

Micron® Memory Support for NXP® i.MX8 Platforms

Save yourself time and money—Micron memory comes **validated** on NXP Platforms

Micron Memory		i.MX Processor Memory		
		i.MX 8 Quad Max, i.MX8 Quad Plus, i.MX8 Quad	i.MX8 Quad X Plus, i.MX8 Dual X Plus, i.MX8 Dual X	i.MX8 M Quad / Quad Lite i.MX8 M Dual / Dual Lite
DRAM	Type	LPDDR4	LPDDR4	LPDDR4
	Family	MT53B	MT53B	MT53D
	Density	24Gb	24Gb	24Gb
	Configuration	384 Meg x 32	384 Meg x 32	384 Meg x 32
	Package	200-ball FBGA	200-ball FBGA	200-ball FBGA
	Validated PN	MT53D1024M32D4NQ-046 AAT:D	MT53D1024M32D4NQ-046 AAT:D	MT53D1024M32D4NQ-046 AAT:D
	Qty/Board	2	1	1
NAND/e.MMC	Type	e.MMC (5.0)	e.MMC (5.0)	e.MMC (5.0)
	Family	MTFC	MTFC	MTFC
	Density	32GB	32GB	16GB
	Package	153-ball VFBGA	153-ball VFBGA	153-ball VFBGA
	Validated PN	MTFC32GAKAEFF-AIT	MTFC32GAKAEFF-AIT	MTFC16GAKAECN-2M WT
NOR	Type	Xccela™ Flash (Octal SPI), Serial (Quad SPI)	Xccela™ Flash (Octal SPI), Serial (Quad SPI)	Quad SPI
	Family	MT35X, MT25T, MT25Q	MT35X, MT25T, MT25Q	MT25Q
	Density	512Mb	512Mb	256Mb
	Package	25-ball BGA (8mm x 6mm)	25-ball BGA (8mm x 6mm)	24-ball BGA (8mm x 6mm)
	Validated PN	MT35XU512ABA1G12-0AAT	MT35XU512ABA1G12-0AAT	MT25Q256ABA1EW9-0SIT

*MT41K family supports both 1.5V and 1.35V power supply and is backward compatible with MT41J family.

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Micron® Memory Support for NXP® i.MX6 Platforms

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Micron Memory		i.MX Processor Memory					
		i.MX 6Quad/i.MX 6Dual/DualLite/Solo i.MX 6QuadPlus/i.MX 6DualPlus			i.MX 6SoloLite		i.MX 6SoloX
		SABRE for Automotive Infotainment	SABRE Platform for Smart Devices	Quick Start Board	Evaluation Kit	WaRP (Wearable Reference Design)	SABRE SDB
DRAM	Type	DDR3	DDR3	DDR3	LPDDR2	eMCP (LPDDR2 with e.MMC)	DDR3
	Family	MT41K*	MT41K*	MT41K*	MT42L	MT29P**	MT41K*
	Density	4Gb	2Gb	2Gb	8Gb	4Gb	4Gb
	Configuration	256 Meg x 16	128 Meg x 16	128 Meg x 16	256 Meg x 32	256 Meg X 16	256 Meg x 16
	Package	96-ball FBGA	96-ball FBGA	96-ball FBGA	168-ball VFBGA	162-ball VFBGA	96-ball FBGA
	Validated PN	MT41J256M16RE	MT41J128M16HA	MT41J128M16HA	MT42L256M32D2LG	MT29PZZZ4D4BKESK	MT41K256M16HA-125:E
	Qty/Board	4	4	4	1	1	2
NAND/e.MMC	Type	Raw	e.MMC	e.MMC	e.MMC	eMCP (LPDDR2 with e.MMC)	e.MMC
	Family	MT29F/MTFC	MTFC	MTFC	MTFC	MT29P**	MTFC
	Density	64Gb	8GB	8GB	8GB	4GB	8GB
	Package	48-pin TSOP	169-ball FBGA	169-ball FBGA	169-ball FBGA	162-ball VFBGA	153-ball TFBGA
	Validated PN	MT29F64G08AFAAA				MT29PZZZ4D4BKESK	MTFC8GLCDM
NOR	Type	Serial (Quad SPI)	Serial (Quad SPI)		Serial (Quad SPI)		Serial (Quad SPI)
	Family	MT25Q	MT25Q		MT25Q		MT25Q
	Density	32Mb	32Mb		32Mb		256Mb
	Package	SO8W	SO8W		SO8W		SO8W

*MT41K family supports both 1.5V and 1.35V power supply and is backward-compatible with MT41J family.
 **Micron's MT29PZZZ4D4BKESK is a multichip package that integrates a 4Gb LPDDR2 and a 4GB e.MMC v4.51 in a single package.

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Micron Memory		i.MX Processor Memory				
		i.MX 6Dual/Quad	i.MX 6Solo	i.MX 6UL (Ultra Lite)		i.MX6ULL
		MX6Q PoP Third-Party Reference Modules	RiOTBoard.ORG	Validation Module		
DRAM	Type	LPDDR2 PoP	DDR3L	DDR3/L		DDR3/L
	Family	MT42L	MT41K*	MT41K*		MT41K
	Density	8Gb	4Gb	4Gb		4Gb
	Configuration	128 Meg x 64	256 Meg x 16	512 Meg x 8		256 Meg x 16
	Package	216-ball PoP	96-ball VFBGA	96-ball FBGA		96-ball VFBGA
	Validated PN	MT42L128M64D2LL-25 AT:A	MT41K256M16HA	MT41K512M8RH		MT41K256M16TW-107:P
	Qty/Board	1	2	2		1
NAND/e.MMC	Type	e.MMC	e.MMC	e.MMC	MLC NAND	
	Family	MTFC	MTFC	MTFC	MT29F	
	Density	4GB	4GB	8GB	32Gb (4Gb)	
	Package	153-ball VFBGA	153-ball WFBGA	153-ball WFBGA	48-pin TSOP	
	Validated PN	MTFC4GACAAAM-4M IT	MTFC4GMVEA-1M WT	MTFC8GACAAAM-4M IT	MT29F32G08CBADAWP	
NOR	Type			Serial (Quad SPI)		Serial (Quad SPI)
	Family			MT25Q, MT25T		MT25Q
	Density			256Mb		256Mb
	Package			V-PDFN-8 (8mm x 6mm)		W-PDFN-8
	Validated PN					MT25QL256ABA1EW9-OSIT

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Micron® Memory Support for NXP® i.MX7 Platforms

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Micron Memory		i.MX Processor Memory				
		i.MX 7			i.MX7ULP	
		SABRE for Smart Devices		Validation Platform		
DRAM	Type	DDR3L		LPDDR3		LPDDR3
	Family	MT41K*		EDFA		MT52L
	Density	4Gb		16Gb		16Gb
	Configuration	256 Meg x 16		512 Meg x 32 (2 rank)		512 Meg x 32
	Package	96-ball VFBGA		168-ball PoP (soldered on board)		168-ball PoP (soldered on PCB)
	Validated PN	MT41K256M16HA		EDFA232A2PF-GD-F-D		MT52L512M32D2PU-107 WT:B
	Qty/Board	2		2		1
NAND/e.MMC	Type	e.MMC	MLC NAND	e.MMC	SLC NAND	e.MMC (5.0)
	Family	MTFC	MT29F	MTFC	MT29F	MTFC
	Density	8GB	32Gb	8GB	32Gb	32GB
	Package	153-ball WFBGA	48-pin TSOP	153-ball WFBGA	48-pin TSOP	153-ball VFBGA
	Validated PN	MTFC8GACAEAM-1M WT	MT29F32G08CBADB	MTFC8GACAEAM-1M WT	MT29F32G08ABCDB14	MTFC8GAKAJCN-1M WT
NOR	Type	Serial (Quad SPI)		Serial (Quad SPI)	Serial (Twin Quad)	Xccela™ Flash (Octal SPI), Serial (Quad SPI)
	Family	MT25Q		MT25Q	MT25TL	MT35X, MT25T, MT25Q
	Density	256Mb		256Mb	512Mb	512Mb
	Package	SO8W		SO8W	SO16	25b BGA
	Validated PN				M25TL512HAA1ESF0AAT	MT35XU512ABA1G12-0SITES

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Micron Memory			Kinetis K Family Processors									
			K80	K70	K60	K50	K40	K30	K20	K10	E, L, M, W	
DRAM	Type	DDR										
	Family	MT46V										
	Density	256Mb–1Gb		✓	✓							
	Configuration	x4, x8, x16										
	Package	TSOP, FBGA										
NAND	Type	Raw (host ECC required)										
	Family	MT29F		✓	✓					✓		
	Density	128Mb–512Gb										
	Package	48-pin TSOP										
NOR	Type	Serial										
	Family	MT25Q		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Density	8Mb–1Gb										
	Package	Many										
Xccela™ Flash	Type	Octal SPI NOR										
	Family	MT35X	✓									
	Density	256Mb–2Gb										
	Package	24-ball T-PBGA										

✓ Indicates the interface is compatible with the memory device.

Micron Memory			Vybrid Processors		
			VF6XX	VF5XX	VF3XX
DRAM	Type	DDR3	LPDDR2		
	Family	MT41K*	MT42L		
	Density	4Gb, 8Gb	4Gb		
	Configuration	x4, x8, x16	x32, x64		
	Package	78-, 96-ball	134-, 253-ball		
NAND	Type	Raw			
	Family	MT29F			
	Density	128–512Gb			
	Package	48-pin TSOP			
NOR	Type	Serial (Quad SPI)			
	Family	MT25Q			
	Density	128Mb–2Gb			
	Package	Many			

✓ Indicates the interface is compatible with the memory device.
*MT41K family supports both 1.5V and 1.35V power supply and is backward-compatible with MT41J family.

Micron Memory		i.MX RT Series	
		i.MX RT 10xx	
DRAM	Type	SDRAM	
	Family	MT48LC	
	Density	256Mb	
	Configuration	16M x 16	
	Package	54-ball FBGA	
	Validated PN	MT48LC16M16A2B4-6A IT:G	
	Quantity/board	1	
NAND/ e.MMC	Type	SPI NAND	e.MMC (5.0/ 4.5 usage)
	Family	MT29F	MTFC
	Density	1GB	8GB
	Package	24-ball T-PBGA	153-ball VFBGA 11.5x13x1mm
	Validated PN	MT29F1G01ABAFD12-IT:F	MTFC8GAKAJCN-1M WT
Quad-SPI/ Parallel NOR	Type	Quad SPI	Parallel
	Family	MT25Q	MT28EW
	Density	128Mb	128Mb
	Package	W-PDFN-8	64-ball LPGA
	Validated PN	MT25QL128ABA1ESE-0SIT	MT28EW128ABA1LPC-0SIT
Xccela™ Flash	Type	Octal SPI NOR	
	Family	MT35X	
	Density	28Mb–2Gb	
	Package	24-ball T-PBGA 6 x 8mm	
	Validated PN	MT35XL512ABA2GSF-0SIT	

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Micron Memory		Automotive Processors	
		ADAS Vision Processor S32V234	Instrument Cluster MAC57D
DRAM	Type	LPDDR2	DDR2
	Family	MT42L	MT47H
	Density	2Gb	1Gb
	Configuration	64M x 32	64M x 16
	Package	134-ball FBGA	84-ball FBGA
	Validated PN	MT42L64M32D1TK-18 AA	MT47H64M16NF-25E
	Quantity/board	2	2
NOR	Type	Serial (Twin Quad SPI)	Serial (Quad SPI)
	Family	MT25TL	MT25Q
	Density	256-1024Mb	128-2048Mb
	Package	SOIC-16, 24-ball T-PBGA	SOIC-16
	Validated PN		
Xccela™ Flash	Type	Octal SPI	Octal SPI
	Family	MT35X	MT35X
	Density	512Mb	512Mb
	Package	24-ball T-PBGA	24-ball T-PBGA
	Validated PN	MT35XL512ABA1G120A-AT	MT35XL512ABA1G120A-AT
NAND/e.MMC	Type	e.MMC	
	Family	MTFC	
	Density	8GB	
	Package	153-ball VFBGA	
	Validated PN	MTFC8GACAAAM-4M-IT	

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Micron® Memory Support for NXP® Networking Platforms

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Micron Memory		QorIQ Processor Memory						
		Value Tier	Mid-Range Tier			High-Performance Tier		
		P1010/P1014	P2022/P2021E	P2041/P2031	T2080/T2081	P408X	P5020/P5040	T4240
DRAM	Type	DDR3/DDR3L	DDR3	DDR3/DDR3L	DDR3/DDR3L	DDR3	DDR3/DDR3L	DDR3/DDR4L
	Family	MT41	MT41	MT41	MT41	MT41	MT41	MT41
	Density	4Gb	4Gb	4Gb	4Gb	4Gb	4Gb	4Gb
	Configuration	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16	512 Meg x 8, 256 Meg x 16
	Package	78-ball, 96-ball	78-ball, 96-ball	78-ball, 96-ball	78-ball, 96-ball	78-ball, 96-ball	78-ball, 96-ball	78-ball, 96-ball
	Base PN	MT41J256M	MT41J256M	MT41J256M	MT41J256M	MT41J256M	MT41J256M	MT41J256M
NAND	Type	Raw (host ECC required)	Raw (host ECC required)	Raw (host ECC required)	Raw (host ECC required)		Raw (host ECC required)	Raw (host ECC required)
	Family	MT29F	MT29F	MT29F	MT29F		MT29F	MT29F
	Density	128Mb–512Gb	128Mb–512Gb	128Mb–512Gb	128Mb–512Gb		128Mb–512Gb	128Mb–512Gb
	Package	48-pin TSOP	48-pin TSOP	48-pin TSOP	48-pin TSOP		48-pin TSOP	48-pin TSOP
NOR	Type	Serial	Serial	Serial	Serial	Serial	Serial	Serial
	Family	MT25Q	MT25Q	MT25Q	MT25Q	MT25Q	MT25Q	MT25Q
	Density	128Mb–2Gb	128Mb–2Gb	128Mb–2Gb	128Mb–2Gb	128Mb–2Gb	128Mb–2Gb	128Mb–2Gb
	Package	Many	Many	Many	Many	Many	Many	Many
e.MMC	Type	Managed (JEDEC STD)	Managed (JEDEC STD)	Managed (JEDEC STD)	Managed (JEDEC STD)	Managed (JEDEC STD)	Managed (JEDEC STD)	Managed (JEDEC STD)
	Family	MTFC	MTFC	MTFC	MTFC	MTFC	MTFC	MTFC
	Density	4GB–64GB	4GB–64GB	4GB–64GB	4GB–64GB	4GB–64GB	4GB–64GB	4GB–64GB
	Package	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA
eUSB	Type	Managed (USB)	Managed (USB)	Managed (USB)	Managed (USB)	Managed (USB)	Managed (USB)	Managed (USB)
	Family	MTEDC	MTEDC	MTEDC	MTEDC	MTEDC	MTEDC	MTEDC
	Density	2GB–16GB	2GB–16GB	2GB–16GB	2GB–16GB	2GB–16GB	2GB–16GB	2GB–16GB
	Package	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm
SATA SSD	Type	Managed (SATA)		Managed (SATA)	Managed (SATA)		Managed (SATA)	Managed (SATA)
	Family	MTFDD		MTFDD	MTFDD		MTFDD	MTFDD
	Density	100GB–960GB		100GB–960GB	100GB–960GB		100GB–960GB	100GB–960GB
	Package	2.5" drive, 7mm height		2.5" drive, 7mm height	2.5" drive, 7mm height		2.5" drive, 7mm height	2.5" drive, 7mm height

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Micron Memory		QoriQ Processor Memory			
		Value Tier			Mid-Range Tier
		LS1020/LS1021/LS1022	T1023/T1024	T1020, T1022, T1040, T1042	LS2085
DRAM	Type	DDR3L	DDR3L UDIMM	DDR3L UDIMM	DDR4 UDIMM
	Density	4Gb	4GB (x72, ECC, DR)	4GB (x72, ECC, DR)	8GB (x72, ECC, DR)
	Configuration	256 Meg x 16	4GB (512 Meg x 72)	4GB (512 Meg x 72)	1 Gig x 72
	Package	96-ball VFBGA	UDIMM (Dual Rank)	UDIMM (Dual Rank)	UDIMM (Dual Rank)
	Part Number	MT41K256M16HA-125:E	MT18KSF51272AZ-1G6	MT18KSF51272AZ-1G6	MTA18ASF1G72AZ-2G1A1
NAND	Type		Raw (host ECC required)	Raw (host ECC required)	Raw (host ECC required)
	Density		8Gb	8Gb	16Gb
	Package		48-pin TSOP	48-pin TSOP	48-pin TSOP
	Part Number		MT29F8G08ABBCAH4	MT29F8G08ABABAWP-ITX:B	MT29F16G08ABABA
NOR	Type	Serial	Serial	Serial	Serial
	Density	128Mb	512Mb	512Mb	512Mb
	Package	24-ball TBGA	SO8, SO16, 24-ball TBGA	SO8, SO16, 24-ball TBGA	SOP2-16/300 mils
	Part Number		MT25QL512ABA1ESF		
e.MMC	Type	Managed (JEDEC STD)		Managed (JEDEC STD)	Managed (JEDEC STD)
	Density	4GB–64GB		4GB–64GB	4GB–64GB
	Package	VFBGA, TFBGA, LFBGA		VFBGA, TFBGA, LFBGA	VFBGA, TFBGA, LFBGA
	Part Number	MTFC		MTFC	MTFC
eUSB	Type	Managed (USB)	Managed (USB)	Managed (USB)	Managed (USB)
	Density	2GB–16GB	2GB–16GB	2GB–16GB	2GB–16GB
	Package	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm	36.9mm x 26.6mm
	Part Number	MTEDC	MTEDC	MTEDC	MTEDC
SATA SSD	Type	Managed (SATA)		Managed (SATA)	Managed (SATA)
	Density	100GB–960GB		100GB–960GB	100GB–960GB
	Package	2.5" drive, 7mm height		2.5" drive, 7mm height	2.5" drive, 7mm height
	Part Number	MTFDD		MTFDD	MTFDD

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