G1WEMB-B031	v5.0	TLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	16G	KLMAG2WEMB-B031	v5.0	TLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	32G	KLMBG4WEBC-B031	v5.0	TLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	16G	KLMAG2GEAC-B031	v5.0	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	8G	KLM8G1GEAC-B031	v5.0	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	4G	KLM4G1FEAC-B031	v5.0	MLC/19nm	11*10-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	32G	KLMBG4GEAC-B031	v5.0	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	32G	KLMBG4GE2A-A001	V4.5	MLC	12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	16G	KLMAG2GEND-B031	v5.0	MLC/16nm	11.5*13-BGA153				S/T	S/T	S/T	S/T	S/T	S/T		
	32G	KLMBG4GEND-B031	v5.0	MLC/16nm	11.5*13-BGA153	D/S			S/T	S/T	S/T	S/T	S/T	S/T		
	8G	KLM8G1WEPD-B031	v5.0	TLC/16nm	11.5*13-BGA153				S/T	S/T	S/T	S/T	S/T	S/T		
	16G	KLMAG2WEPD-B031	v5.0	TLC/16nm	11.5*13-BGA153				S/T	S/T	S/T	S/T	S/T	S/T		
	32G	KLMBG4WEBD-B031	v5.0	TLC/16nm	11.5*13-BGA153				S/T				S/T	S/T		
	64G	KLMCG8GEND-B031	v5.0	MLC/16nm	11.5*13-BGA153										D/S	
8G	KLM8G1GEND-B031	v5.0	MLC/16nm	11.5*13-BGA153										D/S		
64G	KLMCG8WEBD-B031	v5.0	TLC/16nm	11.5*13-BGA153										D/S		
Sandisk	8G	SDIN7DP2-8G	v4.5		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	16G	SDIN7DU2-16G	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	4G	SDIN7DP2-4G	v4.5		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	8G	SDIN8DE1-8G	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	8G	SDIN8DE2-8G	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			
	8G	SDIN8DR1-8G	v4.51	TLC/1Ynm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	SDIN8DR1-16G	v4.51	TLC/1Ynm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	4G	SDIN8DE2-4G	v4.51	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	SDIN7DP4-16G	V4.51	MLC	11.5*13-BGA153	D/S	D/S	D/S	D/S	D/S	D/S	D/S	D/S	D/S		
	16G	SDIN8DE4-16G	v4.51	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	SDIN8DE2-16G	v4.51	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	32G	SDIN8DE4-32G	v4.51	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	SDIN9DW4-16G	v5.0	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	32G	SDIN9DW4-32G	v5.0	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	32G	SDIN9DS2-32G	v5.0	TLC/1Ynm	11.5*13-BGA153										D/S	IO电压不支持3.3V
16G	SDIN9DS2-16G	v5.0	TLC/1Ynm	11.5*13-BGA153										D/S	IO电压不支持3.3V	
4G	3EA28-JW878 (MTFC4GLWAM-WT)	v4.5			11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T			

Allwinner Technology CO., Ltd.

Vendor	Capacity (B)	Part Number	eMMC /SD	Cell&Process	Pkg Size (mm)	A20	A23	A31(S)	A33	A80	A83	R58	R16	A64	Remark
						V1.60	V1.10	V1.60	V1.01	V1.01	V1.01	V1.01	V1.01	V1.01	
Micron	8G	3CA28-JW879 (MTFC8GLWAM-WT)	v4.5		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	4G	1UA18-JW729 (MTFC4GMTEA-WT)	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	2GA28-JW686 (MTFC8GLSEA-IT)	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	3ZA28-JWA48 (MTFC8GACAAEA-WT)	v4.51	MLC	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	4G	3ZA28-JWA49 (MTFC4GACAAEA-WT)	v4.51	MLC	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
Toshiba	4G	THGBM5G5A1JBAIR	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	THGBM5G6A2JBAIR	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	THGBMAG7A2JBAIR	v4.5	19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	4G	THGBMAG5A1JBAIR	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	THGBMBG7D4KBAIR	v5.0	A19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	32G	THGBMBG8D4KBAIR	v5.0	MLC/A19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	8G	THGBMBG6D1KBAIL	v5.0	MLC/A19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	16G	THGBMBG7D2KBAIL	v5.0	MLC/A19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	16G	THGBM5G7A2JBAIR	v4.5	MLC/19nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	16G	THGBMFG7C1LBAIL	v5.0	MLC/15nm	11.5*13-BGA153				S/T				S/T	S/T	
	4G	THGBMBG5D1KBAIL	v5.0	MLC/A19nm	11.5*13-BGA153										
32G	THGBMFG8C2LBAIL	v5.0	MLC/15nm	11.5*13-BGA153				S/T				S/T	D/S		
Skhynix	4G	H26M31003GMR	v4.51	MLC/20nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	H26M42003GMR	v4.51	MLC/20nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	H26M52003EQR	v4.51	MLC/20nm	12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	H26M41103HPR	v5.0	MLC/16nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	16G	H26M52103FMR	v5.0	MLC/16nm	11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T	
	4G	H26M31001HPR	v4.5	MLC/16nm	11.5*13-BGA153		S/T		S/T				S/T		
	32G	H26M64103EMR	v5.0	MLC/16nm	11.5*13-BGA153		S/T		S/T	S/T	S/T	S/T	S/T	S/T	
8G	H26M41103HPRL	v5.0	MLC/16nm	11.5*13-BGA153											
Kingston	4G	KE44B26BN	v4.41		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	KE4CV3H5A	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	KE4CV4H5A	v4.41		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	KE4CN3K6A	v4.5		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	4G	KE4CN2H5A	v4.5		11.5*13-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	KE4CN4K6A	v4.5		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	EMMC16G-V100	v5.0		11.5*13-BGA153		S/T				S/T	S/T			
	8G	EMMC08G-V100	v5.0		11.5*13-BGA153		S/T				S/T	S/T			
8G	EMMC08G-S100	v5.0		11.5*13-BGA153		S/T									
4G	NCTSTS86-04G	SD 2.0		12*20-TSOP48	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		tSD	

Allwinner Technology CO., Ltd.

Vendor	Capacity (B)	Part Number	eMMC /SD	Cell&Process	Pkg Size (mm)	A20	A23	A31(S)	A33	A80	A83	R58	R16	A64	Remark
						V1.60	V1.10	V1.60	V1.01	V1.01	V1.01	V1.01	V1.01	V1.01	
FORESEE	8G	NCTSTS76-08G	SD 2.0		12*20-TSOP48	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		tSD
	8G	NCFES76-08G	v4.41		11.5*13.5-BGA153	S/T	S/T	X	S/T	S/T	S/T	S/T	S/T		注1
	16G	NCFES76-16G	v4.41		11.5*13.5-BGA153	S/T	S/T	X	S/T	S/T	S/T	S/T	S/T		注1
	4G	NCFSES86-04G	SD 2.0		11.5*13.5-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		fSD
	8G	NCFSES76-08G	SD 2.0		11.5*13.5-BGA153	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		fSD
	4G	NCFES76-04G	v4.41		11.5*13.5-BGA153	S/T	S/T	X	S/T	S/T	S/T	S/T	S/T		注1
	32G	NCFEH58-32G	V4.51		11.5*13.5-BGA153					S/T	S/T	S/T		S/T	
	8G	NCFSES78-08G	SD 2.0		11.5*13.5-BGA153		S/T		S/T		S/T	S/T	S/T		
	16G	NCFEH58-16G	V4.51		11.5*13.5-BGA153					S/T	S/T	S/T		S/T	
	4G	NCFES88-04G	v4.51		11.5*13.5-BGA153		S/T		S/T		S/T	S/T	S/T		
	8G	NCFES78-08G	v4.51		11.5*13.5-BGA153		S/T		S/T		S/T	S/T	S/T	S/T	
	8G	NCFESA8-08G	SD 2.0		11.5*13.5-BGA153		S/T		S/T		S/T	S/T	S/T		fSD
	16G	NCFBS98-16G	v4.5	TLC	12*16-BGA169						S/T	S/T		S/T	注2
	4G	NCFEM48-04G	v4.5	MLC	11.5*13.5-BGA153				S/T				S/T		
	16G	NCMAH59-16G	v5.0		11.5*13-BGA153				S/T				S/T	S/T	
32G	NCMAH59-32G	v5.0		11.5*13-BGA153				S/T				S/T	S/T		
16G	NCEMBS99-16G	v5.0		12*16-BGA169				S/T				S/T	S/T		
32G	NCEMBS99-32G	v5.0		12*16-BGA169									D/S		
BIWIN	8G	BWAMGTB11A08G	v4.51		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	BWAMGTB21A16G	v4.51		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	8G	BWBTA-08G	SD 2.0		11.5*13-BGA153				S/T				S/T		
	4G	BWBTA-04G	SD 2.0		11.5*13-BGA153				S/T				S/T		
AcSip	8G	NCMMCS08G	v4.5		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
	16G	NCMMCS16G	v4.5		12*16-BGA169	S/T	S/T	S/T	S/T	S/T	S/T	S/T	S/T		
AVEXIR	16G	AVEC016G-FA6	v4.5		11.5*13-BGA153				S/T						
Skymedi	4G	SP18A4G751B-0003	V5.0		11.5*13-BGA153				S/T						
	8G	SP18A8G752B-0003	V5.0		11.5*13-BGA153				S/T						
EUDAR	8GB	EMS1ASCBT1FC008	v4.51		11.5*13-BGA153				S/T				S/T		
	16G	EMS1ASCBT2FC016	v4.51		11.5*13-BGA153				S/T				S/T		
Barun	4GB	BEM04M5B50XA-A3CT	v4.51	MLC/20nm	11.5*13-BGA153				S/T				S/T		
	4GB	BEM04S2B60XA-A3CT	v4.51	TLC/19nm	11.5*13-BGA153				S/T				S/T		
	8GB	BEM08S1B60XA-A3CT	v4.51	TLC/19nm	11.5*13-BGA153				S/T				S/T		

注1: A80支持该 eMMC 要求如下:

- (1) 软件需要额外补丁;
- (2) BOOT_SEL[1:0]配置必须为 2'b01或2'b00;

注2: 支持该eMMC需要将各环节MMC驱动更新到最新, 并修改sys_config.fex让该eMMC工作在SDR模式下。

Allwinner Technology CO., Ltd.

- **Declaration**

This document is the original work and copyrighted property of Allwinner Technology (“Allwinner”). Reproduction in whole or in part must obtain the written approval of Allwinner and give clear acknowledgement to the copyright owner.

The information furnished by Allwinner is believed to be accurate and reliable. Allwinner reserves the right to make changes in circuit design and/or specifications at any time without notice. Allwinner does not assume any responsibility and liability for its use. Nor for