Hardware System Verification (HSV)
Vertical Solutions Engineering

Memory Model Portfolio Catalog
MMP 18.1.0

Catalog Version: 1.0
Catalog Date : June 29, 2018

Catalog Version	Date	Comment
MMP 18.1.0	**6/29/2018**	**Release: MMP 18.1.0** Add Micron OSPI mt35xu02g. Add Macronix QSPI part mx25u25645g. Both non-BETA (MR) Add additional Micron Octal SPI mt35xu* configurations Add Micron mt25q* and mt25t* (2-die) QSPI parts at BETA (IR) level Mark QSPI / OSPI parts to indicate if each is in release as *.vp or *.vhdp model file Copyright info updated Move Winbond x8 IO PSRAM w955d8mky part from BETA (IR) level to non-BETA (MR) level Expanded number of Toshiba TLC ToggleDDR2 parts Added JSC cellular ram OctaRAM parts jsc*ss*8agdy at BETA (IR) level Move Cypress HyperRAM s27k* and s70k* from BETA (IR) level to non-BETA (MR) level Add Winbond SPI NAND (Advanced) w25n01jw* at BETA (IR) level Add Winbond SPI NAND (Advanced) w25m02gw* at non-BETA (MR) level Add Macronix OSPI parts mx66um1g45g, mx66um2g45g (VHDL) Remove UFS 2.0 from Catalog. Replaced going forward by UFS 2.1 model. Move JSC cellular ram OctaRAM parts jsc*ss*8agdy from BETA (IR) to non-BETA (MR) level Move JEDEC and Samsung DDR4 LRDIMM from BETA (IR) level to non-BETA (MR) level Move Micron B16A & B17A Fortisflash ONFI 4.0 TLC NAND from BETA (IR) level to non-BETA (MR) level Move Toshiba BiCs3 TDDR2 and BiCS4 TDDR3 from BETA (IR) level to non-BETA (MR) level Added TDDR3.0 page; Added Product Levels page; Marked MMP_PLUS models Move GigaDevice SPI NAND gd5f* from BETA (IR) level to non-BETA (MR) level Add AP Memory DDR Octal SPI PSRAM aps*08l

Model Release Levels

All models in the Memory Model Portfolio are graded with a release level. This release level informs users of the current maturity and status of the model. All families in the library are graded at one of these levels.

The different levels give an overall indication of the amount of testing, level of quality and feature availability in the model. For details on supported features check the User Guide for that particular model family.

There are three release levels for models in the MMP release.

Release Level		Model Status	Available in Release	Listed in Catalog	Requires Beta Agreement
Mainstream Release	MR	Fully released and available in the catalog for all customers to use.	Yes	Yes	No
Emerging Release	ER	Model has successfully completed Beta engagement(s). Most, but not all features have been tested. Documentation is available.	No	Yes	Yes
Initial Release	IR	Model has completed initial development and has been released to Beta customer(s). The model may have missing features, may not be fully tested, and may not have documentation. Model may contain defects.	No	Yes	Yes

Access to Initial Release and Emerging Release versions of the models will require a Beta Agreement to be signed before the model can be delivered.

Model Product Levels

All models in the Memory Model Portfolio are assigned a product level. This product level informs users what set of models are accessible with their purchased product and licensing. The majority of models in the MMP library are available at the MMP_BASIC product level. Some advanced models with complex protocols and complex features are available only at the MMP_PLUS product level.

In this MMP Catalog, MMP_PLUS models are marked with ***MMP_PLUS*** in the column at the left hand side of the page. MMP_PLUS models are, like all models, assigned a release level and thus may have either a BETA or non-BETA status.

Access to MMP_BASIC models requires ACCEL_MEM_VIP licensing. Access to MMP_BASIC AND MMP_PLUS models requires ACCEL_MEM_PLUS licensing. Please see the MMP FAQ User Guide in the docs directory of the installed release of MMP 18.1.0 or later for additional details or consult with your Cadence sales representative.

SDRAM

Manufacturer	Model Name	Size	Configuration
Micron			
	mt48lc2m32	64Mb	Configuration: 2M * 32 * 4 banks - Micron 64Mb SDRAM
	mt48lc4m16	64Mb	Configuration: 4M * 16 * 4 banks - Micron 64Mb SDRAM
	mt48lc8m8	64Mb	Configuration: 8M * 8 * 4 banks - Micron 64Mb SDRAM
	mt48lc16m4	64Mb	Configuration: 16M * 4 * 4 banks - Micron 64Mb SDRAM
	mt48lc4m32	128Mb	Configuration: 4M * 32 * 4 banks - Micron 128Mb SDRAM
	mt48lc8m16	128Mb	Configuration: 8M * 16 * 4 banks - Micron 128Mb SDRAM
	mt48lc16m8	128Mb	Configuration: 16M * 8 * 4 banks - Micron 128Mb SDRAM
	mt48lc32m4	128Mb	Configuration: 32M * 4 * 4 banks - Micron 128Mb SDRAM
	mt48lc8m32	256Mb	Configuration: 8M * 32 * 4 banks - Micron 256Mb SDRAM
	mt48lc16m16	256Mb	Configuration: 16M * 16 * 4 banks - Micron 256Mb SDRAM
	mt48lc32m8	256Mb	Configuration: 32M * 8 * 4 banks - Micron 256Mb SDRAM
	mt48lc64m4	256Mb	Configuration: 64M * 4 * 4 banks - Micron 256Mb SDRAM
	mt48lc32m16	512Mb	Configuration: 32M * 16 * 4 banks - Micron 512Mb SDRAM
	mt48lc16m32	512Mb	Configuration: 16M * 32 * 4 banks - Micron 512Mb SDRAM
	mt48lc64m8	512Mb	Configuration: 64M * 8 * 4 banks - Micron 512Mb SDRAM
	mt48lc128m4	512Mb	Configuration: 32M * 4 * 4 banks - Micron 512Mb SDRAM

DDR

Manufacturer	Model Name	Size	Configuration
Micron			
	mt46v16m8	128Mb	Configuration: 4M * 8 * 4 banks - Micron 128Mb DDR SDRAM
	mt46v32m4	128Mb	Configuration: 8M * 4 * 4 banks - Micron 128Mb DDR SDRAM
	mt46v4m32	128Mb	Configuration: 1M * 32 * 4 banks - Micron 128Mb DDR SDRAM
	mt46v8m16	128Mb	Configuration: 2M * 16 * 4 banks - Micron 128Mb DDR SDRAM
	mt46v16m16	256Mb	Configuration: 4M * 16 * 4 banks - Micron 256Mb DDR SDRAM
	mt46v32m8	256Mb	Configuration: 8M * 8 * 4 banks - Micron 256Mb DDR SDRAM
	mt46v64m4	256Mb	Configuration: 16M * 4 * 4 banks - Micron 256Mb DDR SDRAM
	mt46v8m32	256Mb	Configuration: 2M * 32 * 4 banks - Micron 256Mb DDR SDRAM
	mt46v128m4	512Mb	Configuration: 32M * 4 * 4 banks - Micron 512Mb DDR SDRAM
	mt46v16m32	512Mb	Configuration: 4M * 32 * 4 banks - Micron 512Mb DDR SDRAM
	mt46v32m16	512Mb	Configuration: 8M * 16 * 4 banks - Micron 512Mb DDR SDRAM
	mt46v64m8	512Mb	Configuration: 16M * 8 * 4 banks - Micron 512Mb DDR SDRAM
	mt46v128m8	1Gb	Configuration: 32M * 8 * 4 banks - Micron 1Gb DDR SDRAM
	mt46v256m4	1Gb	Configuration: 64M * 4 * 4 banks - Micron 1Gb DDR SDRAM
	mt46v64m16	1Gb	Configuration: 16M * 16 * 4 banks - Micron 1Gb DDR SDRAM
	mt46v32m32	1Gb	Configuration: 32M * 32 * 4 banks - Micron 1Gb DDR SDRAM

DDR2

Manufacturer	Model Name	Size	Configuration
Micron			
	mt47h16m16	256Mb	Configuration: 4M * 16 * 4 banks - Micron 256Mb DDR2 SDRAM
	mt47h32m8	256Mb	Configuration: 8M * 8 * 4 banks - Micron 256Mb DDR2 SDRAM
	mt47h64m4	256Mb	Configuration: 16M * 4 * 4 banks - Micron 256Mb DDR2 SDRAM
	mt47h128m4	512Mb	Configuration: 32M x 4 x 4 Banks- Micron 512Mb DDR2 SDRAM
	mt47h32m16	512Mb	Configuration: 8M * 16 * 4 banks - Micron 512Mb DDR2 SDRAM
	mt47h64m8	512Mb	Configuration: 16M * 8 * 4 banks - Micron 512Mb DDR2 SDRAM
	mt47h128m8	1Gb	Configuration: 16M * 8 * 8 banks - Micron 1Gb DDR2 SDRAM
	mt47h256m4	1Gb	Configuration: 32M * 4 * 8 banks - Micron 1Gb DDR2 SDRAM
	mt47h32m32	1Gb	Configuration: 8M * 32 * 4 banks - Micron 1Gb DDR2 SDRAM
	mt47h64m16	1Gb	Configuration: 8M * 16 * 8 banks - Micron 1Gb DDR2 SDRAM
	mt47h128m16	2Gb	Configuration: 16M * 16 * 8 banks - Micron 2Gb DDR2 SDRAM
	mt47h256m8	2Gb	Configuration: 32M * 8 * 8 banks - Micron 2Gb DDR2 SDRAM
	mt47h32m64	2Gb	Configuration: 8M * 64 * 4 banks - Micron 2Gb DDR2 SDRAM
	mt47h512m4	2Gb	Configuration: 64M * 4 * 8 banks - Micron 2Gb DDR2 SDRAM
Micron DIMM models			
	mt8htf6464a_udimm	512MB DIMM	Configuration: 1 Rank * 8M * 64 * 8 banks - Micron 512MB DDR2 DIMM
	mt8htf12864a_udimm	1GB DIMM	Configuration: 1 Rank * 16M * 64 * 8 banks - Micron 1GB DDR2 DIMM
	mt8htf25664a_udimm	2GB DIMM	Configuration: 1 Rank * 32M * 64 * 8 Banks - Micron 2GB DDR2 DIMM
	mt9htf6472a_udimm	512MB ECC DIMM	Configuration: 1 Rank * 8M * 72 * 8 banks - Micron 512MB DDR2 DIMM
	mt9htf12872a_udimm	1GB ECC DIMM	Configuration: 1 Rank * 16M * 72 * 8 banks - Micron 1GB DDR2 DIMM
	mt9htf25672a_udimm	2GB ECC DIMM	Configuration: 1 Rank * 32M * 72 * 8 banks - Micron 2GB DDR2 DIMM
	mt16htf25664a_udimm	2GB DIMM	Configuration: 2 Rank * 16M * 64 * 8 banks - Micron 1GB DDR2 DIMM
	mt16htf51264a_udimm	4GB DIMM	Configuration: 2 Rank * 32M * 64 * 8 banks - Micron 2GB DDR2 DIMM
	mt18htf12872a_udimm	1GB ECC DIMM	Configuration: 2 Rank * 8M * 72 * 8 banks - Micron 512MB DDR2 DIMM
	mt18htf25672a_udimm	2GB ECC DIMM	Configuration: 2 Rank * 16M * 72 * 8 banks - Micron 1GB DDR2 DIMM
	mt18htf51272a_udimm	4GB ECC DIMM	Configuration: 2 Rank * 32M * 72 * 8 banks - Micron 2GB DDR2 DIMM
Micron Fake DIMM models	`		
	mt47h32m64_fake_dimm	256MB DIMM	Configuration: 8M * 64 * 4 banks - Micron 256MB DDR2 FAKE DIMM
	mt47h32m72_fake_dimm	256MB DIMM	Configuration: 8M * 72 * 4 banks - Micron 256MB DDR2 FAKE DIMM
	mt47h64m64_fake_dimm	512MB DIMM	Configuration: 8M * 64 * 8 banks - Micron 512MB DDR2 FAKE DIMM
	mt47h64m72_fake_dimm	512MB DIMM	Configuration: 8M * 72 * 8 banks - Micron 512MB DDR2 FAKE DIMM
	mt47h128m64_fake_dimm	1GB DIMM	Configuration: 16M * 64 * 8 banks - Micron 1GB DDR2 FAKE DIMM
	mt47h128m72_fake_dimm	1GB DIMM	Configuration: 16M * 72 * 8 banks - Micron 1GB DDR2 FAKE DIMM
	mt47h256m64 _fake_dimm	2GB DIMM	Configuration: 32M * 64 * 8 banks - Micron 2 GB DDR2 FAKE DIMM
	mt47h256m72 _fake_dimm	2GB DIMM	Configuration: 32M * 72 * 8 banks - Micron 2 GB DDR2 FAKE DIMM
Hynix			
	hy5ps1g431c	1Gb	Configuration: 32M * 4 * 8 banks - Hynix 1Gb DDR2 SDRAM
	hy5ps1g831c	1Gb	Configuration: 16M * 8 * 8 banks - Hynix 1Gb DDR2 SDRAM
	hy5ps1g1631c	1Gb	Configuration: 8M * 16 * 8 banks - Hynix 1Gb DDR2 SDRAM
	h5ps1g43	1Gb	Configuration: 32M * 4 * 8 banks - Hynix 1Gb DDR2 SDRAM
	h5ps1g83	1Gb	Configuration: 16M * 8 * 8 banks - Hynix 1Gb DDR2 SDRAM
	h5ps1g63	1Gb	Configuration: 8M * 16 * 8 banks - Hynix 1Gb DDR2 SDRAM
	h5ps2g43	2Gb	Configuration: 64M * 4 * 8 banks - Hynix 2Gb DDR2 SDRAM
	h5ps2g83	2Gb	Configuration: 32M * 8 * 8 banks - Hynix 2Gb DDR2 SDRAM
	h5ps2g63	2Gb	Configuration: 16M * 16 * 8 banks - Hynix 2Gb DDR2 SDRAM
Samsung			
	k4t51043	512Mb	Configuration: 32M * 4 * 4 banks - Samsung 512Mb DDR2 SDRAM
	k4t51083	512Mb	Configuration: 16M * 8 * 4 banks - Samsung 512Mb DDR2 SDRAM
	k4t51163	512Mb	Configuration: 8M * 16 * 4 banks - Samsung 512Mb DDR2 SDRAM
	k4t1g044	1Gb	Configuration: 32M * 4 * 8 banks - Samsung 1Gb DDR2 SDRAM
	k4t1g084	1Gb	Configuration: 16M * 8 * 8 banks - Samsung 1Gb DDR2 SDRAM
	k4t1g164	1Gb	Configuration: 8M * 16 * 8 banks - Samsung 1Gb DDR2 SDRAM
	k4t2g044	2Gb	Configuration: 64M * 4 * 8 banks - Samsung 2Gb DDR2 SDRAM
	k4t2g084	2Gb	Configuration: 32M * 8 * 8 banks - Samsung 2Gb DDR2 SDRAM
	k4t2g164	2Gb	Configuration: 16M * 16 * 8 banks - Samsung 2Gb DDR2 SDRAM

DDR3

Manufacturer	Model Name	Size	Configuration
Elpida			
	edj5308	512Mb	Configuration: 8M * 8 * 8 banks - Elpida 512Mb DDR3 SDRAM
	edj5316	512Mb	Configuration: 4M * 16 * 8 banks - Elpida 512Mb DDR3 SDRAM
	edj1104	1Gb	Configuration: 32M * 4 * 8 banks - Elpida 1Gb DDR3 SDRAM
	edj1108	1Gb	Configuration: 16M * 8 * 8 banks - Elpida 1Gb DDR3 SDRAM
	edj1116	1Gb	Configuration: 8M * 16 * 8 banks - Elpida 1Gb DDR3 SDRAM
	edj2104	2Gb	Configuration: 64M * 4 * 8 banks - Elpida 2Gb DDR3 SDRAM
	edj2108	2Gb	Configuration: 32M * 8 * 8 banks - Elpida 2Gb DDR3 SDRAM
	edj4204	4Gb	Configuration: 128M * 4 * 8 banks - Elpida 4Gb DDR3 SDRAM
	edj4208	4Gb	Configuration: 64M * 8 * 8 banks - Elpida 4Gb DDR3 SDRAM
	edj4216	4Gb	Configuration: 32M * 16 * 8 banks - Elpida 4Gb DDR3 SDRAM
	edj8216	8Gb	Configuration: 64M * 16 * 8 banks - Elpida 8Gb DDR3 SDRAM - Not a real part
Samsung			
	k4w2g1646b	2Gb	Configuration: 16M * 16 * 8 banks - Samsung 2Gb gDDR3 SDRAM
	k4b1g0446d	1Gb	Configuration: 32M * 4 * 8 banks - Samsung 1Gb DDR3 SDRAM
	k4b1g0846b	1Gb	Configuration: 16M * 8 * 8 banks - Samsung 1Gb DDR3 SDRAM
	k4b1g1646b	1Gb	Configuration: 8M * 16 * 8 banks - Samsung 1Gb DDR3 SDRAM
	k4b2g0446d	2Gb	Configuration: 64M * 4 * 8 banks - Samsung 2Gb DDR3 SDRAM
	k4b2g0846b	2Gb	Configuration: 32M * 8 * 8 banks - Samsung 2Gb DDR3 SDRAM
	k4b2g1646b	2Gb	Configuration: 16M * 16 * 8 banks - Samsung 2Gb DDR3 SDRAM
	k4b4g0446d	4Gb	Configuration: 128M * 4 * 8 banks - Samsung 4Gb DDR3 SDRAM
	k4b4g0846b	4Gb	Configuration: 64M * 8 * 8 banks - Samsung 4Gb DDR3 SDRAM
	k4b4g1646b	4Gb	Configuration: 32M * 16 * 8 banks - Samsung 4Gb DDR3 SDRAM
Micron			
	mt41j128m4	512Mb	Configuration: 16M * 4 * 8 banks - Micron 512Mb DDR3 SDRAM
	mt41j64m8	512Mb	Configuration: 8M * 8 * 8 banks - Micron 512Mb DDR3 SDRAM
	mt41j128m8	1Gb	Configuration: 16M * 8 * 8 banks - Micron 1Gb DDR3 SDRAM
	mt41j256m4	1Gb	Configuration: 32M * 4 * 8 banks - Micron 1Gb DDR3 SDRAM
	mt41j64m16	1Gb	Configuration: 8M * 16 * 8 banks - Micron 1Gb DDR3 SDRAM
	mt41k128m8	1Gb	Configuration: 16M * 8 * 8 banks - Micron 1Gb 1.35V DDR3L SDRAM
	mt41k256m4	1Gb	Configuration: 32M * 4 * 8 banks - Micron 1Gb 1.35V DDR3L SDRAM
	mt41j128m16	2Gb	Configuration: 16M * 16 * 8 banks - Micron 2Gb DDR3 SDRAM
	mt41j256m8	2Gb	Configuration: 32M * 8 * 8 banks - Micron 2Gb DDR3 SDRAM
	mt41k128m16	2Gb	Configuration: 16M * 16 * 8 banks - Micron 2Gb DDR3L SDRAM
	mt41j512m4	2Gb	Configuration: 64M * 4 * 8 banks - Micron 2Gb DDR3 SDRAM
	mt41j1g4	4Gb	Configuration: 128M * 4 * 8 banks - Micron 4Gb DDR3 SDRAM
	mt41j512m8	4Gb	Configuration: 64M * 8 * 8 banks - Micron 4Gb DDR3 SDRAM
	mt41j256m16	4Gb	Configuration: 32M * 16 * 8 banks - Micron 4Gb DDR3 SDRAM
	mt41k256m16	4Gb	Configuration: 32M * 16 * 8 banks - Micron 4Gb DDR3L SDRAM
	mt41k512m16	8Gb	Configuration: 64M * 16 * 8 banks - Micron 8Gb DDR3L SDRAM
	mt41k1g8	8Gb	Configuration: 128M * 8 * 8 banks - Micron 8Gb DDR3L SDRAM
	mt41k2g4	8Gb	Configuration: 256M * 4 * 8 banks - Micron 8Gb DDR3L SDRAM
Micron Multi-Die Wrappers			
	mt41j512m8_td	4Gb	Configuration: 2 Ranks * 32M * 8 * 8 banks - Micron 4Gb TwinDie DDR3 SDRAM
	mt41k512m16_td	8Gb	Configuration: 2 Ranks * 32M * 8 * 16 banks - Micron 4Gb TwinDie DDR3 SDRAM
	mt41j1g4_td	4Gb	Configuration: 2 Ranks * 64M * 4 * 8 banks - Micron 4Gb TwinDie DDR3 SDRAM
	mt41j1g8_td	8Gb	Configuration: 4 Ranks * 32M * 8 * 8 banks - Micron 8Gb TwnDie DDR3 SDRAM
	mt41j2g4_td	8Gb	Configuration: 4 Ranks * 64M * 4 * 8 banks - Micron 8Gb TwinDie DDR3 SDRAM

DDR3 (continued)

Manufacturer	Model Name	Size	Configuration
Hynix			
	h5tc1g43tfr	1Gb	Configuration: 32M * 4 * 8 banks - Hynix 1Gb DDR3 SDRAM
	h5tc1g83tfr	1Gb	Configuration: 16M * 8 * 8 banks - Hynix 1Gb DDR3 SDRAM
	h5tc2g43bfr	2Gb	Configuration: 64M * 4 * 8 banks - Hynix 2Gb DDR3 SDRAM
	h5tc2g83bfr	2Gb	Configuration: 32M * 8 * 8 banks - Hynix 2Gb DDR3 SDRAM
	h5tq1g43tfr	1Gb	Configuration: 32M * 4 * 8 banks - Hynix LV 1Gb DDR3 SDRAM
	h5tq1g83tfr	1Gb	Configuration: 16M * 8 * 8 banks - Hynix LV 1Gb DDR3 SDRAM
	h5tq2g43bfr	2Gb	Configuration: 64M * 4 * 8 banks - Hynix LV 2Gb DDR3 SDRAM
	h5tq2g83bfr	2Gb	Configuration: 32M * 8 * 8 banks - Hynix LV 2Gb DDR3 SDRAM
	h5tq2g63bfr	2Gb	Configuration: 16M * 16 * 8 banks - Hynix LV 2Gb DDR3 SDRAM
	h5tc4g43afr	4Gb	Configuration: 128M * 4 * 8 banks - Hynix 4Gb DDR3 SDRAM
	h5tc4g63afr	4Gb	Configuration: 32M * 16 * 8 banks - Hynix 4Gb DDR3 SDRAM
	h5tc4g83afr	4Gb	Configuration: 64M * 8 * 8 banks - Hynix 4Gb DDR3 SDRAM

DDR3 UDIMM

Manufacturer	Model Name	Size	Configuration
Micron			
1 Rank			
	mt8ktf12864az_udimm	1GB	Config: Micron 1GB DDR3 UDIMM 16M x 64 x 8 Banks x 1 Rank
	mt8jtf12864az_udimm	1GB	Config: Micron 1GB DDR3 UDIMM 16M x 64 x 8 Banks x 1 Rank
	mt9jsf12872az_udimm	1GB	Config: Micron 1GB DDR3 UDIMM 16M x 72 x 8 Banks x 1 Rank
	mt4jtf12864az_udimm	1GB	Config: Micron 1GB DDR3 UDIMM 16M x 64 x 8 Banks x 1 Rank
	mt8jtf25664az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 64 x 8 Banks x 1 Rank
	mt4jtf25664az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 64 x 8 Banks x 1 Rank
	mt8ktf25664az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 64 x 8 Banks x 1 Rank
	mt4ktf25664az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 64 x 8 Banks x 1 Rank
	mt9ksf25672az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 72 x 8 Banks x 1 Rank
	mt9jsf25672az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 32M x 72 x 8 Banks x 1 Rank
	mt8ktf51264az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 64M x 64 x 8 Banks x 1 Rank
	mt8jtf51264az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 64M x 64 x 8 Banks x 1 Rank
2 Ranks			
	mt16jtf25664az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 16M x 64 x 8 Banks x 2 Ranks
	mt18jsf25672az_udimm	2GB	Config: Micron 2GB DDR3 UDIMM 16M x 72 x 8 Banks x 2 Ranks
	mt16ktf51264az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 32M x 64 x 8 Banks x 2 Ranks
	mt16jtf51264az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 32M x 64 x 8 Banks x 2 Ranks
	mt18ksf51272az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 32M x 72 x 8 Banks x 2 Ranks
	mt18jsf51272az_udimm	4GB	Config: Micron 4GB DDR3 UDIMM 32M x 72 x 8 Banks x 2 Ranks
	mt16ktf1g64az_udimm	8GB	Config: Micron 8GB DDR3 UDIMM 64M x 64 x 8 Banks x 2 Ranks
	mt16jtf1g64az_udimm	8GB	Config: Micron 8GB DDR3 UDIMM 64M x 64 x 8 Banks x 2 Ranks
	mt18ksf1g72az_udimm	8GB	Config: Micron 8GB DDR3 UDIMM 64M x 72 x 8 Banks x 2 Ranks
	mt18jsf1g72az_udimm	8GB	Config: Micron 8GB DDR3 UDIMM 64M x 72 x 8 Banks x 2 Ranks
	mt18kdf1g72az_udimm	8GB	Config: Micron 8GB DDR3 UDIMM 64M x 72 x 8 Banks x 2 Ranks

DDR3 RDIMM

Manufacturer	Model Name	Size	Configuration
Micron			
1 Rank	mt9jsf12872pz_rdimm	1GB	Config: Micron 1GB DDR3 RDIMM 16M x 72 x 8 banks x 1 rank
	mt9jsf25672pz_rdimm	2GB	Config: Micron 2GB DDR3 RDIMM 32M x 72 x 8 banks x 1 rank
	mt9ksf25672pz_rdimm	2GB	Config: Micron 2GB DDR3 RDIMM 32M x 72 x 8 banks x 1 rank
	mt9kdf25672pz_rdimm	2GB	Config: Micron 2GB DDR3 RDIMM 32M x 72 x 8 banks x 1 rank
	mt9jsf51272pz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 64M x 72 x 8 banks x 1 rank
	mt9ksf51272pz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 64M x 72 x 8 banks x 1 rank
	mt18jsf51272pz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 64M x 72 x 8 banks x 1 rank
	mt18ksf51272pz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 64M x 72 x 8 banks x 1 rank
	mt18jsf1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 128M x 72 x 8 banks x 1 rank
	mt18ksf1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 128M x 72 x 8 banks x 1 rank
2 Ranks	mt18jsf25672pdz_rdimm	2GB	Config: Micron 2GB DDR3 RDIMM 16M x 72 x 8 banks x 2 ranks
	mt18jsf51272pdz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 32M x 72 x 8 banks x 2 ranks
	mt18ksf51272pdz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 32M x 72 x 8 banks x 2 ranks
	mt18kdf51272pdz_rdimm	4GB	Config: Micron 4GB DDR3 RDIMM 32M x 72 x 8 banks x 2 ranks
	mt18jsf1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt18ksf1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt36jsf1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt36ksf1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt36jszf1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt36ksfz1g72pz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 64M x 72 x 8 banks x 2 ranks
	mt36jsf2g72pz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 128M x 72 x 8 banks x 2 ranks
	mt36ksf2g72pz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 128M x 72 x 8 banks x 2 ranks
	mt36msf2g72pz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 128M x 72 x 8 Banks x 2 ranks
4 Ranks	mt36jsf1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 32M x 72 x 8 banks x 4 ranks
	mt36jszf1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 32M x 72 x 8 banks x 4 ranks
	mt36ksf1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 32M x 72 x 8 banks x 4 ranks
	mt36jds1g72pdz_rdimm	8GB	Config: Micron 8GB DDR3 RDIMM 32M x 72 x 8 banks x 4 ranks
	mt36ksf2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72jdzq2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72jss2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72jszs2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72kss2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72kszs2g72pdz_rdimm	16GB	Config: Micron 16GB DDR3 RDIMM 64M x 72 x 8 banks x 4 ranks
	mt72jszs4g72pdz_rdimm	32GB	Config: Micron 32GB DDR3 RDIMM 128M x 72 x 8 banks x 4 ranks
	mt72kszs4g72pdz_rdimm	32GB	Config: Micron 32GB DDR3 RDIMM 128M x 72 x 8 banks x 4 ranks
	mt72kgf4g72pdz_rdimm	32GB	Config: Micron 32GB DDR3 RDIMM 128M x 72 x 8 banks x 4 ranks
Elpida Fake DIMM Models			
	edj5308_dimm	4Gb	Configuration: 8M * 72 * 8 banks - Elpida 64Mx72 DDR3 DIMM
	edj5308_dimm_spd	4Gb	Configuration: 8M * 72 * 8 banks - Elpida 64Mx72 DDR3 DIMM with SPD EPROM
	edj1108_dimm	8Gb	Configuration: 16M * 72 * 8 banks - Elpida 1GB DDR3 DIMM
	edj1108_reg_dimm	8Gb	Configuration: 16M * 72 * 8 banks - Elpida 1GB DDR3 Registered DIMM
	ebj21ee8bafa	16Gb	Configuration: 16M * 72 * 8 banks * 2 ranks – Elpida 2GB DDR3 DIMM with SPD EEPROM
	edj2108_dimm	16Gb	Configuration: 32M * 72 * 8 banks – Elpida 2GB DDR3 DIMM

MRAM

Manufacturer	Model Name	Size	Configuration
Everspin			
	emd3d064m04	64 Mb	Configuration: 64Mb (16Mb x 4) - Everspin MRAM
	emd3d064m08	64 Mb	Configuration: 64Mb (8Mb x 8) - Everspin MRAM
	emd3d064m16	64 Mb	Configuration: 64Mb (4Mb x 16) - Everspin MRAM

DDR4

Manufacturer	Model Name	Size	Configuration
JEDEC			
	jedec_ddr4_2gb_4	2Gb	Configuration : 32M x 4 x 4 Banks x 4 Groups - JEDEC 2Gb DDR4 SDRAM
	jedec_ddr4_2gb_8	2Gb	Configuration : 16M x 8x 4 Banks x 4 Groups - JEDEC 2Gb DDR4 SDRAM
	jedec_ddr4_2gb_16	2Gb	Configuration : 16M x 16 x 4 Banks x 2 Groups - JEDEC 2Gb DDR4 SDRAM
	jedec_ddr4_4gb_4	4Gb	Configuration : 64M x 4 x 4 Banks x 4 Groups - JEDEC 4Gb DDR4 SDRAM
	jedec_ddr4_4gb_8	4Gb	Configuration : 32M x 8x 4 Banks x 4 Groups - JEDEC 4Gb DDR4 SDRAM
	jedec_ddr4_4gb_16	4Gb	Configuration : 32M x 16 x 4 Banks x 2 Groups - JEDEC 4Gb DDR4 SDRAM
	jedec_ddr4_8gb_4	8Gb	Configuration : 128M x 4 x 4 Banks x 4 Groups - JEDEC 8Gb DDR4 SDRAM
	jedec_ddr4_8gb_8	8Gb	Configuration : 64M x 8x 4 Banks x 4 Groups - JEDEC 8Gb DDR4 SDRAM
	jedec_ddr4_8gb_16	8Gb	Configuration : 64M x 16 x 4 Banks x 2 Groups - JEDEC 8Gb DDR4 SDRAM
	jedec_ddr4_16gb_4	16Gb	Configuration : 256M x 4x 4 Banks x 4 Groups - JEDEC 16Gb DDR4 SDRAM
	jedec_ddr4_16gb_8	16Gb	Configuration : 128M x 8x 4 Banks x 4 Groups - JEDEC 16Gb DDR4 SDRAM
	jedec_ddr4_16gb_16	16Gb	Configuration : 128M x 16 x 4 Banks x 2 Groups - JEDEC 16Gb DDR4 SDRAM
Samsung			
	k4a4g045wd	4Gb	Config: 64M * 4 * 4 banks * 4 groups - Samsung 4Gb DDR4 SDRAM
	k4a4g085wd	4Gb	Config: 32M * 8 * 4 banks * 4 groups - Samsung 4Gb DDR4 SDRAM
	k4a4g165wd	4Gb	Config: 32M * 16 * 4 banks * 2 groups - Samsung 4Gb DDR4 SDRAM
	k4a4g045we	4Gb	Config: 64M * 4 * 4 banks * 4 groups - Samsung 4Gb DDR4 SDRAM
	k4a4g085we	4Gb	Config: 32M * 8 * 4 banks * 4 groups - Samsung 4Gb DDR4 SDRAM
	k4a4g165we	4Gb	Config: 32M * 16 * 4 banks * 2 groups - Samsung 4Gb DDR4 SDRAM
	k4a8g045wb	8Gb	Config: 128M * 4 * 4 banks * 4 groups - Samsung 8Gb DDR4 SDRAM
	k4a8g085wb	8Gb	Config: 64M * 8 * 4 banks * 4 groups - Samsung 8Gb DDR4 SDRAM
	k4a8g165wb	8Gb	Config: 64M * 16 * 4 banks * 2 groups - Samsung 8Gb DDR4 SDRAM
Micron			
	mt40a1g4	4Gb	Config: 64M * 4 * 4 banks * 4 groups - Micron 4Gb DDR4 SDRAM
	mt40a512m8	4Gb	Config: 32M * 8 * 4 banks * 4 groups - Micron 4Gb DDR4 SDRAM
	mt40a256m16	4Gb	Config: 32M * 16 * 4 banks * 2 groups - Micron 4Gb DDR4 SDRAM
	mt40a2g4	8Gb	Config: 128M * 4 * 4 banks * 4 groups - Micron 8Gb DDR4 SDRAM
	mt40a1g8	8Gb	Config: 64M * 8 * 4 banks * 4 groups - Micron 8Gb DDR4 SDRAM
	mt40a512m16	8Gb	Config: 64M * 16 * 4 banks * 2 groups - Micron 8Gb DDR4 SDRAM
	mt40a4g4	16Gb	Config: 128M * 4 * 16 banks * 2 ranks - Micron 16Gb 3DS 2H DDR4 SDRAM
	mt40a8g4	32Gb	Config: 128M * 4 * 16 banks * 4 ranks - Micron 32Gb 3DS 4H DDR4 SDRAM
	mt40a2g8	16Gb	Config: 64M * 8 * 16 banks * 2 ranks - Micron 16Gb 3DS 2H DDR4 SDRAM
	mt40a4g8	32Gb	Config: 64M * 8 * 16 banks * 4 ranks - Micron 32Gb 3DS 4H DDR4 SDRAM

DDR4 DIMM

Manufacturer	Model Name	Size	Configuration
Micron			
	mta9asf51272az	4GB	Config: Micron 4GB DDR4 UDIMM 32M x 72 x 16 banks x 1 rank
	mta4atf25664az	2GB	Config: Micron 2GB DDR4 SDRAM UDIMM 32M * 64 * 4 banks * 2 groups
	mta4atf51264az	4GB	Config: Micron 4GB DDR4 SDRAM UDIMM 64M * 64 * 4 banks * 2 groups
	mta8atf51264az	4GB	Config: Micron 4GB DDR4 SDRAM UDIMM 32M * 64 * 4 banks * 4 groups
	mta8atf1g64az	8GB	Config: Micron 8GB DDR4 SDRAM UDIMM 64M * 64 * 4 banks * 4 groups
	mta16atf1g64az	8GB	Config: Micron 8GB DDR4 SDRAM UDIMM 32M * 64 * 4 banks * 4 groups * 2 ranks
	mta18asf2g72az	16GB	Config: Micron 16GB DDR4 SDRAM UDIMM 64M * 72 * 4 banks * 4 groups * 2 ranks
	mta16atf2g64az	16GB	Config: Micron 16GB DDR4 SDRAM UDIMM 64M * 64 * 4 banks * 4 groups * 2 ranks
	mta9asf51272pz	4GB	Config: Micron 4GB DDR4 RDIMM 32M x 72 x 16 banks x 1 rank
	mta18asf1g72pz	8GB	Config: Micron 8GB DDR4 RDIMM 64M x 72 x 16 banks x 1 rank
	mta36asf2g72pz	16GB	Config: Micron 16GB DDR4 RDIMM 64M x 72 x 16 banks x 2 ranks
	mta18adf1g72pz	8GB	Config: Micron 8GB DDR4 SDRAM RDIMM 64M * 72 * 4 banks * 4 groups
	mta18asf1g72pdz	8GB	Config: Micron 8GB DDR4 SDRAM RDIMM 32M * 72 * 4 banks * 4 groups * 2 ranks
	mta18adf2g72pz	16GB	Config: Micron 16GB DDR4 SDRAM RDIMM 128M * 72 * 4 banks * 4 groups
	mta18asf2g72pz	16GB	Config: Micron 16GB DDR4 SDRAM RDIMM 128M * 72 * 4 banks * 4 groups
	mta18asf2g72pdz	16GB	Config: Micron 16GB DDR4 SDRAM RDIMM 64M * 72 * 4 banks * 4 groups * 2 ranks
	mta36ads4g72pz	32GB	Config: Micron 32GB DDR4 SDRAM RDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks
	mta36asf4g72pz	32GB	Config: Micron 32GB DDR4 SDRAM RDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks
JEDEC			
	jedec_ddr4_2GB_72_rdimm	2GB	Config: JEDEC 2GB DDR4 RDIMM 16M * 72 * 16 banks * 1 rank
	jedec_ddr4_2GB_72_udimm	2GB	Config: JEDEC 2GB DDR4 UDIMM 16M * 72 * 16 banks * 1 rank
	jedec_ddr4_2GB_64_rdimm	2GB	Config: JEDEC 2GB DDR4 RDIMM 16M * 64 * 16 banks * 1 rank
	jedec_ddr4_2GB_64_udimm	2GB	Config: JEDEC 2GB DDR4 UDIMM 16M * 64 * 16 banks * 1 rank
	jedec_ddr4_4GB_72_rdimm	4GB	Config: JEDEC 4GB DDR4 RDIMM 32M * 72 * 16 banks * 1 rank
	jedec_ddr4_4GB_72_udimm	4GB	Config: JEDEC 4GB DDR4 UDIMM 32M * 72 * 16 banks * 1 rank
	jedec_ddr4_4GB_64_rdimm	4GB	Config: JEDEC 4GB DDR4 RDIMM 32M * 64 * 16 banks * 1 rank
	jedec_ddr4_4GB_64_udimm	4GB	Config: JEDEC 4GB DDR4 UDIMM 32M * 64 * 16 banks * 1 rank
	jedec_ddr4_8GB_72_rdimm	8GB	Config: JEDEC 8GB DDR4 RDIMM 64M * 72 * 16 banks * 1 rank
	jedec_ddr4_8GB_72_udimm	8GB	Config: JEDEC 8GB DDR4 UDIMM 64M * 72 * 16 banks * 1 rank
	jedec_ddr4_8GB_64_rdimm	8GB	Config: JEDEC 8GB DDR4 RDIMM 64M * 64 * 16 banks * 1 rank
	jedec_ddr4_8GB_64_udimm	8GB	Config: JEDEC 8GB DDR4 UDIMM 64M * 64 * 16 banks * 1 rank
	jedec_ddr4_16GB_72_rdimm	16GB	Config: JEDEC 16GB DDR4 RDIMM 128M * 72 * 16 banks * 1 rank
	jedec_ddr4_16GB_72_udimm	16GB	Config: JEDEC 16GB DDR4 UDIMM 128M * 72 * 16 banks * 1 rank
	jedec_ddr4_16GB_64_rdimm	16GB	Config: JEDEC 16GB DDR4 RDIMM 128M * 64 * 16 banks * 1 rank
	jedec_ddr4_16GB_64_udimm	16GB	Config: JEDEC 16GB DDR4 UDIMM 128M * 64 * 16 banks * 1 rank
	jedec_ddr4_16GB_2r_64_rdimm	16GB	Config: JEDEC 16GB DDR4 RDIMM 64M * 64 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_16GB_2r_64_udimm	16GB	Config: JEDEC 16GB DDR4 UDIMM 64M * 64 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_16GB_2r_72_rdimm	16GB	Config: JEDEC 16GB DDR4 RDIMM 64M * 72 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_16GB_2r_72_udimm	16GB	Config: JEDEC 16GB DDR4 UDIMM 64M * 72 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_32GB_2r_64_rdimm	32GB	Config: JEDEC 32GB DDR4 RDIMM 128M * 64 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_32GB_2r_64_udimm	32GB	Config: JEDEC 32GB DDR4 UDIMM 128M * 64 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_32GB_2r_72_rdimm	32GB	Config: JEDEC 32GB DDR4 RDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks
	jedec_ddr4_32GB_2r_72_udimm	32GB	Config: JEDEC 32GB DDR4 UDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks

DDR4 DIMM

Manufacturer	Model Name	Size	Configuration
Samsung			
	m378a5644eb0	2GB	Config: 16M * 64 * 4 banks * 4 groups - Samsung 2GB DDR4 SDRAM UDIMM
	m471a5644eb0	2GB	Config: 16M * 64 * 4 banks * 4 groups - Samsung 2GB DDR4 SDRAM UDIMM
	m378a5143db0	4GB	Config: 32M * 64 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m378a5143eb1	4GB	Config: 32M * 64 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m391a5143eb1	4GB	Config: 32M * 72 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m471a5143db0	4GB	Config: 32M * 64 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m471a5143eb0	4GB	Config: 32M * 64 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m471a5143eb1	4GB	Config: 32M * 64 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM UDIMM
	m378a1k43bb1	8GB	Config: 64M * 64 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM UDIMM
	m471a1k43bb0	8GB	Config: 64M * 64 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM UDIMM
	m471a1k43bb1	8GB	Config: 64M * 64 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM UDIMM
	m378a1g43db0	8GB	Config: 32M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m378a1g43eb1	8GB	Config: 32M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m391a1g43db0	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m391a1g43db1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m391a1g43eb1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m471a1g43db0	8GB	Config: 32M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m471a1g43eb1	8GB	Config: 32M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m474a1g43db0	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m474a1g43db1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m474a1g43eb1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM UDIMM
	m378a2k43bb1	16GB	Config: 64M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM UDIMM
	m391a2k43bb1	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM UDIMM
	m471a2k43bb1	16GB	Config: 64M * 64 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM UDIMM
	m474a2k43bb1	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM UDIMM
	m393a5143db0	4GB	Config: 32M * 72 * 4 banks * 4 groups - Samsung 4GB DDR4 SDRAM RDIMM
	m393a1g40db0	8GB	Config: 64M * 72 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM RDIMM
	m393a1g40db1	8GB	Config: 64M * 72 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM RDIMM
	m393a1g40eb1	8GB	Config: 64M * 72 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM RDIMM
	m393a1g43db0	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM RDIMM
	m393a1g43db1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM RDIMM
	m393a1g43eb1	8GB	Config: 32M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 8GB DDR4 SDRAM RDIMM
	m393a1k43bb0	8GB	Config: 64M * 72 * 4 banks * 4 groups - Samsung 8GB DDR4 SDRAM RDIMM
	m392a2g40dm0	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m392a2k43bb0	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m393a2g40db0	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m393a2g40db1	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m393a2g40eb1	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m393a2k40bb0	16GB	Config: 128M * 72 * 4 banks * 4 groups - Samsung 16GB DDR4 SDRAM RDIMM
	m393a2k40bb1	16GB	Config: 128M * 72 * 4 banks * 4 groups - Samsung 16GB DDR4 SDRAM RDIMM
	m393a2k43bb1	16GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 16GB DDR4 SDRAM RDIMM
	m392a4k40bm0	32GB	Config: 128M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 32GB DDR4 SDRAM RDIMM
	m393a4k40bb0	32GB	Config: 128M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 32GB DDR4 SDRAM RDIMM
	m393a4k40bb1	32GB	Config: 128M * 72 * 4 banks * 4 groups * 2 ranks- Samsung 32GB DDR4 SDRAM RDIMM
	m393a8g40d40	64GB	Config: 64M * 72 * 4 banks * 4 groups * 2 ranks * 4 high - Samsung 64GB DDR4 3DS SDRAM RDIMM
	m393a8k40b21	64GB	Config: 128M * 72 * 4 banks * 4 groups * 2 ranks * 2 high - Samsung 64GB DDR4 3DS SDRAM RDIMM
	m393aak40b41	128GB	Config: 128M * 72 * 4 banks * 4 groups * 2 ranks * 4 high - Samsung 128GB DDR4 3DS SDRAM RDIMM

DDR4 LRDIMM

Manufacturer	Model Name	Size	Configuration
JEDEC			
MMP_PLUS	*jedec_ddr4_4GB_64_lrdimm*	*4GB*	*Config: JEDEC 4GB DDR4 SDRAM LRDIMM 32M * 64 * 4 banks * 4 groups * 1 rank*
MMP_PLUS	*jedec_ddr4_4GB_72_lrdimm*	*4GB*	*Config: JEDEC 4GB DDR4 SDRAM LRDIMM 32M * 72 * 4 banks * 4 groups * 1 rank*
MMP_PLUS	*jedec_ddr4_8GB_64_lrdimm*	*8GB*	*Config: JEDEC 8GB DDR4 SDRAM LRDIMM 64M * 64 * 4 banks * 4 groups * 1 rank*
MMP_PLUS	*jedec_ddr4_8GB_72_lrdimm*	*8GB*	*Config: JEDEC 8GB DDR4 SDRAM LRDIMM 64M * 72 * 4 banks * 4 groups * 1 rank*
MMP_PLUS	*jedec_ddr4_16GB_2r_64_lrdimm*	*16GB*	*Config: JEDEC 16GB DDR4 SDRAM LRDIMM 64M * 64 * 4 banks * 4 groups * 2 ranks*
MMP_PLUS	*jedec_ddr4_16GB_2r_72_lrdimm*	*16GB*	*Config: JEDEC 16GB DDR4 SDRAM LRDIMM 64M * 72 * 4 banks * 4 groups * 2 ranks*
MMP_PLUS	*jedec_ddr4_16GB_4r_64_lrdimm*	*32GB*	*Config: JEDEC 32GB DDR4 SDRAM LRDIMM 64M * 64 * 4 banks * 4 groups * 4 ranks*
MMP_PLUS	*jedec_ddr4_16GB_4r_72_lrdimm*	*32GB*	*Config: JEDEC 32GB DDR4 SDRAM LRDIMM 64M * 72 * 4 banks * 4 groups * 4 ranks*
Samsung			
MMP_PLUS	*m386a4g40dm0*	*32GB*	*Config: Samsung 32GB DDR4 SDRAM LRDIMM 64M * 72 * 4 banks * 4 groups * 4 ranks*
MMP_PLUS	*m386a4g40dm1*	*32GB*	*Config: Samsung 32GB DDR4 SDRAM LRDIMM 64M * 72 * 4 banks * 4 groups * 4 ranks*
MMP_PLUS	*m386a4k40bb0*	*32GB*	*Config: Samsung 32GB DDR4 SDRAM LRDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks*
MMP_PLUS	*m386a8k40bm1*	*64GB*	*Config: Samsung 64GB DDR4 SDRAM LRDIMM 128M * 72 * 4 banks * 4 groups * 4 ranks*
MMP_PLUS	*m386aak40b40*	*128GB*	*Config: Samsung 128GB DDR4 SDRAM LRDIMM 128M * 72 * 4 banks * 4 groups * 2 ranks * 4 high*

Mobile SDRAM

Manufacturer	Model Name	Size	Configuration
Micron			
	mt48h4m16lf	64Mb	Configuration : 1M x 16 x 4 Banks - Micron 64Mb Mobile SDRAM
	mt48h16m32lf	512Mb	Configuration : 4M x 32 x 4 Banks - Micron 512Mb Mobile SDRAM

Mobile DDR

Manufacturer	Model Name	Size	Configuration
Hynix			
	h5ms1222efp	128Mb	Configuration : 1M x 32 x 4 Banks - Hynix 128Mb Mobile DDR
	h5ms1262efp	128Mb	Configuration : 2M x 16 x 4 Banks - Hynix 128Mb Mobile DDR
	h5ms2532jfr	256Mb	Configuration : 2M x 32 x 4 Banks - Hynix 256Mb Mobile DDR
	h5ms2562jfr	256Mb	Configuration : 4M x 16 x 4 Banks - Hynix 256Mb Mobile DDR
	h5ms2622jfr	256Mb	Configuration : 2M x 32 x 4 Banks - Hynix 256Mb Mobile DDR
	hy5ms5b2alfp	256Mb	Configuration : 2M x 32 x 4 Banks - Hynix 256Mb Mobile DDR
	hy5ms5b6blfp	256Mb	Configuration : 4M x 16 x 4 Banks - Hynix 256Mb Mobile DDR
	h5ms5122dfr	512Mb	Configuration : 4M x 32 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms5122efr	512Mb	Configuration : 4M x 32 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms5132dfr	512Mb	Configuration : 4M x 32 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms5132efr	512Mb	Configuration : 4M x 32 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms5162dfr	512Mb	Configuration : 8M x 16 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms5162efr	512Mb	Configuration : 8M x 16 x 4 Banks - Hynix 512Mb Mobile DDR
	hy5ms7b2blfp	512Mb	Configuration : 4M x 32 x 4 Banks - Hynix 512Mb Mobile DDR
	hy5ms7b6blfp	512Mb	Configuration : 8M x 16 x 4 Banks - Hynix 512Mb Mobile DDR
	h5ms1g22afr	1Gb	Configuration : 8M x 32 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms1g22mfp	1Gb	Configuration : 8M x 32 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms1g32afr	1Gb	Configuration : 8M x 32 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms1g32mfp	1Gb	Configuration : 8M x 32 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms1g62afr	1Gb	Configuration : 16M x 16 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms1g62mfp	1Gb	Configuration : 16M x 16 x 4 Banks - Hynix 1Gb Mobile DDR
	h5ms2g22mfr	2Gb	Configuration : 16M x 32 x 4 Banks - Hynix 2Gb Mobile DDR
	h5ms2g32mfr	2Gb	Configuration : 16M x 32 x 4 Banks - Hynix 2Gb Mobile DDR
	h5ms2g62mfr	2Gb	Configuration : 32M x 16 x 4 Banks - Hynix 2Gb Mobile DDR
Samsung			
	k4x56163pi	256Mb	Configuration : 4M x 16 x 4 Banks - Samsung 256Mb Mobile DDR
	k4x56323pi	256Mb	Configuration : 2M x 32 x 4 Banks - Samsung 256Mb Mobile DDR
	k4x51163pg	512Mb	Configuration : 8M x 16 x 4 Banks - Samsung 512Mb Mobile DDR
	k4x51323pg	512Mb	Configuration : 4M x 32 x 4 Banks - Samsung 512Mb Mobile DDR
	k4x1g163p	1Gb	Configuration : 16M x 16 x 4 Banks - Samsung 1Gb Mobile DDR
	k4x1g323p	1Gb	Configuration : 8M x 32 x 4 Banks - Samsung 1Gb Mobile DDR
Micron			
	mt46h2m32lf	64Mb	Configuration : 0.5M x 32 x 4 Banks - Micron 64Mb Mobile DDR
	mt46h4m16lf	64Mb	Configuration : 1M x 16 x 4 Banks - Micron 64Mb Mobile DDR
	mt46h4m32lf	128Mb	Configuration : 1M x 32 x 4 Banks - Micron 128Mb Mobile DDR
	mt46h8m16lf	128Mb	Configuration : 2M x 16 x 4 Banks - Micron 128Mb Mobile DDR
	mt46h16m16lf	256Mb	Configuration : 4M x 16 x 4 Banks - Micron 256Mb Mobile DDR
	mt46h8m32lf	256Mb	Configuration : 2M x 32 x 4 Banks - Micron 256Mb Mobile DDR
	mt46h8m32lg	256Mb	Configuration : 2M x 32 x 4 Banks - Micron 256Mb Mobile DDR
	mt46h16m32lf	512Mb	Configuration : 4M x 32 x 4 Banks - Micron 512Mb Mobile DDR
	mt46h16m32lg	512Mb	Configuration : 4M x 32 x 4 Banks - Micron 512Mb Mobile DDR
	mt46h32m16lf	512Mb	Configuration : 8M x 16 x 4 Banks - Micron 512Mb Mobile DDR
	mt46h32m32lf	1Gb	Configuration : 8M x 32 x 4 Banks - Micron 1Gb Mobile DDR
	mt46h32m32lg	1Gb	Configuration : 8M x 32 x 4 Banks - Micron 1Gb Mobile DDR
	mt46h64m16lf	1Gb	Configuration : 16M x 16 x 4 Banks - Micron 1Gb Mobile DDR
	mt46h128m16lf	2Gb	Configuration : 32M x 16 x 4 Banks - Micron 2Gb Mobile DDR
	mt46h64m32lf	2Gb	Configuration : 16M x 32 x 4 Banks - Micron 2Gb Mobile DDR
Winbond			
	w947d2hbjx	128Mb	Configuration : 1M x 32 x 4 Banks - Micron 128Mb Mobile DDR
	w947d6hbjx	128Mb	Configuration : 2M x 16 x 4 Banks - Micron 128Mb Mobile DDR
	w948d2hbjx	256Mb	Configuration : 2M x 32 x 4 Banks - Micron 256Mb Mobile DDR
	w948d6hbjx	256Mb	Configuration : 4M x 16 x 4 Banks - Micron 256Mb Mobile DDR
	w949d2hbjx	512Mb	Configuration : 4M x 32 x 4 Banks - Micron 512Mb Mobile DDR
	w949d6hbjx	512Mb	Configuration : 8M x 16 x 4 Banks - Micron 512Mb Mobile DDR

LPDDR2

Manufacturer	Model Name	Size	Configuration
Micron			
	mt42l32m32	1Gb	Configuration: 4M * 32 * 8 Banks - Micron 1Gb LPDDR2 S4 SDRAM
	mt42l32m64	2Gb	Configuration: 4M * 64 * 8 Banks - Micron 2Gb LPDDR2 S4 SDRAM
	mt42l64m16	1Gb	Configuration: 8M * 16 * 8 Banks - Micron 1Gb LPDDR2 S4 SDRAM
	mt42l64m32	2Gb	Configuration: 8M * 32 * 8 Banks - Micron 2Gb LPDDR2 S4 SDRAM
	mt42l64m64	4Gb	Configuration: 4M * 64 * 8 Banks - Micron 4Gb LPDDR2 S4 SDRAM
	mt42l128m16	2Gb	Configuration: 16M * 16 * 8 Banks - Micron 2Gb LPDDR2 S4 SDRAM
	mt42l128m32	4Gb	Configuration: 16M * 32 * 8 Banks - Micron 4Gb LPDDR2 S4 SDRAM
	mt42l1256m16	4Gb	Configuration: 32M * 16 * 8 Banks - Micron 4Gb LPDDR2 S4 SDRAM
Micron Multi-Die			
	mt42l64m32d1	2Gb	Die Config: 8M * 32 * 8 Banks - Model: Micron 2Gb 1 Channel - 1 Rank/Ch - 1 Die/Rank
	mt42l64m64d2	4Gb	Die Config: 8M * 32 * 8 Banks - Model: Micron 4Gb 2 Channel - 1 Rank/Ch - 1 Die/Rank
	mt42l128m16d1	2Gb	Die Config: 16M * 16 * 8 Banks - Model: Micron 2Gb 1 Channel - 1 Rank/Ch - 1 Die/Rank
	mt42l128m32d2	4Gb	Die Config: 8M * 32 * 8 Banks - Model: Micron 4Gb 1 Channel - 2 Rank/Ch - 1 Die/Rank
	mt42l128m64d4	8Gb	Die Config: 8M * 32 * 8 Banks - Model: Micron 8Gb 2 Channel - 2 Rank/Ch - 1 Die/Rank
	mt42l256m32d4	8Gb	Die Config: 16M * 16 * 8 Banks - Model: Micron 8Gb 1 Channel - 2 Rank/Ch - 2 Die/Rank
	mt42l128m32d1	4Gb	Die Config: 16M * 32 * 8 Banks - Model: Micron 4Gb 1 Channel - 1 Rank/Ch - 1 Die/Rank
	mt42l256m16d1	4Gb	Die Config: 32M * 16 * 8 Banks - Model: Micron 4Gb 1 Channel - 1 Rank/Ch - 1 Die/Rank
	mt42l256m32d2	8Gb	Die Config: 16M * 32 * 8 Banks - Model: Micron 8Gb 1 Channel - 2 Rank/Ch - 1 Die/Rank
	mt42l512m32d4	16Gb	Die Config: 32M * 16 * 8 Banks - Model: Micron 16Gb 2 Channel - 2 Rank/Ch - 2 Die/Rank
	mt42l128m64d2	8Gb	Die Config: 16M * 32 * 8 Banks - Model: Micron 8Gb 2 Channel - 1 Rank/Cha- 1 Die/Rank
	mt42l192m64d3	12Gb	Die Config: 16M * 32 * 8 Banks - Model: Micron 12Gb 2 Channel - 1/2 Rank/Ch - 1 Die/Rank
	mt42l256m64d4	16Gb	Die Config: 16M * 16 * 8 Banks - Model: Micron 16Gb 2 Channel - 2 Rank/Ch - 1 Die/Rank
Samsung			
	k4p51163	512Mb	Configuration : 8M x 16 x 4 Banks Samsung 512Mb LPDDR2 S4 SDRAM
	k4p51323	512Mb	Configuration : 4M x 32 x 4 Banks Samsung 512Mb LPDDR2 S4 SDRAM
	k4p1g164	1Gb	Configuration : 8M x 16 x 8 Banks Samsung 1Gb LPDDR2 S4 SDRAM
	k4p1g324	1Gb	Configuration : 4M x 32 x 8 Banks Samsung 1Gb LPDDR2 S4 SDRAM
	k4q1g163	1Gb	Configuration : 16M x 16 x 4 Banks Samsung 1Gb LPDDR2 S2 SDRAM
	k4q1g323	1Gb	Configuration : 8M x 32 x 4 Banks Samsung 1Gb LPDDR2 S2 SDRAM
	k4p2g164	2Gb	Configuration : 16M x 16 x 8 Banks Samsung 2Gb LPDDR2 S4 SDRAM
	k4p2g324	2Gb	Configuration : 8M x 32 x 8 Banks Samsung 2Gb LPDDR2 S4 SDRAM
	k4p4g164	4Gb	Configuration : 32M x 16 x 8 Banks Samsung 4Gb LPDDR2 S4 SDRAM
	k4p4g324	4Gb	Configuration : 16M x 32 x 8 Banks Samsung 4Gb LPDDR2 S4 SDRAM
Jedec			
	jedec_1gb_64	1Gb	Configuration: 2M * 64 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_4gb_8	4Gb	Configuration: 64M * 8 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_4gb_16	4Gb	Configuration: 32M * 16 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_4gb_32	4Gb	Configuration: 16M * 32 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_8gb_16	8Gb	Configuration: 64M * 16 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_8gb_32	8Gb	Configuration: 32M * 32 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
	jedec_8gb_64	8Gb	Configuration: 16M * 64 * 8 Banks - Generic JEDEC LPDDR2 S4 SDRAM
Elpida			
	ecb440abacn_16	4Gb	Configuration: 32M * 16 * 8 Banks - Elpida 4Gb LPDDR2 S4 SDRAM
	ecb440abacn_32	4Gb	Configuration: 16M * 32 * 8 Banks - Elpida 4Gb LPDDR2 S4 SDRAM

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LPDDR3

Manufacturer	Model Name	Size	Configuration
Jedec			
	jedec_lpddr3_2gb_32	2Gb	Configuration: 8M * 32 * 8 Banks - JEDEC 2Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_4gb_16	4Gb	Configuration: 32M * 16 * 8 Banks - JEDEC 4Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_4gb_32	4Gb	Configuration: 16M * 32 * 8 Banks - JEDEC 4Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_8gb_16	8Gb	Configuration: 64M * 16 * 8 Banks - JEDEC 8Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_8gb_32	8Gb	Configuration: 32M * 32 * 8 Banks - JEDEC 8Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_16gb_16	16Gb	Configuration: 128M * 16 * 8 Banks - JEDEC 16Gb LPDDR3 S8 SDRAM
	jedec_lpddr3_16gb_32	16Gb	Configuration: 64M * 32 * 8 Banks - JEDEC 16Gb LPDDR3 S8 SDRAM
Micron			
	mt52l128m32	4Gb	Configuration: 16M * 32 * 8 Banks - Micron 4Gb LPDDR3 S8 SDRAM
	mt52l256m16	4Gb	Configuration: 32M * 16 * 8 Banks - Micron 4Gb LPDDR3 S8 SDRAM
Micron Multi-Die			
	mt52l128m32d1	4Gb	Config: 16M * 32 * 8 Banks - Micron 8Gb LPDDR3 S8 SDRAM - 1 Ch - 1 Ranks/Ch - 1 Die/Rank
	mt52l256m16d1	4Gb	Config: 32M * 16 * 8 Banks - Micron 4Gb LPDDR3 S8 SDRAM - 1 Ch - 1 Ranks/Ch - 1 Die/Rank
	mt52l256m32d2	8Gb	Config: 32M * 32 * 8 Banks - Micron 8Gb LPDDR3 S8 SDRAM - 1 Ch - 2 Ranks/Ch - 1 Die/Rank
	mt52l384m32d3	12Gb	Config: 48M * 32 * 8 Banks - Micron 12Gb LPDDR3 S8 SDRAM - 1 Ch - 2 Ranks/Ch - 1/2 Die/Rank
	mt52l512m32d4	16Gb	Config: 64M * 32 * 8 Banks - Micron 16Gb LPDDR3 S8 SDRAM - 1 Ch - 2 Ranks/Ch - 2 Die/Rank
	mt52l128m64d2	8Gb	Config: 16M * 64 * 8 Banks - Micron 8Gb LPDDR3 S8 SDRAM - 2 Ch - 1 Ranks/Ch - 1 Die/Rank
	mt52l256m64d4	16Gb	Config: 32M * 64 * 8 Banks - Micron 16Gb LPDDR3 S8 SDRAM - 2 Ch - 2 Ranks/Ch - 1 Die/Rank
	edf8132a1	8Gb	Configuration: 16M x 32 x 8 banks - Micron 8Gb S8 - 1 Ch - 2 Ranks/Ch - 1 Die/Rank
	edfa164a1	16Gb	Configuration: 16M x 32 x 8 banks - Micron 16Gb S8 - 2 Ch - 2 Ranks/Ch - 1 Die/Rank
	edfa232a1	16Gb	Configuration: 32M x 16 x 8 banks - Micron 16Gb S8 - 1 Ch - 2 Ranks/Ch - 2 Die/Rank

LPDDR4

Manufacturer	Model Name	Size	Configuration
Samsung	**Rev 0.4 Spec**		
	samsunglpddr4_4Gb	4Gb	Configuration: 16M * 16 * 8 Banks * 2 Ch - Samsung 4Gb LPDDR4
	samsunglpddr4_6Gb	6Gb	Configuration: 24M * 16 * 8 Banks * 2 Ch - Samsung 6Gb LPDDR4
	samsunglpddr4_8Gb	8Gb	Configuration: 32M * 16 * 8 Banks * 2 Ch - Samsung 8Gb LPDDR4
	samsunglpddr4_12Gb	12Gb	Configuration: 48M * 16 * 8 Banks * 2 Ch - Samsung 12Gb LPDDR4
	samsunglpddr4_16Gb	16Gb	Configuration: 64M * 16 * 8 Banks * 2 Ch - Samsung 16Gb LPDDR4
	samsunglpddr4_24Gb	24Gb	Configuration: 96M * 16 * 8 Banks * 2 Ch - Samsung 24Gb LPDDR4
	samsunglpddr4_32Gb	32Gb	Configuration: 128M * 16 * 8 Banks * 2 Ch - Samsung 32Gb LPDDR4
SKHynix	**Rev 0.8 Spec**		
	sklpddr4_4ch_16Gb	4Gb	Configuration: 32M * 16 * 8 Banks * 4 Ch - SK Hynix 16Gb LPDDR4
JEDEC	**JESD209-4B Rev February 2017 Spec**		
	jedec_lpddr4_4Gb	4Gb	Configuration: 16M * 16 * 8 Banks * 2 Ch - JEDEC 4Gb LPDDR4
	jedec_lpddr4_6Gb	6Gb	Configuration: 24M * 16 * 8 Banks * 2 Ch - JEDEC 6Gb LPDDR4
	jedec_lpddr4_8Gb	8Gb	Configuration: 32M * 16 * 8 Banks * 2 Ch - JEDEC 8Gb LPDDR4
	jedec_lpddr4_12Gb	12Gb	Configuration: 48M * 16 * 8 Banks * 2 Ch - JEDEC 12Gb LPDDR4
	jedec_lpddr4_16Gb	16Gb	Configuration: 64M * 16 * 8 Banks * 2 Ch - JEDEC 16Gb LPDDR4
	jedec_lpddr4_24Gb	24Gb	Configuration: 96M * 16 * 8 Banks * 2 Ch - JEDEC 24Gb LPDDR4
	jedec_lpddr4_32Gb	32Gb	Configuration: 128M * 16 * 8 Banks * 2 Ch - JEDEC 32Gb LPDDR4
	jedec_lpddr4_single_ch_2Gb	2Gb	Configuration: 16M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 2Gb LPDDR4
	jedec_lpddr4_single_ch_3Gb	3Gb	Configuration: 24M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 3Gb LPDDR4
	jedec_lpddr4_single_ch_4Gb	4Gb	Configuration: 32M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 4Gb LPDDR4
	jedec_lpddr4_single_ch_6Gb	6Gb	Configuration: 48M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 6Gb LPDDR4
	jedec_lpddr4_single_ch_8Gb	8Gb	Configuration: 64M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 8Gb LPDDR4
Micron			
	mt53b128m32	4Gb	Configuration: 16Mb * 16 * 8 Banks * 2 Ch * 1 Rank - Micron 4Gb LPDDR4
	mt53b256m32d1	8Gb	Configuration: 32Mb * 16 * 8 Banks * 2 Ch * 1 Rank – Micron 8Gb LPDDR4
	mt53b384m32d2	12Gb	Configuration: 48Mb * 16 * 8 Banks * 2 Ch – Micron 12Gb 2Dies LPDDR4
	mt53b768m32d4	24Gb	Configuration: 96Mb * 16 * 8 Banks * 2 Ch – Micron 24Gb 4Dies LPDDR4
	mt53b512m32d2	16Gb	Configuration: 32Mb * 16 * 8 Banks * 2 Ch * 2 Ranks – Micron 16Gb 2Dies LPDDR4
	mt53b256m64d2	16Gb	Configuration: 32Mb * 16 * 8 Banks * 4 Ch * 1 Rank – Micron 16Gb 2Dies LPDDR4
	mt53b384m64d4	24Gb	Configuration: 48Mb * 16 * 8 Banks * 4 Ch – Micron 24Gb 4Dies LPDDR4
	mt53b512m64d4	32Gb	Configuration: 64Mb * 16 * 8 Banks * 4 Ch – Micron 32Gb 4Dies LPDDR4
	mt53b768m64d8	48Gb	Configuration: 48Mb * 16 * 8 Banks * 4 Ch * 2 Ranks – Micron 48Gb 8Dies LPDDR4
	mt53b1024m64d8	64Gb	Configuration: 64Mb * 16 * 8 Banks * 4 Ch * 2 Ranks – Micron 64Gb 8Dies LPDDR4

LPDDR4X

Manufacturer	Model Name	Size	Configuration
JEDEC	**JEDEC LPDDR4X draft Spec Addendum (August 2016)**		
	jedec_lpddr4x_4Gb	4Gb	Configuration: 16M * 16 * 8 Banks * 2 Ch - JEDEC 4Gb LPDDR4X
	jedec_lpddr4x_6Gb	6Gb	Configuration: 24M * 16 * 8 Banks * 2 Ch - JEDEC 6Gb LPDDR4X
	jedec_lpddr4x_8Gb	8Gb	Configuration: 32M * 16 * 8 Banks * 2 Ch - JEDEC 8Gb LPDDR4X
	jedec_lpddr4x_12Gb	12Gb	Configuration: 48M * 16 * 8 Banks * 2 Ch - JEDEC 12Gb LPDDR4X
	jedec_lpddr4x_16Gb	16Gb	Configuration: 64M * 16 * 8 Banks * 2 Ch - JEDEC 16Gb LPDDR4X
	jedec_lpddr4x_24Gb	24Gb	Configuration: 96M * 16 * 8 Banks * 2 Ch - JEDEC 24Gb LPDDR4X
	jedec_lpddr4x_32Gb	32Gb	Configuration: 128M * 16 * 8 Banks * 2 Ch - JEDEC 32Gb LPDDR4x
	jedec_lpddr4x_single_ch_2Gb	2Gb	Configuration: 16M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 2Gb LPDDR4X
	jedec_lpddr4x_single_ch_3Gb	3Gb	Configuration: 24M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 3Gb LPDDR4X
	jedec_lpddr4x_single_ch_4Gb	4Gb	Configuration: 32M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 4Gb LPDDR4X
	jedec_lpddr4x_single_ch_6Gb	6Gb	Configuration: 48M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 6Gb LPDDR4X
	jedec_lpddr4x_single_ch_8Gb	8Gb	Configuration: 64M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 8Gb LPDDR4X
Micron			
	mt53d512m64d8	32Gb	Configuration: 32Mb * 16 * 8 Banks * 4 Ch * 2 Ranks – Micron 32Gb 8Dies LPDDR4X
	mt53d768m64d8	48Gb	Configuration: 48Mb * 16 * 8 Banks * 4 Ch * 2 Ranks – Micron 48Gb 8Dies LPDDR4X
	mt53d512m64d4	32Gb	Configuration: 64Mb * 16 * 8 Banks * 4 Ch – Micron 32Gb 4Dies LPDDR4X
	mt53d1024m64d8	64Gb	Configuration: 64Mb * 16 * 8 Banks * 4 Ch * 2 Ranks – Micron 64Gb 8Dies LPDDR4X

LPDDR4 x8

Manufacturer	Model Name	Size	Configuration
JEDEC	**JEDEC LPDDR4 draft Byte Mode Spec Addendum (August 2015)**		
	jedec_lpddr4_x8_4Gb	4Gb	Configuration: 32M * 8 * 8 Banks * 2 Ch - JEDEC 4Gb LPDDR4_x8
	jedec_lpddr4_x8_6Gb	6Gb	Configuration: 48M * 8 * 8 Banks * 2 Ch - JEDEC 6Gb LPDDR4_x8
	jedec_lpddr4_x8_8Gb	8Gb	Configuration: 64M * 8 * 8 Banks * 2 Ch - JEDEC 8Gb LPDDR4_x8
	jedec_lpddr4_x8_12Gb	12Gb	Configuration: 96M * 8 * 8 Banks * 2 Ch - JEDEC 12Gb LPDDR4_x8
	jedec_lpddr4_x8_16Gb	16Gb	Configuration: 128M * 8 * 8 Banks * 2 Ch - JEDEC 16Gb LPDDR4_x8
	jedec_lpddr4_x8_single_ch_2Gb	2Gb	Configuration: 32M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 2Gb LPDDR4_x8
	jedec_lpddr4_x8_single_ch_3Gb	3Gb	Configuration: 48M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 3Gb LPDDR4_x8
	jedec_lpddr4_x8_single_ch_4Gb	4Gb	Configuration: 64M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 4Gb LPDDR4_x8
	jedec_lpddr4_x8_single_ch_6Gb	6Gb	Configuration: 96M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 6Gb LPDDR4_x8
	jedec_lpddr4_x8_single_ch_8Gb	8Gb	Configuration: 128M * 16 * 8 Banks * 1 Ch - JEDEC Single Channel 8Gb LPDDR4_x8
Micron			
	mt53b1024m32d4	32Gb	Configuration: 64Mb * 8 * 8 Banks * 2 Ch * 2 Ranks * 2 – Micron 32Gb 4Dies LPDDR4_x8

LPDDR5

Manufacturer	Model Name	Size	Configuration
JEDEC	20170821_Samsung LPDDR5 Specification Draft R09 r2 (August 2017)		
	*LPDDR5 model configuration can be changed by mode register MR3 OP[4:3]. Default configuration for LPDDR5 model is 4BG4B with MR3[4:3]=2'b00. By setting MR3[4:3]=2'b01, LPDDR5 model is configured as 8 bank. By setting MR3[4:3]=2'b10, LPDDR5 model is configured as 16 bank.		
BETA MMP_PLUS	*jedec_lpddr5_2Gb*	*2Gb*	*Configuration: 8Mb * 16 * 4 Banks * 4 BG - JEDEC 2Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_3Gb*	*3Gb*	*Configuration: 12Mb * 16 * 4 Banks * 4 BG - JEDEC 3Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_4Gb*	*4Gb*	*Configuration: 16Mb * 16 * 4 Banks * 4 BG - JEDEC 4Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_6Gb*	*6Gb*	*Configuration: 24Mb * 16 * 4 Banks * 4 BG - JEDEC 6Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_8Gb*	*8Gb*	*Configuration: 32Mb * 16 * 4 Banks * 4 BG - JEDEC 8Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_12Gb*	*12Gb*	*Configuration: 48Mb * 16 * 4 Banks * 4 BG - JEDEC 12Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_16Gb*	*16Gb*	*Configuration: 64Mb * 16 * 4 Banks * 4 BG - JEDEC 16Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_24Gb*	*24Gb*	*Configuration: 96Mb * 16 * 4 Banks * 4 BG - JEDEC 24Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_32Gb*	*32Gb*	*Configuration: 128Mb * 16 * 4 Banks * 4 BG - JEDEC 32Gb LPDDR5*

LPDDR5 x8

Manufacturer	Model Name	Size	Configuration
JEDEC	20170821_Samsung LPDDR5 Specification Draft R09 r2 (August 2017)		
BETA MMP_PLUS	*jedec_lpddr5_x8_2Gb*	*2Gb*	*Configuration: 16Mb * 8 * 4 Banks * 4 BG - JEDEC 2Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_3Gb*	*3Gb*	*Configuration: 24Mb * 8 * 4 Banks * 4 BG - JEDEC 3Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_4Gb*	*4Gb*	*Configuration: 32Mb * 8 * 4 Banks * 4 BG - JEDEC 4Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_6Gb*	*6Gb*	*Configuration: 48Mb * 8 * 4 Banks * 4 BG - JEDEC 6Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_8Gb*	*8Gb*	*Configuration: 64Mb * 8 * 4 Banks * 4 BG - JEDEC 8Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_12Gb*	*12Gb*	*Configuration: 96Mb * 8* 4 Banks * 4 BG - JEDEC 12Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_16Gb*	*16Gb*	*Configuration: 128Mb * 8* 4 Banks * 4 BG - JEDEC 16Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_24Gb*	*24Gb*	*Configuration: 192Mb * 8 * 4 Banks * 4 BG - JEDEC 24Gb LPDDR5*
BETA MMP_PLUS	*jedec_lpddr5_x8_32Gb*	*32Gb*	*Configuration: 256Mb * 8* 4 Banks * 4 BG - JEDEC 32Gb LPDDR5*

RLDRAM2

Manufacturer	Model Name	Size	Configuration
Micron			
	mt49h8m36	288Mb	Configuration: 1M * 36 * 8 banks - Micron 288Mb CIO RLDRAM2
	mt49h16m18	288Mb	Configuration: 2M * 18 * 8 banks - Micron 288Mb CIO RLDRAM2
	mt49h16m18c	288Mb	Configuration: 2M * 18 * 8 banks - Micron 288Mb SIO RLDRAM2
	mt49h32m9	288Mb	Configuration: 4M * 9 * 8 banks - Micron 288Mb CIO RLDRAM2
	mt49h16m36	576Mb	Configuration: 2M * 36 * 8 banks - Micron 576Mb CIO RLDRAM2
	mt49h32m18	576Mb	Configuration: 4M * 18 * 8 banks - Micron 576Mb CIO RLDRAM2
	mt49h32m18c	576Mb	Configuration: 4M * 18 * 8 banks - Micron 576Mb SIO RLDRAM2
	mt49h64m9	576Mb	Configuration: 8M * 9 * 8 banks - Micron 576Mb CIO RLDRAM2
	mt49h64m9c	576Mb	Configuration: 8M * 9 * 8 banks - Micron 576Mb SIO RLDRAM2

RLDRAM3

Manufacturer	Model Name	Size	Configuration
Micron			
BETA	*mt6l16m36*	*576Mb*	*Configuration: 1M * 36 * 16 banks - Micron 576Mb RLDRAM3*
BETA	*mt6l32m18*	*576Mb*	*Configuration: 2M * 18 * 16 banks - Micron 576Mb RLDRAM3*

FCRAM

Manufacturer	Model Name	Size	Configuration
Fujitsu			
	BETA	*512Mb*	*Configuration: 2M * 64 * 2 banks - Fujitsu 512Mb FCRAM*

GDDR5M

Manufacturer	Model Name	Size	Configuration
JEDEC			
	gddr5m_jedec_2gb_8	2Gb	Configuration: 32M * 8 * 8 banks - JEDEC 2Gb GDDR5M SGRAM
	gddr5m_jedec_2gb_16	2Gb	Configuration: 16M * 16 * 8 banks - JEDEC 2Gb GDDR5M SGRAM
	gddr5m_jedec_4gb_8	4Gb	Configuration: 64M * 8 * 8 banks - JEDEC 4Gb GDDR5M SGRAM
	gddr5m_jedec_4gb_16	4Gb	Configuration: 32M * 16 * 8 banks - JEDEC 4Gb GDDR5M SGRAM
	gddr5m_jedec_8gb_8	8Gb	Configuration: 64M * 8 * 16 banks - JEDEC 8Gb GDDR5M SGRAM
	gddr5m_jedec_8gb_16	8Gb	Configuration: 32M * 16 * 16 banks - JEDEC 8Gb GDDR5M SGRAM
	gddr5m_jedec_16gb_8	16Gb	Configuration: 128M * 8 * 16 banks - JEDEC 16Gb GDDR5M SGRAM
	gddr5m_jedec_16gb_16	16Gb	Configuration: 64M * 16 * 16 banks - JEDEC 16Gb GDDR5M SGRAM

GDDR5X

Manufacturer	Model Name	Size	Configuration
JEDEC			
	gddr5x_jedec_4gb_16	4Gb	Configuration: 16Mb * 16 * 16 banks - 4Gb GDDR5X SGRAM
	gddr5x_jedec_4gb_32	4Gb	Configuration: 8Mb * 32 * 16 banks - 4Gb GDDR5X SGRAM
	gddr5x_jedec_6gb_16	6Gb	Configuration: 24Mb * 16 * 16 banks - 6Gb GDDR5X SGRAM
	gddr5x_jedec_6gb_32	6Gb	Configuration: 12Mb * 32 * 16 banks - 6Gb GDDR5X SGRAM
	gddr5x_jedec_8gb_16	8Gb	Configuration: 32Mb * 16 * 16 banks - 8Gb GDDR5X SGRAM
	gddr5x_jedec_8gb_32	8Gb	Configuration: 16Mb * 32 * 16 banks - 8Gb GDDR5X SGRAM
	gddr5x_jedec_12gb_16	12Gb	Configuration: 48Mb * 16 * 16 banks - 12Gb GDDR5X SGRAM
	gddr5x_jedec_12gb_32	12Gb	Configuration: 24Mb * 32 * 16 banks - 12Gb GDDR5X SGRAM
	gddr5x_jedec_16gb_16	16Gb	Configuration: 64Mb * 16 * 16 banks - 16Gb GDDR5X SGRAM
	gddr5x_jedec_16gb_32	16Gb	Configuration: 32Mb * 32 * 16 banks - 16Gb GDDR5X SGRAM

GDDR6 SGRAM

Manufacturer	Model Name	Size	Configuration
JEDEC			
	jedec_gddr6_8gb_8	8Gb	Configuration: 32M * 8 * 16 banks * 2 channels - 8Gb GDDR6 SGRAM
	jedec_gddr6_8gb_16	8Gb	Configuration: 16M * 16 * 16 banks * 2 channels - 8Gb GDDR6 SGRAM
	jedec_gddr6_12gb_8	12Gb	Configuration: 48M * 8 * 16 banks * 2 channels - 12Gb GDDR6 SGRAM
	jedec_gddr6_12gb_16	12Gb	Configuration: 24M * 16 * 16 banks * 2 channels - 12Gb GDDR6 SGRAM
	jedec_gddr6_16gb_8	16Gb	Configuration: 64M * 8 * 16 banks * 2 channels - 16Gb GDDR6 SGRAM
	jedec_gddr6_16gb_16	16Gb	Configuration: 32M * 16 * 16 banks * 2 channels - 16Gb GDDR6 SGRAM

HBM

Manufacturer	Model Name	Size	Configuration
Generic	**High Bandwidth Memory (HBM) DRAM JESD235B Specification Rev 2.10**		
	hbm_channel	xGb	Configure size in top level module as below:
	1Gb in Legacy Mode	1Gb	Configuration: RA[12:0], CA[5:0], BA[2:0]
	2Gb in Legacy Mode	2Gb	Configuration: RA[13:0], CA[5:0], BA[2:0]
	4Gb in Legacy Mode	4Gb	Configuration: RA[13:0], CA[5:0], BA[3:0]
	2Gb in Pseudo Channel Mode	2Gb	Configuration: RA[13:0], CA[5:0], BA[2:0]
	4Gb in Pseudo Channel Mode	4Gb	Configuration: RA[13:0], CA[5:0], BA[3:0]
	8Gb in Pseudo Channel Mode	8Gb	Configuration: RA[14:0], CA[5:0], BA[3:0]
	8Gb in 8-High Mode	8Gb	Configuration: RA[13:0], CA[5:0], {SID,BA[3:0]}

HMC

Manufacturer	Model Name	Size	Configuration
Generic	**Hybrid Memory Cube Specification Revision 2.1**		
	hmc_top	*xGB*	*Supports up to 8 cubes. Configure size in top level module. Examples:*
BETA MMP_PLUS		*4GB*	*4GB (32/64/128/256 byte max block size)*
BETA MMP_PLUS		*8GB*	*8GB (32/64/128/256 byte max block size)*

WIDEIO

Manufacturer	Model Name	Size	Configuration
JEDEC			
	jedec_wideio_1gb_128bit_4ch_1rank	1Gb	Configuration: 256Mb x 4 channels(512K x 128 x 4 banks) WIDEIO
	jedec_wideio_2gb_128bit_4ch_1rank	2Gb	Configuration: 512Mb x 4 channels(1M x 128 x 4 banks) WIDEIO
	jedec_wideio_4gb_128bit_4ch_1rank	4Gb	Configuration: 1Gb x 4 channels(2M x 128 x 4 banks) WIDEIO
	jedec_wideio_8gb_128bit_4ch_1rank	8Gb	Configuration: 2Gb x 4 channels(4M x 128 x 4 banks) WIDEIO

WIDEIO2

Manufacturer	Model Name	Size	Configuration
Intel			
BETA	***intelwio2_8Gb_1h_4ch_4x64die***	***8Gb***	***Configuration: 4M * 64 * 8 Banks * 4 Ch***
BETA	***intelwio2_8Gb_1h_8ch_8x64die***	***8Gb***	***Configuration: 4M * 64 * 4 Banks * 8 Ch***
BETA	***intelwio2_12Gb_1h_4ch_4x64die***	***12Gb***	***Configuration: 6M * 64 * 8 Banks * 4 Ch***
BETA	***intelwio2_12Gb_1h_8ch_8x64die***	***12Gb***	***Configuration: 6M * 64 * 4 Banks * 8 Ch***
BETA	***intelwio2_16Gb_1h_4ch_4x64die***	***16Gb***	***Configuration: 8M * 64 * 8 Banks * 4 Ch***
BETA	***intelwio2_16Gb_1h_8ch_8x64die***	***16Gb***	***Configuration: 8M * 64 * 4 Banks * 8 Ch***
BETA	***intelwio2_24Gb_1h_4ch_4x64die***	***24Gb***	***Configuration: 12M * 64 * 8 Banks * 4 Ch***
BETA	***intelwio2_24Gb_1h_8ch_8x64die***	***24Gb***	***Configuration: 12M * 64 * 4 Banks * 8 Ch***
BETA	***intelwio2_32Gb_1h_4ch_4x64die***	***32Gb***	***Configuration: 16M * 64 * 8 Banks * 4 Ch***
BETA	***intelwio2_32Gb_1h_8ch_8x64die***	***32Gb***	***Configuration: 16M * 64 * 4 Banks * 8 Ch***

Manufacturer	Model Name	Size	Configuration
JEDEC	**JEDEC Standard JESD229-2**		
BETA	***jedec_wio2_8Gb_1h_4ch_4x64die***	***8Gb***	***Configuration: 4M * 64 * 8 Banks * 4 Ch***
BETA	***jedec_wio2_8Gb_1h_8ch_8x64die***	***8Gb***	***Configuration: 4M * 64 * 4 Banks * 8 Ch***
BETA	***jedec_wio2_12Gb_1h_4ch_4x64die***	***12Gb***	***Configuration: 6M * 64 * 8 Banks * 4 Ch***
BETA	***jedec_wio2_12Gb_1h_8ch_8x64die***	***12Gb***	***Configuration: 6M * 64 * 4 Banks * 8 Ch***
BETA	***jedec_wio2_16Gb_1h_4ch_4x64die***	***16Gb***	***Configuration: 8M * 64 * 8 Banks * 4 Ch***
BETA	***jedec_wio2_16Gb_1h_8ch_8x64die***	***16Gb***	***Configuration: 8M * 64 * 4 Banks * 8 Ch***
BETA	***jedec_wio2_24Gb_1h_4ch_4x64die***	***24Gb***	***Configuration: 12M * 64 * 8 Banks * 4 Ch***
BETA	***jedec_wio2_24Gb_1h_8ch_8x64die***	***24Gb***	***Configuration: 12M * 64 * 4 Banks * 8 Ch***
BETA	***jedec_wio2_32Gb_1h_4ch_4x64die***	***32Gb***	***Configuration: 16M * 64 * 8 Banks * 4 Ch***
BETA	***jedec_wio2_32Gb_1h_8ch_8x64die***	***32Gb***	***Configuration: 16M * 64 * 4 Banks * 8 Ch***

DFI

Manufacturer	Model Name	Size	Configuration
DFI 4.0			
			DFI 4.0 PHY - Supports: DDR, DDR2, DDR3, DDR4, LPDDR (Mobile DDR), LPDDR2, LPDDR3, LPDDR4 Supports: Freq Ratio 1:1, 1:2 and 1:4 Does not support: Training interfaces, PHY initiated update, parity interface
	dfiphy_pd	Core Model	
		Core Model Configurable With Below Wrappers:	
	dfiphy_ddr	DDR	DFI PHY wrapper for use with DDR
	dfiphy_ddr2	DDR2	DFI PHY wrapper for use with DDR2
	dfiphy_ddr3	DDR3	DFI PHY wrapper for use with DDR3
	dfiphy_ddr4	DDR4	DFI PHY wrapper for use with DDR4
	dfiphy_lpddr	LPDDR	DFI PHY wrapper for use with LPDDR (Mobile DDR)
	dfiphy_lpddr2	LPDDR2	DFI PHY wrapper for use with LPDDR2
	dfiphy_lpddr3	LPDDR3	DFI PHY wrapper for use with LPDDR3
	dfiphy_lpddr4	LPDDR4	DFI PHY wrapper for use with LPDDR4

Cellular RAM

Manufacturer	Model Name		Size	Configuration
Numonyx MCP Parts with only Cellular RAM implemented				
	pf38f3040m0y0qe		32Mb	Configuration: 2M * 16 PSRAM
	pf38f3040m0y3de		32Mb	Configuration: 2M * 16 PSRAM
	pf38f3050m0y3de		64Mb	Configuration: 4M * 16 PSRAM
	pf38f4050m0y3ce		64Mb	Configuration: 4M * 16 PSRAM
	pf38f5060m0y3ce		128Mb	Configuration: 8M * 16 PSRAM
	pf38f5060m0y3de		128Mb	Configuration: 8M * 16 PSRAM
	pf38f5070m0y3de		256Mb	Configuration: 16M * 16 PSRAM
	pf38f6070m0y1ce		256Mb	Configuration: 16M * 16 PSRAM
Micron				
	mt45w4mw16		64Mb	Configuration: 4M * 16 CellularRAM
	mt45w8mw16		128Mb	Configuration: 8M * 16 CellularRAM
AP Memory				
	aps3216h		32Mb	Configuration: 2M * 16 ADMUX PSRAM
	aps6416f		64Mb	Configuration: 4M * 16 ADMUX PSRAM
	aps12816g		128Mb	Configuration: 8M * 16 ADMUX PSRAM
	aps25616g		256Mb	Configuration: 16M * 16 ADMUX PSRAM
	aps1608k	*	16Mb	Configuration: 2M * 8 OPIDDR PSRAM
	aps3208k	*	32Mb	Configuration: 4M * 8 OPIDDR PSRAM
	aps6408k	*	64Mb	Configuration: 8M * 8 OPIDDR PSRAM
	aps12808k	*	128Mb	Configuration: 16M * 8 OPIDDR PSRAM
BETA	aps1608l	*	16Mb	Configuration: 2M * 8 DDR Octal SPI PSRAM
BETA	aps3208l	*	32Mb	Configuration: 4M * 8 DDR Octal SPI PSRAM
BETA	aps6408l	*	64Mb	Configuration: 8M * 8 DDR Octal SPI PSRAM
BETA	aps12808l	*	128Mb	Configuration: 16M * 8 DDR Octal SPI PSRAM
BETA	aps25608l	*	256Mb	Configuration: 32M * 8 DDR Octal SPI PSRAM
Winbond				
	w955d8mky		32Mb	Configuration: 1k x 4096 PSRAM
JSC				
	jsc64ssp8agdy		64Mb	Configuration: 8K x 1k x 8bits OctaRAM
	jsc64ssu8agdy		64Mb	Configuration: 8K x 1k x 8bits OctaRAM
	jsc28ssp8agdy		128Mb	Configuration: 16K x 1k x 8bits OctaRAM
	jsc28ssu8agdy		128Mb	Configuration: 16K x 1k x 8bits OctaRAM

*Please contact Cadence emulation support team or MMP product team to arrange for use of these models.
These models are not in the MMP release as they require additional permission.

UTRAM

Manufacturer	Model Name	Size	Configuration
Samsung			
	k1b1616b2b	16Mb	Configuration: 1M * 16 UtRAM (Async/Burst)
	k1b3216bdd	32Mb	Configuration: 2M * 16 UtRAM (Async/Burst)
	k1b6416b6c	64Mb	Configuration: 4M * 16 UtRAM (Async/Burst)
	k1b2816b2a	128Mb	Configuration: 8M * 16 UtRAM (Async/Burst)
	k1b5616b2m	256Mb	Configuration: 16M * 16 UtRAM (Async/Burst)

UTRAM2 **Release Version** **1.2**

Manufacturer	Model Name	Size	Configuration
Samsung			
	k1c3216bff	32Mb	Configuration: 2M * 16 UtRAM (Async/Burst)
	k1c3216bkf	32Mb	Configuration: 2M * 16 UtRAM (Async/Burst)
	k1c6416bff	64Mb	Configuration: 4M * 16 UtRAM (Async/Burst)
	k1c6416bkf	64Mb	Configuration: 4M * 16 UtRAM (Async/Burst)
	k1c2816bfc	128Mb	Configuration: 8M * 16 UtRAM (Async/Burst)
	k1c2816bkc	128Mb	Configuration: 8M * 16 UtRAM (Async/Burst)
	k1c5616bkb	256Mb	Configuration: 16M * 16 UtRAM (Async/Burst)

OneNAND

Manufacturer	Model Name	Size	Configuration
Samsung			
	kfm1216q2m	512Mb	Configuration: 256 + 8 words/sector; 4 sectors/page; 64 pages/block; 512 blocks SLC
	kfm1g16q2m	1Gb	Configuration: 256 + 8 words/sector; 4 sectors/page; 64 pages/block; 1k blocks SLC
	kfm2g16q2m	2Gb	Configuration: 256 + 8 words/sector; 4 sectors/page; 64 pages/block; 2k blocks SLC
	kfm4g16q4m	2Gb	Configuration: 256 + 8 words/sector; 8 sectors/page; 64 pages/block; 2k blocks SLC
	kfm8g16q5m	2Gb	Configuration: 256 + 8 words/sector; 8 sectors/page; 64 pages/block; 4k blocks SLC
Toshiba			
	tc58rym9s8e	512Mb	Configuration: 256 + 8 words/sector; 4 sectors/page; 64 pages/block; 512 blocks SLC

NAND Flash

Manufacturer	Model Name	Size	Configuration
Numonyx		**1.4**	
	nand04gw3f2e	4Gb	Configuration:4Gx8 NAND Flash Die: 1 Page Size: 4096 bytes Spare Size: 128 bytes Blocks/Die: 2048 Pages/Block: 64
	nand04gw4f2e	4Gb	Configuration:4Gx16 NAND Flash Die: 1 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 2048 Pages/Block: 64
	nand08gw3f2e	8Gb	Configuration:8Gx8 NAND Flash Die: 2 Page Size: 4096 bytes Spare Size: 128 bytes Blocks/Die: 2048 Pages/Block: 64
	nand08gw4f2e	8Gb	Configuration:8Gx16 NAND Flash Die: 2 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 2048 Pages/Block: 64
Micron		**2.0**	
	mt29f1g08a	1Gb	Configuration: 1Gb (x8) NAND Flash Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 1024 Pages/Block: 64
	mt29f1g16a	1Gb	Configuration: 1Gb (x16) NAND Flash Die: 1 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 1024 Pages/Block: 64
	mt29f2g08a	2Gb	Configuration: 2Gb (x8) NAND Flash Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 2048 Pages/Block: 64
	mt29f2g16a	2Gb	Configuration: 2Gb (x16) NAND FlashDie: 1 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 2048 Pages/Block: 64
	mt29f4g08b	4Gb	Configuration: 4Gb (x8) NAND Flash Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 4096 Pages/Block: 64
	mt29f4g16b	4Gb	Configuration: 4Gb (x16) NAND Flash Die: 1 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 4096 Pages/Block: 64
	mt29f8g08f	8Gb	Configuration: 8Gb (x8) NAND Flash Die: 2 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 4096 Pages/Block: 64
	mt29f8g16f	8Gb	Configuration: 8Gb (x16) NAND Flash Die: 2 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 4096 Pages/Block: 64
Toshiba		**1.4**	
	tc58nvg1s3b	2Gb	Configuration: 2Gb - 2112 bytes per page - 8bit interface Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 2048 Pages/Block: 64
	tc58nvg1s4b	2Gb	Configuration: 2Gb - 1056 words per page - 16bit interface Die: 1 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 2048 Pages/Block: 64
Samsung			
	k9f1208r0b	512Mb	Configuration: 512Mb (x8) NAND Flash Die: 1 Page Size: 528 words Spare Size: 16 words Blocks/Die: 4096 Pages/Block: 32
	k9f1g08u0m	1Gb	Configuration: 1Gb (x8) NAND Flash Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 1024 Pages/Block: 64
	k9f2g08u0m	2Gb	Configuration: 2Gb (x8) NAND Flash Die: 1 Page Size: 2048 bytes Spare Size: 64 bytes Blocks/Die: 2048 Pages/Block: 64
	k9f2g16u0m	2Gb	Configuration: 2Gb (x16) NAND Flash Die: 1 Page Size: 1024 words Spare Size: 32 words Blocks/Die: 2048 Pages/Block: 64
	k9f4g08u0m	4Gb	Configuration: 4Gb (x8) NAND Flash Die: 1 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 4096 Pages/Block: 64
	kf94g08q	4Gb	Configuration: 512Mb (x8) NAND Flash Die: 1 Page Size: 4096 words Spare Size: 128 words Blocks/Die: 2048 Pages/Block: 64
	kf94g16q	4Gb	Configuration: 256Mb (x16) NAND Flash Die: 1 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 2048 Pages/Block: 64
	kf88g08q	8Gb	Configuration: 8Gb (x8) NAND Flash Die: 1 Page Size: 4096 bytes Spare Size: 128 bytes Blocks/Die: 4096 Pages/Block: 64
	kf88g16q	8Gb	Configuration: 8Gb (x16) NAND Flash Die: 1 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 4096 Pages/Block: 64
	k9k8g08u1m	8Gb	Configuration: 8Gb (x16) NAND Flash Die: 2 Page Size: 2048 words Spare Size: 64 words Blocks/Die: 4096 Pages/Block: 64
	K9g8g08u0c	8Gb	Configuration: 8Gb (x8) NAND Flash Die: 1 Page Size: 8192 words Spare Size: 436 words Blocks/Die: 1038 Pages/Block: 128

ONFI 2.1 NAND

Manufacturer	Model Name	Size	Configuration
Micron			
	mt29f16g08ababa	16Gb	Configuration: 16Gb SLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f16g08abcbb	16Gb	Configuration: 16Gb SLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f32g08cbaba	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f32g08cbabb	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f32g08cbcbb	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f32g08afaba	32Gb	Configuration: 32Gb SLC Die: 2 CE: 2 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f32g08aecbb	32Gb	Configuration: 32Gb SLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08cfaba	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cfabb	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Common IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08ceaba	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29e64g08cecbb	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cecbb	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08ajaba	64Gb	Configuration: 64Gb SLC Die: 4 CE: 2 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08akaba	64Gb	Configuration: 64Gb SLC Die: 4 CE: 2 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08akcbb	64Gb	Configuration: 64Gb SLC Die: 4 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08amaba	64Gb	Configuration: 64Gb SLC Die: 4 CE: 4 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08amcbb	64Gb	Configuration: 64Gb SLC Die: 4 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08cjaba	128Gb	Configuration: 128Gb MLC Die: 4 CE: 2 Common IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cjabb	128Gb	Configuration: 128Gb MLC Die: 4 CE: 2 Common IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08ckaba	128Gb	Configuration: 128Gb MLC Die: 4 CE: 2 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29e128g08ckcbb	128Gb	Configuration: 128Gb MLC Die: 4 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08ckcbb	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cmaba	128Gb	Configuration: 128Gb MLC Die: 1 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29e128g08cmcbb	128Gb	Configuration: 128Gb MLC Die: 1 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cmcbb	128Gb	Configuration: 128Gb MLC Die: 4 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08auaba	128Gb	Configuration: 128Gb SLC Die: 8 CE: 4 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08aucbb	128Gb	Configuration: 128Gb SLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f256g08cuaba	256Gb	Configuration: 256Gb MLC Die: 8 CE: 4 Separate IO Interface: Async Only Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29e256g08cucbb	256Gb	Configuration: 256Gb MLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256

ONFI 2.1 NAND (continued)			
Manufacturer	**Model Name**	**Size**	**Configuration**
Micron			
	mt29f256g08cucbb	256Gb	Configuration: 256Gb MLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 4096 bytes Spare Size: 224 bytes Blocks/Die: 4096 Pages/Block: 256

ONFI 2.2 NAND

Manufacturer	Model Name	Size	Configuration
Micron			
	mt29f64g08cbaaa	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cbaab	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cbcab	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08ceaaa	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cecab	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cbcab	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cbcab	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cjaaa	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cjaab	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08ckaaa	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08ckcab	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cmaaa	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cmcab	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f512g08cuaaa	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f512g08cucab	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f32g08abaaa	32Gb	Configuration: 32Gb SLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f32g08abcab	32Gb	Configuration: 32Gb SLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08afaaa	64Gb	Configuration: 64Gb SLC Die: 2 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f64g08aecab	64Gb	Configuration: 64Gb SLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08ajaaa	128Gb	Configuration: 128Gb SLC Die: 4 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08akaaa	128Gb	Configuration: 128Gb SLC Die: 4 CE: 2 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08akcab	128Gb	Configuration: 128Gb SLC Die: 4 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08amaaa	128Gb	Configuration: 128Gb SLC Die: 4 CE: 4 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f128g08amcab	128Gb	Configuration: 128Gb SLC Die: 4 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f256g08auaaa	256Gb	Configuration: 256Gb SLC Die: 8 CE: 4 Separate IO Interface: Async Only Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29f256g08aucab	256Gb	Configuration: 256Gb SLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 448 bytes Blocks/Die: 4096 Pages/Block: 128

ONFI 2.3 NAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Micron			
	mt29f32g08cbada	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 2128 Pages/Block: 256
	mt29f32g08cbadb	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 2128 Pages/Block: 256
	mt29f32g08cbcdb	32Gb	Configuration: 32Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 2128 Pages/Block: 256
	mt29f64g08cecdb	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 2128 Pages/Block: 256
	mt29f64g08cbaba	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cbabb	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f64g08cbcbb	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cfaba	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cfabb	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f128g08cecbb	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cjaba	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Common IO Interface: Async Only Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cjabb	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Common IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08ckcbb	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f256g08cmcbb	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29f512g08cucbb	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 Separate IO Interface: Sync/Async Page Size: 8192 bytes Spare Size: 744 bytes Blocks/Die: 4096 Pages/Block: 256

ONFI 3.0 NAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Micron			
	mt29f64g08cbcdb	64Gb	Configuration: 64Gb MLC+ Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f128g08cecdb	128Gb	Configuration: 128Gb MLC+ Die: 2 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f128g08cbcab	128Gb	Configuration: 128Gb MLC Die: 1 CE: 1 Target Page Size: 16384 bytes Spare Size: 1218 bytes Blocks/Die: 2048 Pages/Block: 512
	mt29f192g08cgcdb	192Gb	Configuration: 192Gb MLC+ Die: 3 CE: 3 Separate-3 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f256g08ckcdb	256Gb	Configuration: 256Gb MLC+ Die: 4 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f256g08cecab	256Gb	Configuration: 256Gb MLC Die: 1 CE: 2 Target Page Size: 16384 bytes Spare Size: 1218 bytes Blocks/Die: 2048 Pages/Block: 512
	mt29f256g08cmcdb	256Gb	Configuration: 256Gb MLC+ Die: 4 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f512g08cucda	512Gb	Configuration: 512Gb MLC+ Die: 8 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f512g08ckcab	512Gb	Configuration: 512Gb MLC Die: 2 CE: 2 Target Page Size: 16384 bytes Spare Size: 1218 bytes Blocks/Die: 2048 Pages/Block: 512
	mt29f512g08cmcab	512Gb	Configuration: 512Gb MLC Die: 1 CE: 4 Target Page Size: 16384 bytes Spare Size: 1218 bytes Blocks/Die: 2048 Pages/Block: 512
	mt29f1024g08cucab	1024Gb	Configuration: 1024Gb MLC Die: 2 CE: 4 Target Page Size: 16384 bytes Spare Size: 1218 bytes Blocks/Die: 2048 Pages/Block: 512
	mt29f128g08cbcbb	128Gb	Configuration: 128Gb MLC+ Die: 1 CE: 1 Target Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f256g08cecbb	256Gb	Configuration: 256Gb MLC+ Die: 1 CE: 2 Target - 2 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08ckcbb	512Gb	Configuration: 512Gb MLC+ Die: 2 CE: 2 Target - 2 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08cmcbb	512Gb	Configuration: 512Gb MLC+ Die: 1 CE: 4 Target - 2 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08ctcbb	1024Gb	Configuration: 1024Gb MLC+ Die: 2 CE: 4 Target - 4 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08cucbb	1024Gb	Configuration: 1024Gb MLC+ Die: 2 CE: 4 Target - 2 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f2t08cvcbb	2048Gb	Configuration: 2048Gb MLC+ Die: 2 CE: 8 Target - 4 Channel Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08cvcdb	1Tb	Configuration: 1Tb MLC+ Die: 16 CE: 8 Separate-4 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 1048 Pages/Block: 512
	mt29f1t08cqcbb	1Tb	Configuration: 1Tb MLC+ Die: 8 CE: 4 Separate-4 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f2t08ctcbb	2Tb	Configuration: 2Tb MLC+ Die: 16 CE: 8 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1216 bytes Blocks/Die: 2096 Pages/Block: 512

ONFI 3.2 NAND

Manufacturer	Model Name	Size	Configuration
Micron			
	mt29f128g08cbecb	128Gb	Configuration: 128Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f128g08cbccb	128Gb	Configuration: 128Gb MLC+ Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f256g08ceecb	256Gb	Configuration: 256Gb MLC Die: 2 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f256g08ceccb	256Gb	Configuration: 256Gb MLC+ Die: 2 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08ckecb	512Gb	Configuration: 512Gb MLC Die: 4 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08ckccb	512Gb	Configuration: 512Gb MLC+ Die: 4 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08cmecb	512Gb	Configuration: 512Gb MLC Die: 4 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08cmcbb	512Gb	Configuration: 512Gb MLC+ Die: 4 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f512g08clccb	512Gb	Configuration: 512Gb MLC+ Die: 4 CE: 4 Separate-4 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08cuecb	1Tb	Configuration: 1Tb MLC Die: 8 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08cqccb	1Tb	Configuration: 1Tb MLC+ Die: 8 CE: 4 Separate-4 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f1t08cuccb	1Tb	Configuration: 1Tb MLC+ Die: 8 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f2t08cvecb	2Tb	Configuration: 2Tb MLC Die: 16 CE: 8 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f2t08ctccb	2Tb	Configuration: 2Tb MLC+ Die: 16 CE: 8 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512
	mt29f2t08cvccb	2Tb	Configuration: 2Tb MLC+ Die: 16 CE: 8 Separate-4 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 1872 bytes Blocks/Die: 2096 Pages/Block: 512

ONFI 4.0 NAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Micron			
	mt29f384g08ebcbb	384Gb	Configuration: 384Gb TLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
	mt29f768g08eecbb	768Gb	Configuration: 768Gb TLC Die: 2 CE: 2 Separate–2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
	mt29f1ht08emcbb	1536Gb	Configuration: 1536Gb TLC Die: 4 CE: 4 Separate–2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
	mt29f1ht08ekcbb	1536Gb	Configuration: 1536Gb TLC Die: 4 CE: 2 Separate–2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
	mt29f3t08eucbb	3072Gb	Configuration: 3072Gb TLC Die: 8 CE: 4 Separate–2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
	mt29f6t08etcbb	6144Gb	Configuration: 6144Gb TLC Die: 16 CE: 8 Separate–2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1536
MMP_PLUS	***mt29f512g08ebhaf***	***512Gb***	***B17A Fortisflash: Configuration: 512Gb TLC Die: 1 CE: 1 R/B: 1 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2016 Pages/Block: 2304***
MMP_PLUS	***mt29f1t08eehaf***	***1Tb***	***B17A Fortisflash: Configuration: 1Tb TLC Die: 2 CE: 2 R/B: 2 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2016 Pages/Block: 2304***
MMP_PLUS	***mt29f2t08emhaf***	***2Tb***	***B17A Fortisflash: Configuration: 2Tb TLC Die: 4 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2016 Pages/Block: 2304***
MMP_PLUS	***mt29f4t08euhaf***	***4Tb***	***B17A Fortisflash: Configuration: 4Tb TLC Die: 8 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2016 Pages/Block: 2304***
MMP_PLUS	***mt29f8t08ewhaf***	***8Tb***	***B17A Fortisflash: Configuration: 8Tb TLC Die: 16 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2016 Pages/Block: 2304***
MMP_PLUS	***mt29f256g08ebhaf***	***256Gb***	***B16A Fortisflash: Configuration: 256Gb TLC Die: 1 CE: 1 R/B: 1 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 1008 Pages/Block: 2304***
MMP_PLUS	***mt29f512g08eehaf***	***512Gb***	***B16A Fortisflash: Configuration: 512Gb TLC Die: 2 CE: 2 R/B: 2 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 1008 Pages/Block: 2304***
MMP_PLUS	***mt29f1t08emhaf***	***1Tb***	***B16A Fortisflash: Configuration: 1Tb TLC Die: 4 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 1008 Pages/Block: 2304***
	mt29f256g08cbcbb	256Gb	Configuration: 256Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f256g08cbhbb	256Gb	Configuration: 256Gb MLC Die: 1 CE: 1 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f512g08cecbb	512Gb	Configuration: 512Gb MLC Die: 2 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f512g08cfcbb	512Gb	Configuration: 512Gb MLC Die: 2 CE: 2 Common IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f512g08cehbb	512Gb	Configuration: 512Gb MLC Die: 2 CE: 2 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f1t08cmcbb	1Tb	Configuration: 1Tb MLC Die: 4 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f1t08cmhbb	1Tb	Configuration: 1Tb MLC Die: 4 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f2t08cuhbb	2Tb	Configuration: 2Tb MLC Die: 8 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024
	mt29f4t08cthbb	4Tb	Configuration: 4Tb MLC Die: 16 CE: 4 Separate-2 Ch IO Interface: Sync/Async Page Size: 16384 bytes Spare Size: 2208 bytes Blocks/Die: 2192 Pages/Block: 1024

Toggle DDR			
Manufacturer	**Model Name**	**Size**	**Configuration**
Samsung			
	k9lcgd8x1m	64Gb	Configuration: 64Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 512 bytes Blocks/Die: 4152 Pages/Block: 128
	k9hdgd8x5m	128Gb	Configuration: 128Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 512 bytes Blocks/Die: 4152 Pages/Block: 128
	k9kdgd8x7m	128Gb	Configuration: 128Gb MLC Die: 8 CE: 8 R/B: 8 Page Size: 8192 bytes Spare Size: 512 bytes Blocks/Die: 4152 Pages/Block: 128
	k9pfgd8x7m	256Gb	Configuration: 256Gb MLC Die: 8 CE: 8 R/B: 4 Page Size: 8192 bytes Spare Size: 512 bytes Blocks/Die: 4152 Pages/Block: 128
	k9pfgd8x5m	256Gb	Configuration: 256Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 512 bytes Blocks/Die: 4152 Pages/Block: 128
	k9kbgd8x1m	32Gb	Configuration: 32Gb SLC Die: 2 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4152 Pages/Block: 64
	k9wcgd8x5m	64Gb	Configuration: 64Gb SLC Die: 4 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4152 Pages/Block: 64
	k9qdgd8x5m	128Gb	Configuration: 128Gb SLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4152 Pages/Block: 64

Toggle DDR 2.0			
Manufacturer	**Model Name**	**Size**	**Configuration**
Samsung			
	k9gcgd8x0a	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 8192 Pages/Block: 128
	k9ldgx8x1a	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 8192 Pages/Block: 128
	k9hfgy8x5a	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 8192 Pages/Block: 128
	k9phgy8x5a	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 8192 Pages/Block: 128
	k9phgy8x7a	512Gb	Configuration: 512Gb MLC Die: 8 CE: 8 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 8192 Pages/Block: 128
	k9gcgd8x0m	64Gb	Configuration: 64Gb MLC Die: 1 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
	k9ldgx8x0m	128Gb	Configuration: 128Gb MLC Die: 2 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
	k9hfgd8x0m	256Gb	Configuration: 256Gb MLC Die: 4 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
	k9hfgd8x1m	256Gb	Configuration: 256Gb MLC Die: 4 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
	k9phgd8x1m	512Gb	Configuration: 512Gb MLC Die: 8 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
	k9phgd8x5m	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 8192 Pages/Block: 128
Toshiba			
	th58teg7d2h	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4164 Pages/Block: 256
	th58teg8d2h	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4164 Pages/Block: 256
	th58teg9d2h	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 640 bytes Blocks/Die: 4164 Pages/Block: 256
	th58teg7e2h	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 4156 Pages/Block: 256
	th58teg8e2h	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 4156 Pages/Block: 256
	th58teg9e2h	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 8192 bytes Spare Size: 1024 bytes Blocks/Die: 4156 Pages/Block: 256
	th58teg7ddj *	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2116 Pages/Block: 256
	th58teg8ddj *	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2116 Pages/Block: 256
	th58teg9ddj *	512Gb	Configuration: 512Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2116 Pages/Block: 256
	th58tfg8efk *	256Gb	Configuration: 256Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 4276 Pages/Block: 256
	th58tfg9efk *	512Gb	Configuration: 512Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 4276 Pages/Block: 256
	th58tft0efk *	1024Gb	Configuration: 1024Gb MLC Die: 8 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 4276 Pages/Block: 256
	th58teg7ddk *	128Gb	Configuration: 128Gb MLC Die: 2 CE: 2 R/B: 2 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2132 Pages/Block: 256
	th58teg8ddk *	256Gb	Configuration: 256Gb MLC Die: 4 CE: 4 R/B: 4 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2132 Pages/Block: 256
	th58teg9ddk *	512Gb	Configuration: 512Gb MLC Die: 8 CE: 8 R/B: 8 Page Size: 16384 bytes Spare Size: 1280 bytes Blocks/Die: 2132 Pages/Block: 256

*Please contact Cadence emulation support team or MMP product team to arrange for use of these models.
These models are not in the MMP release as they require additional permission.

Toggle DDR 2.0			
Manufacturer	**Model Name**	**Size**	**Configuration**
Toshiba			
	th58tfg9t23ba4c *	512Gb	Configuration: 512Gb TLC Die: 1 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tft0t23ba8c *	1024Gb	Configuration: 1024Gb TLC Die: 1 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tft1t23ba8h *	2048Gb	Configuration: 2048Gb TLC Die: 2 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	tc58tfg8t23ta0d *	256Gb	Configuration: 256Gb TLC Die: 1 CE: 1 R/B: 1 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tfg9t23ta2d *	512Gb	Configuration: 512Gb TLC Die: 1 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tft0t23ta2h *	1024Gb	Configuration: 1024Gb TLC Die: 2 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tfg9t22ba4c *	512Gb	Configuration: 512Gb TLC Die: 1 CE: 2 R/B: 2 TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3944 Pages/Block: 576
	th58tfg9v23ba4c *	512Gb	Configuration: 512Gb TLC Die: 1 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tft0t22ba8c *	1024Gb	Configuration: 1024Gb TLC Die: 1 CE: 4 R/B: 4 TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3944 Pages/Block: 576
	th58tft1t22ba8h *	2048Gb	Configuration: 2048Gb TLC Die: 2 CE: 4 R/B: 4 TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3944 Pages/Block: 576
	th58tft2t22ba8p *	4096Gb	Configuration: 4096Gb TLC Die: 4 CE: 4 R/B: 4 TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3944 Pages/Block: 576
	th58tft0t23ba4k *	1024Gb	Configuration: 1024Gb TLC Die: 1 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 5916 Pages/Block: 768
	th58tft1t23ba8k *	2048Gb	Configuration: 2048Gb TLC Die: 1 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 5916 Pages/Block: 768
	th58tft2t23ba8j *	4096Gb	Configuration: 4096Gb TLC Die: 2 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 5916 Pages/Block: 768
	th58tft0v23ba8c *	1024Gb	Configuration: 1024Gb TLC Die: 1 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tft1v23ba8h *	2048Gb	Configuration: 2048Gb TLC Die: 2 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 2956 Pages/Block: 768
	th58tgt2v23bb2j *	4096Gb	Configuration: 4096Gb TLC Die: 8 CE: 2 R/B: 2 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 5916 Pages/Block: 768
	th58tgt3v23bb8n *	8192Gb	Configuration: 4096Gb TLC Die: 16 CE: 4 R/B: 4 3rd Gen TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 5916 Pages/Block: 768

*Please contact Cadence emulation support team or MMP product team to arrange for use of these models.
These models are not in the MMP release as they require additional permission.

Toggle DDR 3.0				
Manufacturer	**Model Name**		**Size**	**Configuration**
Toshiba				
MMP_PLUS	*th58ljt0t24ba4c*	*	*1024Gb*	*Configuration: 1024Gb TLC Die: 2 CE: 2 R/B: 2 4th Gen (BiCS4) TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3916 Pages/Block: 1152*
MMP_PLUS	*th58ljt1t24ba8c*	*	*2048Gb*	*Configuration: 2048Gb TLC Die: 4 CE: 4 R/B: 4 4th Gen (BiCS4) TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3916 Pages/Block: 1152*
MMP_PLUS	*th58ljt2t24ba8h*	*	*4096Gb*	*Configuration: 4096Gb TLC Die: 8 CE: 4 R/B: 4 4th Gen (BiCS4) TLC NAND Page Size: 16384 bytes Spare Size: 1952 bytes Blocks/Die: 3916 Pages/Block: 1152*

*Please contact Cadence emulation support team or MMP product team to arrange for use of these models.
These models are not in the MMP release as they require additional permission.

EF3.0-NAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Samsung			
BETA	*kleb4gw1m*	*32GB*	*Configuration: 256Gb MLC CAU: 8 CE: 2 R/B: 2* *Page Size: 8192 bytes Spare Size: 32 bytes Blocks/CAU: 2048 Pages/Block: 128*

Enhanced ClearNAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Micron			
	mt29fen16gdkbaa	64Gb	Configuration: 64Gb MLC Die: 8 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 128 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29fen16gdebaa	32Gb	Configuration: 32Gb MLC Die: 4 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 128 bytes Blocks/Die: 4096 Pages/Block: 256
	mt29fen32ggkbaa	32Gb	Configuration: 32Gb SLC Die: 8 CE: 8 R/B: 1 Page Size: 8192 bytes Spare Size: 128 bytes Blocks/Die: 4096 Pages/Block: 128
	mt29fen16ggebaa	16Gb	Configuration: 16Gb SLC Die: 4 CE: 1 R/B: 1 Page Size: 8192 bytes Spare Size: 128 bytes Blocks/Die: 4096 Pages/Block: 128

LBA-NAND			
Manufacturer	**Model Name**	**Size**	**Configuration**
Toshiba			
	mlba02g8p	2Gb	Toshiba 2Gb mLBA-NAND Flash memory (x8) with Optional Power-On mode
	mlba02g8s	2Gb	Toshiba 2Gb mLBA-NAND Flash memory (x8) without Optional Power-On mode
	mlba02g16p	2Gb	Toshiba 2Gb mLBA-NAND Flash memory (x16) with Optional Power-On mode
	mlba02g16s	2Gb	Toshiba 2Gb mLBA-NAND Flash memory (x16) without Optional Power-On mode
	mlba04g8p	4Gb	Toshiba 4Gb mLBA-NAND Flash memory (x8) with Optional Power-On mode
	mlba04g8s	4Gb	Toshiba 4Gb mLBA-NAND Flash memory (x8) without Optional Power-On mode
	mlba04g16p	4Gb	Toshiba 4Gb mLBA-NAND Flash memory (x16) with Optional Power-On mode
	mlba04g16s	4Gb	Toshiba 4Gb mLBA-NAND Flash memory (x16) without Optional Power-On mode
	mlba08g8p	8Gb	Toshiba 8Gb mLBA-NAND Flash memory (x8) with Optional Power-On mode
	mlba08g8s	8Gb	Toshiba 8Gb mLBA-NAND Flash memory (x8) without Optional Power-On mode
	mlba08g16p	8Gb	Toshiba 8Gb mLBA-NAND Flash memory (x16) with Optional Power-On mode
	mlba08g16s	8Gb	Toshiba 8Gb mLBA-NAND Flash memory (x16) without Optional Power-On mode
	mlba16g8p	16Gb	Toshiba 16Gb mLBA-NAND Flash memory (x8) with Optional Power-On mode
	mlba16g8s	16Gb	Toshiba 16Gb mLBA-NAND Flash memory (x8) without Optional Power-On mode
	mlba16g16p	16Gb	Toshiba 16Gb mLBA-NAND Flash memory (x16) with Optional Power-On mode
	mlba16g16s	16Gb	Toshiba 16Gb mLBA-NAND Flash memory (x16) without Optional Power-On mode
	mlba32g8p	32Gb	Toshiba 32Gb mLBA-NAND Flash memory (x8) with Optional Power-On mode
	mlba32g8s	32Gb	Toshiba 32Gb mLBA-NAND Flash memory (x8) without Optional Power-On mode
	mlba32g16p	32Gb	Toshiba 32Gb mLBA-NAND Flash memory (x16) with Optional Power-On mode
	mlba32g16s	32Gb	Toshiba 32Gb mLBA-NAND Flash memory (x16) without Optional Power-On mode

NOR Flash

Manufacturer	Model Name	Size	Configuration
Spansion			
	s29gl01gp	1Gb	Configuration: 1Gb (x8/x16) NOR Flash
	s29gl032n	32Mb	Configuration: 32Mb (x8/x16) NOR Flash
	s29gl064n	64Mb	Configuration: 64Mb (x8/x16) NOR Flash
	s29gl128n	128Mb	Configuration: 3128Mb (x8/x16) NOR Flash
	s29gl128p	128Mb	Configuration: 3128Mb (x8/x16) NOR Flash
	s29gl256n	256Mb	Configuration: 256Mb (x8/x16) NOR Flash
	s29gl256p	256Mb	Configuration: 256Mb (x8/x16) NOR Flash
	s29gl512n	512Mb	Configuration: 512Mb (x8/x16) NOR Flash
	s29gl512p	512Mb	Configuration: 512Mb (x8/x16) NOR Flash
	s70gl01gn	1Gb	Configuration: 1Gb (x8/x16) NOR Flash
	s70gl02gp	2Gb	Configuration: 2Gb (x8/x16) NOR Flash
Numonyx			
	m29w400dt	4Mb	Configuration: 4Mb (x8/x16) NOR Flash
	m29w400db	4Mb	Configuration: 4Mb (x8/x16) NOR Flash
	m29w800dt	8Mb	Configuration: 8Mb (x8/x16) NOR Flash
	m29w800db	8Mb	Configuration: 8Mb (x8/x16) NOR Flash
	m29w160et	16Mb	Configuration: 16Mb (x8/x16) NOR Flash
	m29w160eb	16Mb	Configuration: 16Mb (x8/x16) NOR Flash
	m29w320dt	32Mb	Configuration: 32Mb (x8/x16) NOR Flash
	m29w320db	32Mb	Configuration: 32Mb (x8/x16) NOR Flash
	m29w320et	32Mb	Configuration: 32Mb (x8/x16) NOR Flash with Write Buffer and Ext Block
	m29w320eb	32Mb	Configuration: 32Mb (x8/x16) NOR Flash with Write Buffer and Ext Block
	m29w640ft	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w640fb	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w640gt	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w640gb	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w640gh	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w640gl	64Mb	Configuration: 64Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w128gh	128Mb	Configuration: 128Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w128gl	128Mb	Configuration: 128Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
	m29w256gh	256Mb	Configuration: 256Mb (x8/x16) NOR Flash with Enhanced Write Buffer and Ext Block
Numonyx Axcell			
	xx28f256m29ew	256Mb	Configuration: 256Mb - 64Mx16/128Mx8 - 256 Sectors - 128kbytes per sector
	xx28f512m29ew	512Mb	Configuration: 512Mb - 64Mx16/128Mx8 - 512 Sectors - 128kbytes per sector
	xx28f00am29ew	1Gb	Configuration: 1Gb - 64Mx16/128Mx8 - 1024 Sectors - 128kbytes per sector
	xx28f00bm29ew	2Gb	Configuration: 2Gb - 64Mx16/128Mx8 - 2048 Sectors - 128kbytes per sector
	Note: xx above refers to one of the following voltage/package options "js", "pc" or "rc"		

SPI Flash

Manufacturer	Model Name	Size	Configuration
Numonyx			
	m25p05a	512kb	Configuration: 64k * 8 Serial Flash
	m25p10a	1Mb	Configuration: 128k * 8 Serial Flash
	m25p20	2Mb	Configuration: 256k * 8 Serial Flash
	m25p40	4Mb	Configuration: 512k * 8 Serial Flash
	m25p80	8Mb	Configuration: 1M * 8 Serial Flash
	m25p16	16Mb	Configuration: 2M * 8 Serial Flash
	m25p32	32Mb	Configuration: 4M * 8 Serial Flash
	m25p64	64Mb	Configuration: 8M * 8 Serial Flash
	m25p128	128Mb	Configuration: 16M * 8 Serial Flash
	m25pe10	1Mb	Configuration: 128k * 8 Serial Flash with Page Erase
	m25pe20	2Mb	Configuration: 256k * 8 Serial Flash with Page Erase
	m25pe40	4Mb	Configuration: 512k * 8 Serial Flash with Page Erase
	m25pe80	8Mb	Configuration: 1M * 8 Serial Flash with Page Erase
	m25pe16	16Mb	Configuration: 2M * 8 Serial Flash with Page Erase
	m25px80	8Mb	Configuration: 1M * 8 Serial Flash with Dual IO
	m25px16	16Mb	Configuration: 2M * 8 Serial Flash with Dual IO
	m25px32	32Mb	Configuration: 4M * 8 Serial Flash with Dual IO
	m25px64	64Mb	Configuration: 8M * 8 Serial Flash with Dual IO
	m45pe10	1Mb	Configuration: 128k * 8 Serial Flash with Page Erase and Write buffer
	m45pe20	2Mb	Configuration: 256k * 8 Serial Flash with Page Erase and Write buffer
	m45pe40	4Mb	Configuration: 512k * 8 Serial Flash with Page Erase and Write buffer
	m45pe80	8Mb	Configuration: 1M * 8 Serial Flash with Page Erase and Write buffer
	m45pe16	16Mb	Configuration: 2M * 8 Serial Flash with Page Erase and Write buffer
Macronix			
	mx25l5126e	512kb	Configuration: 64k * 8 Serial Flash
	mx25l1006e	1Mb	Configuration: 128k * 8 Serial Flash
	mx25l2006e	2Mb	Configuration: 256k * 8 Serial Flash
	mx25l4006e	4Mb	Configuration: 512k * 8 Serial Flash
	mx25l8006e	8Mb	Configuration: 1M * 8 Serial Flash
	mx25l1606e	16Mb	Configuration: 2M * 8 Serial Flash
	mx25l3206e	32Mb	Configuration: 4M * 8 Serial Flash
	mx25l6406e	64Mb	Configuration: 8M * 8 Serial Flash

SPI NAND

Manufacturer	Model Name	Size	Configuration
Micron			
	mt29f1g01aaadd	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	mt29f2g01aaaed	2 Gb	2Gb (2048 blocks x 64 pages x 2112 bytes)
	mt29f4g01aaadd	4 Gb	4Gb (4096 blocks x 64 pages x 2112 bytes)
Macronix			
	mx35lf1ge4ab	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	mx35lf2ge4ab	2 Gb	2Gb (2048 blocks x 64 pages x 2112 bytes)
Winbond			
	w25n01gvxxig	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	w25n01gvxxit	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	w25n01gwxxig	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	w25n01gwxxit	1 Gb	1Gb (1024 blocks x 64 pages x 2112 bytes)
	w25m02gvxxig	2 Gb	2Gb (2 dies x 1024 blocks x 64 pages x 2112 bytes)
	w25m02gvxxit	2 Gb	2Gb (2 dies x 1024 blocks x 64 pages x 2112 bytes)
	w25m02gwxxig	2 Gb	2Gb (2 dies x 1024 blocks x 64 pages x 2112 bytes)
	w25m02gwxxit	2 Gb	2Gb (2 dies x 1024 blocks x 64 pages x 2112 bytes)
BETA	***w25n01jwxxig***	***1 Gb***	***1Gb (1024 blocks x 64 pages x 2112 bytes)***
BETA	***w25n01jwxxit***	***1 Gb***	***1Gb (1024 blocks x 64 pages x 2112 bytes)***
GigaDevice			
	gd5f1gq4rb	1 Gb	1Gb (1024 blocks x 64 pages x 2176 bytes)
	gd5f1gq4rc	1 Gb	1Gb (1024 blocks x 64 pages x 2176 bytes)
	gd5f1gq4ub	1 Gb	1Gb (1024 blocks x 64 pages x 2176 bytes)
	gd5f1gq4uc	1 Gb	1Gb (1024 blocks x 64 pages x 2176 bytes)
	gd5f2gq4rb	2 Gb	2Gb (2048 blocks x 64 pages x 2176 bytes)
	gd5f2gq4rc	2 Gb	2Gb (2048 blocks x 64 pages x 2176 bytes)
	gd5f2gq4ub	2 Gb	2Gb (2048 blocks x 64 pages x 2176 bytes)
	gd5f2gq4uc	2 Gb	2Gb (2048 blocks x 64 pages x 2176 bytes)
	gd5f4gq4rb	4 Gb	4Gb (2048 blocks x 64 pages x 4352 bytes)
	gd5f4gq4rc	4 Gb	4Gb (2048 blocks x 64 pages x 4352 bytes)
	gd5f4gq4ub	4 Gb	4Gb (2048 blocks x 64 pages x 4352 bytes)
	gd5f4gq4uc	4 Gb	4Gb (2048 blocks x 64 pages x 4352 bytes)

Quad SPI Flash

Micron Quad SPI (Numonyx)			
	* n25q032	32Mb	Configuration: 4M * 8 Serial Flash with Quad IO (addr size 24b)
	* n25q064	64Mb	Configuration: 8M * 8 Serial Flash with Quad IO (addr size 24b)
	* n25q128	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO (addr size 24b)
	* n25q256a13	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b)
	* n25q256a33	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b)
	* n25q256a11	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b)
	* n25q256a31	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b)
	* n25q512	512Mb	Configuration: 64M * 8 Serial Flash with Quad IO (addr size 32b)
	* n25q00a	1Gb	Configuration: 128M * 8 Serial Flash with Quad IO (addr size 32b)
BETA	*mt25qu128aba*	*128Mb*	*Configuration: 128Mb - 4KB x 16 Sectors x 256 Blocks (addr size 24b)*
BETA	*mt25ql128aba*	*128Mb*	*Configuration: 128Mb - 4KB x 16 Sectors x 256 Blocks (addr size 24b)*
BETA	*mt25qu256aba*	*256Mb*	*Configuration: 256Mb - 4KB x 16 Sectors x 512 Blocks (addr size 32b)*
BETA	*mt25ql256aba*	*256Mb*	*Configuration: 256Mb - 4KB x 16 Sectors x 512 Blocks (addr size 32b)*
BETA	*mt25qu512abb*	*512Mb*	*Configuration: 512Mb - 4KB x 16 Sectors x 1024 Blocks (addr size 32b)*
BETA	*mt25ql512abb*	*512Mb*	*Configuration: 512Mb - 4KB x 16 Sectors x 1024 Blocks (addr size 32b)*
BETA	*mt25qu01gbbb*	*1Gb*	*Configuration: 1Gb - 4KB x 16 Sectors x 2048 Blocks (addr size 32b)*
BETA	*mt25ql01gbbb*	*1Gb*	*Configuration: 1Gb - 4KB x 16 Sectors x 2048 Blocks (addr size 32b)*
BETA	*mt25qu02gcbb*	*2Gb*	*Configuration: 2Gb - 4KB x 16 Sectors x 4096 Blocks (addr size 32b)*
BETA	*mt25ql02gcbb*	*2Gb*	*Configuration: 2Gb - 4KB x 16 Sectors x 4096 Blocks (addr size 32b)*
BETA	*mt25tu256*	*256Mb*	*Configuration: 256Mb - 4KB x 16 Sectors x 256 Blocks x 2 Dies (addr size 24b)*
BETA	*mt25tl256*	*256Mb*	*Configuration: 256Mb - 4KB x 16 Sectors x 256 Blocks x 2 Dies (addr size 24b)*
BETA	*mt25tu512*	*512Mb*	*Configuration: 512Mb - 4KB x 16 Sectors x 512 Blocks x 2 Dies (addr size 32b)*
BETA	*mt25tl512*	*512Mb*	*Configuration: 512Mb - 4KB x 16 Sectors x 512 Blocks x 2 Dies (addr size 32b)*
BETA	*mt25tu01g*	*1Gb*	*Configuration: 1Gb - 4KB x 16 Sectors x 1024 Blocks x 2 Dies (addr size 32b)*
BETA	*mt25tl01g*	*1Gb*	*Configuration: 1Gb - 4KB x 16 Sectors x 1024 Blocks x 2 Dies (addr size 32b)*
Spansion Quad SPI			
	* s25fl032p	32Mb	Configuration: 4M * 8 Serial Flash with Quad IO (addr size 24b)
	* s25fl064p	64Mb	Configuration: 8M * 8 Serial Flash with Quad IO (addr size 24b)
	* s25fl128px0	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 64k Sector (addr size 24b)
	* s25fl128px1	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 256k Sector (addr size 24b)
	* s25fl129px0	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 64k Sector (addr size 24b)
	* s25fl129px1	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 256k Sector (addr size 24b)
	* S25fl128s	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 256k Sector (addr size 32b/24b per cmd)
	* S25fl256s	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO - 256k Sector (addr size 32b/24b per cmd)
	* s25fs128s	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO - 256k Sector (addr size 32b/24b per cmd)
	* s25fs256s	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO - 256k Sector (addr size 32b/24b per cmd)
	* s25fs512s	512Mb	Configuration: 64M * 8 Serial Flash with Quad IO - 256k Sector (addr size 32b/24b per cmd)
	* s70fs01gs	1Gb	Configuration: 128M*8 Serial Flash with Quad IO – 256k Sector (addr size 32b/24b per cmd)

* QSPI / OSPI parts with an asterisk are found in the MMP release as *.vhdp files
QSPI / OSPI parts without the asterisk are found in the MMP release as *.vp files

Quad SPI Flash		
Winbond Quad SPI		
* w25q40bv	4Mb	Configuration: 512k * 8 Serial Flash with Quad IO (addr size 24b)
* w25q80bv	8Mb	Configuration: 1M * 8 Serial Flash with Quad IO (addr size 24b)
* w25q16cv	16Mb	Configuration: 2M * 8 Serial Flash with Quad IO (addr size 24b)
* w25q32bv	32Mb	Configuration: 4M * 8 Serial Flash with Quad IO (addr size 24b)
* w25q64cv	64Mb	Configuration: 8M * 8 Serial Flash with Quad IO (addr size 24b)
* w25q128bv	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO (addr size 24b)
w25q256fv	256Mb	Configuration: 256Mb - 4KB x 16 Sectors x 512 Blocks (addr size 32b)
w25q256jw	256Mb	Configuration: 256Mb - 4KB x 16 Sectors x 512 Blocks (addr size 32b)
Macronix Quad SPI		
* mx25u4035	4Mb	Configuration: 512k * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u8035	8Mb	Configuration: 1M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u1635	16Mb	Configuration: 2M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u3235e	32Mb	Configuration: 4M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u3235f	32Mb	Configuration: 4M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u6435	64Mb	Configuration: 8M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u12835	128Mb	Configuration: 16M * 8 Serial Flash with Quad IO (addr size 24b)
* mx25u25635	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b/24b per cmd)
* mx25u25645g	256Mb	Configuration: 32M * 8 Serial Flash with Quad IO (addr size 32b/24b per cmd)
* mx66u51235	512Mb	Configuration: 64M * 8 Serial Flash with Quad IO (addr size 32b/24b per cmd)
* mx25u51245g	512Mb	Configuration: 64M * 8 Serial Flash with Quad IO (addr size 32b/24b per cmd)

* QSPI / OSPI parts with an asterisk are found in the MMP release as *.vhdp files
QSPI / OSPI parts without the asterisk are found in the MMP release as *.vp files

Octal SPI Flash

Micron Octal SPI (Numonyx)

*	mt35xu256	256Mb	Configuration: 32M * 8 Octal Flash – 32bit addressing mode support
*	mt35xu512	512Mb	Configuration: 64M * 8 Octal Flash – 32bit addressing mode support
*	mt35xu01g	1Gb	Configuration: 128M * 8 Octal Flash – 32bit addressing mode support
*	mt35xu02g	2Gb	Configuration: 256M * 8 Octal Flash – 32bit addressing mode support

Macronix Octal SPI

*	mx25um51245g	512Mb	Configuration: 64M * 8 Octal Flash – 32bit addressing mode support
*	mx66um1g45g	1Gb	Configuration: 128M * 8 Octal Flash – 32bit addressing mode support
*	mx66um2g45g	2Gb	Configuration: 256M * 8 Octal Flash – 32bit addressing mode support

* QSPI / OSPI parts with an asterisk are found in the MMP release as *.vhdp files
QSPI / OSPI parts without the asterisk are found in the MMP release as *.vp files

HyperFlash

Manufacturer	Model Name	Size	Configuration
Spansion			
	s26ks128s	16MB	Sector Size: 256Kbyte Sector Count:64
	s26ks256s	32MB	Sector Size: 256Kbyte Sector Count:128
	s26ks512s	64MB	Sector Size: 256Kbyte Sector Count:256
Cypress			
BETA	***s26ks512t***	***64MB***	***Sector Size: 256Kbyte Sector Count:256***
BETA	***s26kl512t***	***64MB***	***Sector Size: 256Kbyte Sector Count:256***
BETA	***s26ks01gt***	***128MB***	***Sector Size: 256Kbyte Sector Count:512***
BETA	***s26kl01gt***	***128MB***	***Sector Size: 256Kbyte Sector Count:512***

SPI EEPROM

Manufacturer	Model Name	Size	Configuration
ST			
	st_eeprom_m95080	8kb	Config: 1kbyte 32byte page EEPROM
	st_eeprom_m95160	16kb	Config: 2kbyte 32byte page EEPROM
	st_eeprom_m95320	32kb	Config: 4kbyte 32byte page EEPROM
	st_eeprom_m95320d	32kb	Config: 4kbyte 32byte page EEPROM with ID page
	st_eeprom_m95320a	32kb	Config: 4kbyte 32byte page EEPROM - Automotive
	st_eeprom_m95640	64kb	Config: 8kbyte 32byte page EEPROM
	st_eeprom_m95640d	64kb	Config: 8kbyte 32byte page EEPROM with ID page
	st_eeprom_m95640a	64kb	Config: 8kbyte 32byte page EEPROM- Automotive
	st_eeprom_m95128	128kb	Config: 16kbyte 64byte page EEPROM
	st_eeprom_m95128d	128kb	Config: 16kbyte 64byte page EEPROM with ID page
	st_eeprom_m95128a	128kb	Config: 16kbyte 64byte page EEPROM- Automotive
	st_eeprom_m95256	256kb	Config: 32kbyte 64byte page EEPROM
	st_eeprom_m95256d	256kn	Config: 32kbyte 64byte page EEPROM with ID page
	st_eeprom_m95256a	256kb	Config: 32kbyte 64byte page EEPROM- Automotive
	st_eeprom_m95512	512kb	Config: 64kbyte 128byte page EEPROM
	st_eeprom_m95512d	512kb	Config: 64kbyte 128byte page EEPROM with ID page
	st_eeprom_m95512a	512kb	Config: 64kbyte 128byte page EEPROM- Automotive
	st_eeprom_m95m01	1Mb	Config: 128kbyte 128byte page EEPROM
	st_eeprom_m95m01d	1Mb	Config: 128kbyte 128byte page EEPROM with ID page
	st_eeprom_m95m01a	1Mb	Config: 128kbyte 128byte page EEPROM- Automotive
	st_eeprom_m95m02d	2Mb	Config: 256kbyte 128byte page EEPROM
Microchip			
	mc_eeprom_25lc080c	8kb	Config: 1kbyte 16byte page EEPROM
	mc_eeprom_25lc080d	8kb	Config: 1kbyte 32byte page EEPROM
	mc_eeprom_25lc160c	16kb	Config: 2kbyte 16byte page EEPROM
	mc_eeprom_25lc160d	16kb	Config: 2kbyte 32byte page EEPROM
	mc_eeprom_25lc320a	32kb	Config: 4kbyte 32byte page EEPROM
	mc_eeprom_25lc640a	64kb	Config: 8kbyte 32byte page EEPROM
	mc_eeprom_25lc128	128kb	Config: 16kbyte 64byte page EEPROM
	mc_eeprom_25lc256	256kb	Config: 32kbyte 64byte page EEPROM

I2C EPROM

Manufacturer	Model Name	Size	Configuration
Atmel			
	at24c01	1kb	Configuration: 1kbit I2C EPROM
	at24c02	2kb	Configuration: 2kbit I2C EPROM
	at24c04	4kb	Configuration: 4kbit I2C EPROM
	at24c08	8kb	Configuration: 8kbit I2C EPROM
	at24c16	16kb	Configuration: 16kbit I2C EPROM
	at24c32	32kb	Configuration: 32kbit I2C EPROM - 32-byte page write mode
	at24c64	64kb	Configuration: 64kbit I2C EPROM- 64-byte page write mode
	at24c128	128kb	Configuration: 128kbit I2C EPROM- 128-byte page write mode
	at24c256	256kb	Configuration: 256kbit I2C EPROM- 256-byte page write mode
	at24c512	512kb	Configuration: 512kbit I2C EPROM- 512-byte page write mode
	at24c1024	1024kb	Configuration: 1024kbit I2C EPROM- 1024-byte page write mode
Microchip			
	mc_24aa16h	16kb	Configuration: 16kbit I2C EPROM

Microwire EEPROM

Manufacturer	Model Name	Size	Configuration
Atmel			
	at93c46d	1Kbit	128x8 or 64x16 Microwire Serial EEPROM
	at93c46e	1Kbit	128x8 or 64x16 Microwire Serial EEPROM
	at93c56a	2Kbit	256x8 or 128x16 Microwire Serial EEPROM
	at93c56b	2Kbit	256x8 or 128x16 Microwire Serial EEPROM
	at93c66a	4Kbit	512x8 or 256x16 Microwire Serial EEPROM
	at93c66b	4Kbit	512x8 or 256x16 Microwire Serial EEPROM
	at93c86a	16Kbit	2048x8 or 1024x16 Microwire Serial EEPROM

eMMC 4.5

Manufacturer	Model Name	Size	Configuration
Toshiba			
	toshiba_16GB_emmc	16GB	
Samsung			
	klm8g1geac	8GB	
	klmag2geac	16GB	
	klmbg4geac	32GB	
	klmcg8geac	64GB	

eMMC 5.0

Manufacturer	Model Name	Size	Configuration
Generic			
	klm4g1yemd_b031	4GB	
	klm8g1wemb_b031	8GB	
	klmag2wemb_b031	16GB	
	klmbg4webc_b031	32GB	
	klmcg8webc_b031	64GB	

SD Card

Manufacturer	Model Name	Size	Configuration
Generic			
	sd_card_256m	256MB	256MB SDSC 4.2
	sd_card_512m	512MB	512MB SDSC 4.2
	sd_card_1g	1GB	1GB SDSC 4.2
	sd_card_2g	2GB	2GB SDSC 4.2
	sd_card_4g	4GB	4GB SDHC 4.2
	sd_card_8g	8GB	8GB SDHC 4.2
	sd_card_16g	16GB	16GB SDHC 4.2
	sd_card_32g	32GB	32GB SDHC 4.2
	sd_card_64g	64GB	64GB SDXC 4.2

UFS 2.1

Manufacturer	Model Name	Size	Configuration
JEDEC	**Universal Flash Storage (UFS) 2.1**		
	Universal Flash Storage v2.1 (UFS 2.1) JESD220C (March 2016) Specification for Unified Protocol (UniProSM) Version 1.6 (6 August 2013) Specification for M-PHY Version 3.0 (26 July 2013)		
	jedec_ufs_stack	2GB	Configuration: LU0: 1GB LU1: 1GB LU2-LU7: Disabled Note: The user may enable the LU2-LU7 and set memory size by macro and adjust the LUN size to something smaller by changing descriptor values
Micron	**Universal Flash Storage (UFS) 2.1**		
	mtfc32gamakam_ufs_stack	32GB	Configuration: LU0: 16GB LU1: 16GB LU2-LU7: Disabled Note: The user may enable the LU2-LU7 and set memory size by macro and adjust the LU size to something smaller by changing descriptor values
JEDEC	***Universal Flash Storage (UFS) Card***		
	Universal Flash Storage (UFS) Card Extension v1.0 JESD220-2 (March 2016)		
	ufs_card	2GB	Configuration: LU0: 1GB LU1: 1GB LU2-LU7: Disabled Note: The user may enable the LU2-LU7 and set memory size by macro and adjust the LUN size to something smaller by changing descriptor values

CompactFlash

Manufacturer	Model Name	Size	Configuration
Generic			
BETA	***compactflash_1024MB***	***1GB***	

SRAM Async

Manufacturer	Model Name	Size	Configuration
Cypress			
	cy7c1041bnv33	4Mb	Configuration: 256kx16 Async SRAM
	cy7c1061av33	16Mb	Configuration: 1Mx16 Async SRAM
	cy7c1069av33	16Mb	Configuration: 2Mx8 Async SRAM

SRAM Sync

Manufacturer	Model Name	Size	Configuration
Cypress			
	cy7c1363	18Mb	Configuration: 1Mx18 Syncburst Flow Through
	cy7c1380	18Mb	Configuration: 512kx36 Syncburst Pipelined
	cy7c1480	72Mb	Configuration: 2Mx36 Syncburst Pipelined

SRAM Sync DP

Manufacturer	Model Name	Size	Configuration
Cypress			
	cy7c0832v	4Mb	Configuration: 256kx18 Dual Port SRAM
	cy7c0852v	4Mb	Configuration: 128kx36 Dual Port SRAM

SRAM DDR

Manufacturer	Model Name	Size	Configuration
Samsung DDRII+ CIO			
	k7k1636t2c	18Mb	Samsung 512K x 36 DDRII+ CIO b2 SRAM
	k7k1636u2c	18Mb	Samsung 512K x 36 DDRII+ CIO b2 SRAM
	k7k1618t2c	18Mb	Samsung 1M x 18 DDRII+ CIO b2 SRAM
	k7k1618u2c	18Mb	Samsung 1M x 18 DDRII+ CIO b2 SRAM
	k7k3236u2c	36Mb	Samsung 1M x 36 DDRII+ CIO b2 SRAM
	k7k3236t2c	36Mb	Samsung 1M x 36 DDRII+ CIO b2 SRAM
	k7k3218u2c	36Mb	Samsung 2M x 18 DDRII+ CIO b2 SRAM
	k7k3218t2c	36Mb	Samsung 2M x 18 DDRII+ CIO b2 SRAM
Samsung DDRII CIO			
	k7i163682b	18Mb	Samsung 512K x 36 DDRII CIO b2 SRAM
	k7i643684m	18Mb	Samsung 512K x 36 DDRII CIO b2 SRAM
	k7i161882b	18Mb	Samsung 1M x 18 DDRII CIO b2 SRAM
	k7i643684m	18Mb	Samsung 1M x 18 DDRII CIO b2 SRAM
	k7i323682c	36Mb	Samsung 1M x 36 DDRII CIO b2 SRAM
	k7i643684m	36Mb	Samsung 1M x 36 DDRII CIO b2 SRAM
	k7i321882c	36Mb	Samsung 2M x 18 DDRII CIO b2 SRAM
	k7i643684m	36Mb	Samsung 2M x 18 DDRII CIO b2 SRAM
	k7i643682m	72Mb	Samsung 2M x 36 DDRII CIO b2 SRAM
	k7i643684m	72Mb	Samsung 2M x 36 DDRII CIO b2 SRAM
	k7i641882m	72Mb	Samsung 4M x 18 DDRII CIO b2 SRAM
	k7i643684m	72Mb	Samsung 4M x 18 DDRII CIO b2 SRAM
Samsung DDRII SIO			
	k7j163682b	18Mb	Samsung 512K x 36 DDRII SIO b2 SRAM
	k7j161882b	18Mb	Samsung 1M x 18 DDRII SIO b2 SRAM
	k7j323682c	36Mb	Samsung 1M x 36 DDRII SIO b2 SRAM
	k7j321882c	36Mb	Samsung 2M x 18 DDRII SIO b2 SRAM
	k7j643682m	72Mb	Samsung 2M x 36 DDRII SIO b2 SRAM
	k7j641882m	72Mb	Samsung 4M x 18 DDRII SIO b2 SRAM
Samsung DDR			
	k7d803671b	9Mb	Samsung 256K x 36 DDR SRAM
	k7d801871b	9Mb	Samsung 512K x 18 DDR SRAM
	k7d163674b	18Mb	Samsung 512K x 36 DDR SRAM
	k7d161874b	18Mb	Samsung 1M x 18 DDR SRAM
	k7d323674c	36Mb	Samsung 1M x 36 DDR SRAM
	k7d321874c	36Mb	Samsung 2M x 18 DDR SRAM

SRAM QDR

Manufacturer	Model Name	Size	Configuration
Samsung QDRII+ b4			
	k7s1636u4c	18Mb	Samsung 512K x 36 QDRII+ b4 SRAM
	k7s1618t4c	18Mb	Samsung 1M x 18 QDRII+ b4 SRAM
	k7s1618u4c	18Mb	Samsung 1M x 18 QDRII+ b4 SRAM
	k7s3236t4c	36Mb	Samsung 1M x 36 QDRII+ b4 SRAM
	k7s3236u4c	36Mb	Samsung 1M x 36 QDRII+ b4 SRAM
	k7s3218t4c	36Mb	Samsung 2M x 18 QDRII+ b4 SRAM
	k7s3218u4c	36Mb	Samsung 2M x 18 QDRII+ b4 SRAM
Samsung QDRII b2			
	k7r160982b	18Mb	Samsung 2M x 9 QDRII b2 SRAM
	k7r163682b	18Mb	Samsung 512K x 36 QDRII b2 SRAM
	k7r161882b	18Mb	Samsung 1M x 18 QDRII b2 SRAM
	k7r323682c	36Mb	Samsung 1M x 36 QDRII b2 SRAM
	k7r321882c	36Mb	Samsung 2M x 18 QDRII b2 SRAM
	k7r320982c	36Mb	Samsung 4M x 9 QDRII b2 SRAM
	k7r643682m	72Mb	Samsung 2M x 36 QDRII b2 SRAM
	k7r641882m	72Mb	Samsung 4M x 18 QDRII b2 SRAM
	k7r640982m	72Mb	Samsung 8M x 9 QDRII b2 SRAM
Samsung QDRII b4			
	k7r163684b	18Mb	Samsung 512K x 36 QDRII b4 SRAM
	k7r161884b	18Mb	Samsung 1M x 18 QDRII b4 SRAM
	k7r323684c	36Mb	Samsung 1M x 36 QDRII b4 SRAM
	k7r321884c	36Mb	Samsung 2M x 18 QDRII b4 SRAM
	k7r320984c	36Mb	Samsung 4M x 9 QDRII b4 SRAM
	k7r643684m	72Mb	Samsung 2M x 36 QDRII b4 SRAM
	k7r641884m	72Mb	Samsung 4M x 18 QDRII b4 SRAM
Samsung QDR b2			
	k7q163662b	18Mb	Samsung 512K x 36 QDR b2 SRAM
	k7q161862b	18Mb	Samsung 1M x 18 QDR b2 SRAM
Samsung QDR b4			
	k7q163664b	18Mb	Samsung 512K x 36 QDR b4 SRAM
	k7q161864b	18Mb	Samsung 1M x 18 QDR b4 SRAM

HyperRam

Manufacturer	Model Name	Size	Configuration
Cypress			
	s27kl0641	8Mbyte	Configuration: 1k x 8192 HyperRam
	s70kl1281	16Mbyte	Configuration: 1k x 16384 HyperRam
	s70kl2561	32Mbyte	Configuration: 1k x 32768 HyperRam
	s27ks0641	8Mbyte	Configuration: 1k x 8192 HyperRam
	s70ks1281	16Mbyte	Configuration: 1k x 16384 HyperRam
	s70ks2561	32Mbyte	Configuration: 1k x 32768 HyperRam