

Micron® Flash Memory Support for Xilinx® Platforms

Save yourself time and money—Micron memory comes *validated* on Xilinx platforms

Micron Flash	SPI NOR Flash	BPI NOR Flash		NAND Flash	Managed NAND	
	MT25Q	MT28EW	MT28FW	MT29F Parallel	MTFC	MTFC
Family	MT25Q	MT28EW	MT28FW	MT29F Parallel	MTFC	MTFC
Voltage	1.8V, 3.3V	3.3V Vcc/1.8-3.3V I/O	3.3V Vcc/1.8-3.3V I/O	1.8V, 3V	3V, 1.8V	3V
Speed ¹	133 MHz/108 MHz	Asynch	Asynch	30 MB/s	e.MMC 5.0	e.MMC 4.41/4.51
Width	x1, x2, x4	x8, x16	x16	x8, x16	x1, x4, x8	x1, x4, x8
Density	128Mb–2Gb	128Mb–1Gb	2Gb	1Gb–128Gb	4GB–64GB	4GB–64GB
Xilinx FPGA Family	MPSoC					
	Zynq® UltraScale+™ MPSoC/RFSoc	✓			✓	✓
	SoC					
	Zynq-7000 SoC	✓	✓ ⁴		✓	✓ ²
	Xilinx UltraScale+™ Series FPGAs					
	Virtex®	✓	✓	✓		
	Kintex®	✓	✓	✓		
	Xilinx UltraScale™ Series FPGAs					
	Virtex	✓	✓	✓		
	Kintex	✓	✓	✓		
	Xilinx 7-Series FPGAs					
	Virtex-7 (1.8V only)	✓	✓	✓		
	Kintex-7	✓	✓	✓		
	Artix-7	✓	✓	✓		
	Spartan®-7	✓				
	Xilinx 6-Series FPGAs					
	Virtex-6 (x1 SPI only)	✓ ³				
	Spartan-6	✓ ³	✓ ⁵			
	Xilinx Legacy FPGAs					
	Virtex-5	✓ ³				
	Spartan-3A	✓ ³				

Please verify exact configuration and specification with your Xilinx or Micron representative. [Ⓜ] Pending characterization. 1. The max flash speed is dependent on the FPGA family supported frequency. 2. Zynq-7000 supports x1 and x4 modes for storage only (cannot be used for boot). 3. MT25Q 128Mb is supported in ISE 14.7 by selecting N25Q128 in iMPACT. 4. x8 support only. 5. Contact Xilinx for a workaround solution on Spartan-6 platforms with ISE 14.7 iMPACT.

Products are warranted only to meet Micron's production data sheet specifications. Products, programs and specifications are subject to change without notice. Dates are estimates only. ©2012 Micron Technology, Inc. All rights reserved. All information herein is provided on an "AS IS" basis without warranties of any kind. Micron, the Micron logo, RDRAM and all other Micron trademarks are the property of Micron Technology, Inc. Xilinx, Zynq, Virtex, Kintex, Artix, and Spartan are registered trademarks and UltraScale is a trademark of Xilinx Inc. All other trademarks are property of their respective owners. Rev. M 5/18 CCMMD-676576390-2452



Micron® DRAM Memory Support for Xilinx® Platforms

Save yourself time and money—Micron memory comes *validated* on Xilinx platforms

Micron DRAM		DDR4	DDR3L ⁴ /DDR3	DDR2	DDR	RLDRAM ^{®3}	RLDRAM ^{®2}	LPDDR4	LPDDR3	LPDDR2	HMC	
	Family	MT40A	MT41K/MT41J	MT47	MT46	MT44	MT49	MT53	EDF/MT52	MT42	MT43	
	Voltage (Core)	1.2V	1.35V, 1.5V	1.8V	2.5V	1.35V	1.8V	1.1V	1.2V	1.2V	1.2V	
	Speed	526–1333 MHz	300–1066 MHz	125–533 MHz	77–200 MHz	200–1066 MHz	175–533 MHz	10–1600 MHz	10–933 MHz	10–533 MHz	15 Gb/s	
	Width	x4 ¹ , x8, x16	x4 ¹ , x8, x16	x8, x16	x8, x16	x18, x36	x18, x36	x32	x32, x64	x16, x32	x32, x64	
	Density	4Gb, 8Gb	1Gb, 2Gb, 4Gb, 8Gb	512Mb, 1Gb, 2Gb	256Mb, 512Mb	576Mb, 1.125Gb	288Mb, 576Mb	8Gb, 16Gb	8Gb, 16Gb, 32Gb	512Mb–16Gb	2GB, 4GB	
	Modules	UDIMM, RDIMM, LRDIMM, SODIMM				–	–	–	–	–	–	
Xilinx FPGA Family	Extensible Processing Platforms – Zynq® UltraScale+™ -MPSoC/RFSoC											
	Processing System	✓	✓					✓	✓			
	Programmable Logic	✓	✓			✓	✓		✓		✓	
	Extensible Processing Platforms – Zynq-7000 SoC²											
	Processing System		✓ ³	✓							✓	
	Programmable Logic		✓	✓							✓	
	Xilinx UltraScale+ Series FPGAs											
	Virtex®	✓	✓			✓				✓		✓
	Kintex®	✓	✓			✓				✓		✓
	Xilinx UltraScale Series FPGAs											
	Virtex	✓	✓			✓				✓		✓
	Kintex	✓	✓			✓				✓		✓
	Xilinx 7-Series FPGAs											
	Virtex-7		✓	✓		✓	✓				✓	
	Kintex-7		✓	✓		✓	✓				✓	
	Artix®-7		✓	✓							✓	
	Spartan®-7		✓	✓								
	Xilinx 6-Series FPGAs											
	Virtex-6		✓	✓				✓				
	Spartan-6		✓	✓		✓						
Xilinx Legacy FPGAs												
Virtex-5		✓	✓	✓	✓		✓					
Spartan-3A			✓	✓	✓							

Please verify exact configuration and specification with your Xilinx or Micron representative. 1. The x4 width applies to UltraScale FPGAs only. 2. DRAM DIMMs not supported on Zynq-7000. 3. Zynq processing system can run up to 667 MHz on DDR3. 4. DDR3L (MT41K) devices are compatible with operation at 1.5V. Note that some density and speed combinations may be available only as 1.35V part numbers, but these meet the specification for operation at 1.5V.

Products are warranted only to meet Micron's production data sheet specifications. Products, programs and specifications are subject to change without notice. Dates are estimates only. ©2012 Micron Technology, Inc. All rights reserved. All information herein is provided on an "AS IS" basis without warranties of any kind. Micron, the Micron logo, RLDRAM and all other Micron trademarks are the property of Micron Technology, Inc. Xilinx, Zynq, Virtex, Kintex, Artix, and Spartan are registered trademarks and UltraScale is a trademark of Xilinx Inc. All other trademarks are property of their respective owners.
Rev. M 5/18 CCMMD-676576390-2452

