

TCCxxxx

TCC Available NAND List V7

TCCxxxx_ALL_AN_8900_V2.20E

26 January 2012

Revision History

Date	Version	Description
2009-07-31	1.00	- Initialize TCC89XX, TCC92XX
2009-09-11	1.01	- Update Support NAND(HYNIX: HY27UBG8U5A, HY27UCG8V5A, NUMONYX: NAND16GW3DAN6, SAMSUNG: K9F1G08U0C)
2009-09-28	1.02	- Put a mark on a Serial Access Time & Update K9LBG08U1D, K9HCG08U5D, K9PDG08U5D
2009-10-14	1.03	- Update Support NAND(NAND02GR4B2D, K9GBG08U0M, K9LCG08U1M, K9HDG08U5M)
2009-10-19	1.04	- Update Support NAND(HY27UF081G2A)
2009-11-19	1.05	- Update Support NAND(MT29F32G08CBABA,MT29F64G08CFABA,MT29F128G08CJABA,HY27UH08AG5B,MT29F8G08ABA)
2009-12-28	1.06	- Update Support NAND(NAND01GW3B2C, NAND04GR4B2DDI6)
2010-02-02	1.07	- Update Support NAND(K9F2G08U0B, K9PFG08U5M) & Rename NAND512W3A (NAND512W3A2C/2D)
2010-04-09	1.08	- Update Support NAND(MT29F128G08CKAA,MT29F256G08CUABA)
2010-06-12	1.09	- Update Support NAND(H27UAG8T2A, K9G8G08U0M)
2010-07-23	1.10	- Update Support NAND(H27UBG8T2A , H27UCG8UDA, H27UDG8VEA, K9F4G08U0B, K9GAG08UOE, K9LBG08UOE, K9HCG08U1E)
2010-08-27	2.00	- Remove EOL products, Integration with TCC NAND Driver & TCC MTD I/O Driver
2010-10-05	2.01	- Update TCC MTD NAND I/O Driver Support NAND(H27UBG8T2A , H27UCG8UDA, H27UDG8VEA, K9GAG08UOE, K9LBG08UOE, K9HCG08U1E, MT29F128G08CFAAA)
2010-10-28	2.02	- Update Support NAND(H27U2G8F2CTR, HY27U8G8T2B, MT29F16G08ABA, K9K8G08U0B)
2010-11-24	2.03	- Update Support NAND(TC58DVG3S0ET)
2010-12-01	2.04	- Update Support NAND(K9G8G08U0C)
2010-12-20	2.05	- Update Support NAND(H27UAG8T2B)
2011-01-27	2.06	- Update Support NAND(MT29F64G08CBAAA)
2011-03-28	2.07	- Update Support NAND(K9F1G08U0D)
2011-04-02	2.08	- Update Support NAND(HY27U1G8F2B)
2011-04-08	2.09	- Update TCC MTD NAND I/O Driver Support NAND (TC58DVG3S0ET)
2011-04-11	2.10	- Update Support NAND(MT29F2G08ABAEAH4I)
2011-05-06	2.11	- Update Support NAND (MT29F32G08CBACA)
2011-05-11	2.12	- Update Support NAND (MT29F64G08CFACA)
2011-05-12	2.13	- Update Support NAND (K9F2G08U0C)
2011-06-07	2.14	- Update Support NAND (K9F4G08U0D)
2011-09-01	2.15	- Update Support NAND (TC58NVG1S3ETAI0, 29F16G08ABACA) - Remove TCC MTD IO Driver Version.
2011-09-22	2.16	- Renew H27UAG8T2A
2011-12-05	2.17	- Update Support NAND (H27U4G8F2DTR, MT29F1G08ABADA, MT29F4G08ABADA, TY0A00011458RA, K9GAG08U0F)
2011-12-22	2.18	- Update Support NAND (K9GBG08U0A)
2012-01-09	2.19	- Update Support NAND (K9K8G08U0D)
2012-01-26	2.20	- Update Support NAND (K9LCG08U0A, K9HDG08U1A, K9K8G08U0D)

TCC NAND Driver V7 Version History

Version	Release Date	BSP	Nand driver	Nand I/O driver	TNFTL driver library
		WINCE	nand_drv_v7.c	nand_io_v7.c	TCCXXX_BL_TNFTL.lib(pdb)
		LINUX/ANDROID			TCCXXX_NK_TNFTL_V7.lib(pdb)
		NU			libtnftl_v7xxx_TCCxxxx.lo
					tnftl_v7xxx_TCCxxxx.a
V7182	2012.01.26		R7050	R7125	R7078
V7176	2012.01.09		R7048	R7121	R7076
V7168	2011.12.22		R7048	R7115	R7074
V7160	2011.12.05		R7047	R7109	R7071
V7127	2011.09.01		R7035	R7091	R7058
V7124	2011.08.22		R7035	R7088	R7058
V7110	2011.06.07		V7032	V7080	V7052
V7103	2011.05.02		V7032	V7073	V7052
V7095	2011.04.11		V7029	V7072	V7050
V7095	2011.04.02		V7029	V7070	V7050
V7092	2011.03.28		V7029	V7068	V7048
V7074	2010.12.20		V7026	V7054	V7038
V7072	2010.12.01		V7025	V7052	V7037
V7071	2010.11.24		V7024	V7051	V7036
V7066	2010.10.28		V7024	V7049	V7033
V7066	2010.10.28		V7023	V7047	V7032
V7063	2010.10.05		V7019	V7036	V7023
V7045	2010.07.22		V7013	V7021	V7013
V7024	2010.01.27		V7012	V7011	V7011
V7014	2009.11.13			V7010	V7009
V7010	2009.10.13			V7003	V7003

NANDFLASH List supported by Telechips Nand Driver

PRODUCT			TCC NAND Driver V7	NAND FEATURES											
TYPE	Vendor	Part Number	TCC NAND												
			WINCE BSP LINUX BSP ANDROID SDK	ECC (Bit/Byte)	Bus Width	Access Time (ns)	CS	Page	Spare	PpB	1Block Size	BBpZ	PBpV	Function	Total Size (MB)
MLC	Samsung	K9G8G08U0C	V7072~	24 / 1024	8Bit	30	x1	8192	436	128	1024KB	15	1024	CP	1024
MLC	Samsung	K9GAG08U0D	V7003~	8 / 512	8Bit	30	x1	4096	218	128	512KB	25	4096	MCP	2048
MLC	Samsung	K9LBG08U0D	V7003~	8 / 512	8Bit	30	x1	4096	218	128	512KB	25	8192	IL,MP	4096
MLC	Samsung	K9LBG08U1D	V7003~	8 / 512	8Bit	30	x2	4096	218	128	512KB	25	8192	MCP	4096
MLC	Samsung	K9HCG08U1D	V7003~	8 / 512	8Bit	30	x2	4096	218	128	512KB	25	16384	IL,MP	8192
MLC	Samsung	K9HCG08U5D	V7003~	8 / 512	8Bit	45	x4	4096	218	128	512KB	25	16384	MCP	8192
MLC	Samsung	K9PDG08U5D	V7003~	8 / 512	8Bit	45	x4	4096	128	128	512KB	25	32768	IL,MP	16384
MLC	Samsung	K9GBG08U0M	V7010~	24 / 1024	8Bit	30	x1	8192	436	128	1024KB	20	4096	MP	4096
MLC	Samsung	K9LCG08U1M	V7010~	24 / 1024	8Bit	30	x2	8192	436	128	1024KB	20	8192	MP, EIL	8192
MLC	Samsung	K9HDG08U5M	V7010~	24 / 1024	8Bit	30	x4	8192	436	128	1024KB	20	16384	MP, EIL	16384
MLC	Samsung	K9PFG08U5M	V7024~	24 / 1024	8Bit	30	x4	8192	436	128	1024KB	30	32768	IL,MP	32768
MLC	Samsung	K9GAG08U0E	V7045~	24 / 1024	8Bit	30	x1	8192	436	128	1024KB	30	2048	NOR	2048
MLC	Samsung	K9LBG08U0E	V7045~	24 / 1024	8Bit	30	x1	8192	436	128	1024KB	30	4096	IL	4096
MLC	Samsung	K9HCG08U1E	V7045~	24 / 1024	8Bit	30	x2	8192	436	128	1024KB	30	8192	IL	8192
MLC	Hynix	H27U8G8T2B	V7066~	4 / 512	8Bit	25	x1	4096	128	128	512KB	25	2048	MP	1024
MLC	Hynix	H27UAG8T2B	V7074~	24 / 1024	8Bit	25	x1	8192	448	256	2048KB	25	1024	MP	2048
MLC	Hynix	H27UAG8T2A	V7010~	12 / 512	8Bit	25	x1	4096	224	128	512KB	25	4096	MCP	2048
MLC	Hynix	H27UBG8U5A	V7010~	12 / 512	8Bit	25	x2	4096	224	128	512KB	25	8192	MCP	4096
MLC	Hynix	H27UCG8V5A	V7010~	12 / 512	8Bit	25	x2	4096	224	128	512KB	25	16384	MCP	8192
MLC	Hynix	H27UBG8T2A	V7045~	24 / 1024	8Bit	25	x1	8192	448	256	2048KB	25	2048	MP	4096
MLC	Hynix	H27UCG8U5(D)A	V7045~	24 / 1024	8Bit	25	x2	8192	448	256	2048KB	25	4096	MP,EIL	8192
MLC	Hynix	H27UDG8VEA	V7045~	24 / 1024	8Bit	25	x4	8192	448	256	2048KB	25	8192	MP,EIL	16384
MLC	Micron	MT29F32G08CBAA	V7010~	12 / 512	8Bit	25	x1	4096	218	128	512KB	25	8192	MCP	4096
MLC	Micron	MT29F64G08CFAA	V7010~	12 / 512	8Bit	25	x2	4096	218	128	512KB	25	16384	MCP	8192
MLC	Micron	MT29F128G08CJAA	V7010~	12 / 512	8Bit	25	x2	4096	218	128	512KB	25	32768	IL, MP	16384
MLC	Micron	MT29F128G08CKAA	V7010~	12 / 512	8Bit	25	x2	4096	218	128	512KB	25	32768	IL, MP	16384
MLC	Micron	MT29F32G08CBABA	V7014~	12 / 512	8Bit	25	x1	4096	224	256	1024KB	25	4096	MCP	4096
MLC	Micron	MT29F64G08CFABA	V7014~	12 / 512	8Bit	25	x2	4096	224	256	1024KB	25	8192	MCP	8192
MLC	Micron	MT29F128G08CJABA	V7014~	12 / 512	8Bit	25	x2	4096	224	256	1024KB	25	16384	IL, MP	16384
MLC	Micron	MT29F256G08CUABA	V7014~	12 / 512	8Bit	25	x4	4096	224	256	1024KB	25	32768	IL, MP	32768
MLC	Micron	MT29F64G08CBAAA ¹⁾	V7087~	24 / 1024	8Bit	25	x1	8192	448	256	2048KB	25	4096	MP	8192
MLC	Micron	MT29F128G08CFAAA ¹⁾	V7087~	24 / 1024	8Bit	25	x2	8192	448	256	2048KB	25	8192	MP, EIL	16384
MLC	Micron	MT29F32G08CBACA ¹⁾	V7083~	24 / 1024	8Bit	25	x1	4096	224	256	1024KB	25	4096	MP	4096
MLC	Micron	MT29F64G08CFACA ¹⁾	V7083~	24 / 1024	8Bit	25	x2	4096	224	256	1024KB	25	8192	MP,EIL	8192
MLC	Samsung	K9GAG08U0F ²⁾	V7160~	24 / 1024	8Bit	30	x2	8192	512	128	1024KB	15	2048	MCP	2048
MLC	Samsung	K9GBG08U0A	V7168~	24 / 1024	8Bit	25	x1	8192	640	128	1024KB	30	4096	MP, RAND	4096
MLC	Samsung	K9LCG08U0A	V7182~	24 / 1024	8Bit	25	x1	8192	640	128	1024KB	30	8192	IL, MP, RAND	8192
MLC	Samsung	K9HDG08U1A	V7182~	24 / 1024	8Bit	25	x2	8192	640	128	1024KB	30	16384	IL, MP, RAND	16384

1) Qualification for using with 16bit/512B ECC condition is released by Micron.

It is recommended to use NAND which is manufactured after October, 2011. Please contact Micron for detailed information.

2) It requires qualification for using with 16bit/512B ECC condition. Please contact Samsung for detailed information.

NANDFLASH List supported by Telechips Nand Driver

PRODUCT			TCC NAND Driver V7	NAND FEATURES											
			TCC89/91/92XX												
TYPE	Vendor	Part Number	WINCE BSP LINUX BSP ANDROID SDK	ECC (Bit/Byte)	Bus Width	Access Time (ns)	CS	Page	Spare	PpB	1Block Size	BBpZ	PBpV	Function	Total Size (MB)
SLC	Samsung	K9F5608U0B ¹⁾	V7000~	2 / 512	8Bit	50	x1	512	16	32	16KB	20	2048	CB	32
SLC	Samsung	K9F5608U0D ¹⁾	V7000~	2 / 512	8Bit	50	x1	512	16	32	16KB	20	2048	CB	32
SLC	Samsung	K9F1G08U0C ¹⁾	V7003~	2 / 512	8Bit	50	x1	2048	64	64	128KB	20	1024	CB	128
SLC	Samsung	K9F1G08U0D ¹⁾	V7092~	2 / 512	8Bit	50	x1	2048	64	64	128KB	20	1024	CB	128
SLC	Samsung	K9F2G08U0B ¹⁾	V7000~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	2048	MP	256
SLC	Samsung	K9F2G08U0C ¹⁾	V7087~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	2048	MP	256
SLC	Samsung	K9F4G08U0B/D	V7045~	2 / 512	8Bit	30	x1	2048	64	64	128KB	20	4096	MP	512
SLC	Samsung	K9K8G08U0B	V7066~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	8192	MP,IL	1024
SLC	Samsung	K9K8G08U0D	V7176~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	8192	MP,IL	1024
SLC	Hynix	H27U2G8F2CTR ¹⁾	V7066~	2 / 512	8Bit	20	x1	2048	64	64	128KB	20	2048	MCP	256
SLC	Hynix	HY27UF084G2B	V7000~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	4096	CB,MP	512
SLC	Hynix	H27U1G8F2B ¹⁾	V7095~	2 / 512	8Bit	50	x1	2048	64	64	128KB	20	1024	CB	128
SLC	ST	NAND512W3A2C/2D ¹⁾	V7000~	2 / 512	8Bit	50	x1	512	16	32	16KB	20	4096	NOR	64
SLC	ST	NAND02GW3B2D ¹⁾	V7000~	2 / 512	8Bit	45	x1	2048	64	64	128KB	20	2048	MP	256
SLC	ST	NAND04GW3B2D	V7000~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	4096	MP	512
SLC	Numonyx	NAND01GW3B2C ¹⁾	V7020~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	1024	NOR	128
SLC	Numonyx	NAND02GR4B2D ¹⁾	V7010~	2 / 512	16Bit	25	x1	2048	64	64	128KB	20	2048	MP	256
SLC	Numonyx	NAND04GR4B2D	V7020~	2 / 512	16Bit	45	x1	2048	64	64	128KB	20	4096	MP	512
SLC	Numonyx	NAND08GW3B2C	V7000~	2 / 512	8Bit	25	x1	2048	64	64	128KB	20	8192	MP,IL	1024
SLC	Micron	MT29F2G08ABAEAH4I ¹⁾	V7098~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	2048	MP	256
SLC	Micron	MT29F8G08ABA	V7016~	4 / 512	8Bit	25	x1	4096	224	128	512KB	20	2048	MP	1024
SLC	Micron	MT29F16G08ABA	V7066~	4 / 512	8Bit	25	x1	4096	224	128	512KB	20	4096	MP	2048
SLC	Toshiba	TC58DVG3S0ET	V7071~	4 / 512	8Bit	25	x1	4096	128	64	256KB	20	4096	MP	1024
SLC	Toshiba	TC58NVG1S3ETAi0 ¹⁾	V7122~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	2048	NOR	256
SLC	Micron	MT29F16G08ABACA	V7124~	4 / 512	8Bit	30	x1	4096	224	128	512KB	20	4096	MP,CP	2048
SLC	Hynix	H27U4G8F2DTR	V7128~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	4096	MP,CP	512
SLC	Micron	MT29F1G08ABADA ¹⁾	V7154~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	1024	CP	128
SLC	Micron	MT29F4G08ABADA	V7155~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	4096	MP,CP	512
SLC	Toshiba	TY0A00011458RA ¹⁾	V7159~	4 / 512	8Bit	30	x1	1024	32	64	64KB	20	1024	NOR	64
SLC	Samsung	K9K8G08U0D	V7182~	4 / 512	8Bit	25	x1	2048	64	64	128KB	20	8192	MP,IL	1024

1) Android doesn't support nand whose size is less than 512MB.

Unsupportable NANDFLASH List

PRODUCT			NAND FEATURE		REASON
TYPE	Vendor	Part Number	ECC	Density	
MLC	Hynix	H27UBG8T2B	24bit/1KB	32Gb	read retry mode
MLC	Hynix	H27UCG8U5B	24bit/1KB	64Gb	read retry mode

Note

TERM		MEANING
	PpB	Pages per 1Block
	BBpZ	Bad Blocks per 1Zone (1Zone = 1024Blocks)
	PBpV	Total Physical Blocks
Fuction	CP	Cache-Program
	CB	Copy-Back
	MP	Multi-Plane
	MP2	Multi-Page Write on a Block
	IL	Interleave
	EIL	External Interleave
	RAND	S/W Randomizer