

# Micron® DRAM Memory Support for Intel® IoT Platforms

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

	Form Factor	Density	Memory Configuration
<b>Intel Atom™ Processor</b>			
Atom Processor C3000 series – <b>Denverton NS</b>	FBGA (memory down)*	4Gb, 8Gb	DDR4-2400
Atom Processor E3900 series, Intel Celeron™ Processor N3350, and Intel Pentium™ Processor N4200 – <b>Apollo Lake</b>	FBGA (memory down)*	4Gb–32Gb	LPDDR4-1600
Atom x3-C3230RK Processor – <b>SoFIA 3G-R</b>	VFBA eMCP*	8GB e.MMC 5.0 + 8Gb LPDDR3	e.MMC v5.0 + LPDDR3-1866 x32
Atom x5-Z8300 Processor – <b>Cherry Trail</b>	FBGA, PoP (memory down)	16Gb–32Gb	LPDDR3-1866
Pentium and Celeron Processor N3000 Product Families – <b>Brasswell</b>	FBGA (memory down)*	4Gb, 8Gb	DDR3L-1600
	ECC/non-ECC SODIMM*	2GB, 4GB, 8GB	DDR3L-1600
Atom Processor E3800 – <b>Bay Trail</b>	FBGA (memory down)*	4Gb	DDR3L-1333/1600
Atom Processor C2000 – <b>Rangeley</b>	ECC SODIMM*	4GB, 8GB	DDR3L-1600
<b>Intel Core™ i5 and Core™ i7 Processors</b>			
7th Generation Intel Core Desktop/Mobile Processor Family and Intel Xeon® Processor E3-1500 v6 Product Family with Intel 100 Series or CM230 Series Chipsets – <b>Kaby Lake H/S/U/Y</b>	FBGA (memory down)*	4Gb, 8Gb, 16Gb	DDR4-2400
	non-ECC SODIMM*	2GB, 4GB, 8GB, 16GB	DDR4-2400
	ECC UDIMM	4GB, 8GB, 16GB	DDR4-2400
6th Generation Intel Core Desktop/Mobile Processor Family with Intel 100 Series Chipsets and Intel Xeon Processor E3-1200/ E3-1500 v5 Product Family with C230/CM230 Series Chipsets – <b>Skylake S/H/U</b>	FBGA, PoP (memory down)	8Gb–32Gb	LPDDR3-1866/2133
	FBGA (memory down)*	4Gb, 8Gb	DDR4-2133
5th Generation Intel Core Processors with Mobile Intel QM87 and HM86 Chipsets – <b>Broadwell H/U</b>	UDIMM, SODIMM*	4Gb, 8Gb, 16GB	DDR4-2133
	FBGA (memory down)*	4Gb, 8Gb	DDR3L-1600
4th Generation Intel Core Processors with Intel Communications Chipset 89xxCC Series – <b>Glen Forest (Haswell Mobile + Cave Creek)</b>	SODIMM*	2GB, 4GB, 8GB	DDR3L-1600
	FBGA (memory down)*	4Gb, 8Gb	DDR3L-1600
Intel Xeon, Intel Core, and Intel Pentium Processors with Intel Communications Chipset 89xx Series – <b>Crystal Forest/ Gladden Refresh</b>	ECC UDIMM*, LRDIMM, RDIMM, VLP RDIMM	2GB, 4GB, 8GB	DDR3/L-1333/1600
4th Generation Intel Core Processors with Intel Q87 Chipset – <b>Shark Bay Desktop (Haswell + Lynx Point)</b>	UDIMM*	4GB, 8GB	DDR4-2133
4th Generation Core Processors with Mobile Intel QM87 and HM86 Chipsets – <b>Shark Bay Mobile (Haswell + Lynx Point)</b>	FBGA (memory down)*	4Gb, 8Gb	DDR3L-1600
	SODIMM*	2GB, 4GB, 8GB	DDR3L-1600
<b>Intel Xeon® Processor</b>			
Intel Xeon Scalable Processors with Intel C620 Series Chipsets – <b>Purley (Skylake-SP and Lewisburg)</b>	RDIMM	4GB–128GB	DDR4-2666
	LRDIMM	64GB–128GB	DDR4-2666
Intel Xeon Processor E5-2600 v4 Product Family with Intel C612 Chipset – <b>Grantley Refresh (Broadwell-EP + Wellsburg)</b>	RDIMM	8GB, 16GB, 32GB	DDR4-1600/2133/2400
Intel Xeon Processor D-1500 Product Family – <b>Broadwell DE</b>	ECC UDIMM*	8GB, 16GB	DDR4-2133
Intel Xeon Processor E5-2600 v3 Product Family with Intel Communications Chipset 89xx Series – <b>River Forest (Haswell + Coletto Creek)</b> and Intel Xeon Processor E5-2600 v3 Product Family with Intel C612 Chipset – <b>Grantley (Haswell-EP + Wellsburg)</b>	LRDIMM	32GB	DDR4-2133
	RDIMM	4GB, 8GB, 16GB	DDR4-2133/2400
Intel Xeon Processor E5-2600 v2 Product Family with Intel Communications Chipset 89xx Series – <b>Crystal Forest/Server Refresh</b> and Intel Xeon Processor E5-2600 v2 Product Family with Intel C604 Chipset and Intel C602-J Chipset – <b>Romley-EP Refresh</b>	RDIMM	2GB, 4GB, 8GB, 16GB, 32GB	DDR3/L-1066/1333/1600/1866
	LRDIMM	8GB, 16GB, 32GB, 64GB	DDR3/L-1333/1600/1866
	ECC UDIMM*	2GB, 4GB, 8GB	DDR3-1600/1866

Please verify exact configuration and specification with your Intel or Micron representative.

\* These devices have lifecycles supported for 5 to 10+ years. For more details, go to [www.micron.com/lifecycle](http://www.micron.com/lifecycle) or contact your Micron representative. For more details on Micron memory for Intel platforms, go to [www.micron.com/solutions/micron-valued-partner-program/chipset-partner/intel](http://www.micron.com/solutions/micron-valued-partner-program/chipset-partner/intel).

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Micron Flash		SPI NOR	e.MMC		
	Family	MT25Q	v4.41	v4.51 <sup>2</sup>	v5.0 <sup>2</sup>
	Density	32–64MB (128Mb–1Gb)	4MB–128GB		
	Voltage	3V/1.8V	3V V <sub>CC</sub> ; 3V/1.8V I/O		
	Speed	108/133/166 MHz	SDR/DDR 52 MHz	SDR/DDR 52 MHz, HS200	SDR/DDR 52 MHz, HS200 HS400
	Width		x1, x4, x8		
	Temperature/Grade	Industrial, Automotive	Automotive, Industrial, Wireless		
	Packages	SO16, DFN6x8, BGA	100/153/169-ball BGA, 162-ball eMCP BGA		
Intel Atom™ Processor					
Atom Processor C3000 series – <i>Denverton NS</i>		✓			✓
Atom Processor E3900 series, Intel Celeron™ Processor N3350 and Intel Pentium™ Processor N4200 – <i>Apollo Lake</i>		✓		✓	✓
Atom x3-C3230RK Processor – <i>SoFIA 3G-R</i>				✓	✓
Atom x5-Z8300 Processor – <i>Cherry Trail</i>			✓	✓	✓
Pentium and Celeron Processor N3000 Product Families – <i>Brasswell</i>			✓	✓	✓
Intel Core™ i5 and Core™ i7					
7th Generation Intel Core Desktop/Mobile Processor Family and Intel Xeon Processor E3-1500 v6 Product Family with Intel 100 Series or CM230 Series Chipsets – <i>Kaby Lake H/S/U/Y</i>		✓			
6th Generation Intel Core Desktop/Mobile Processor Family with Intel 100 Series Chipsets and Intel Xeon Processor E3-1200/E3-1500 v5 Product Family with Intel C230/CM230 Series Chipsets – <i>Skylake S/H/U</i>		✓			
5th Generation Intel Core Processors with Mobile Intel QM87 and HM86 Chipsets – <i>Broadwell H/U</i>		✓			
4th Generation Intel Core Processors with Intel Communications Chipset 89xxCC Series – <i>Glen Forest (Haswell Mobile + Cave Creek)</i>		✓			
Intel Xeon, Intel Core, and Intel Pentium® Processors with Intel Communications Chipset 89xx Series – <i>Crystal Forest/Gladden Refresh</i>		✓			
4th Generation Intel Core Processors with Intel Q87 Chipset – <i>Shark Bay Desktop (Haswell + Lynx Point)</i>		✓			
4th Generation Intel Core Processors with Mobile Intel QM87 and HM86 Chipsets – <i>Shark Bay Mobile (Haswell + Lynx Point)</i>		✓			
Xeon® Processor					
Intel Xeon Scalable Processors with Intel C620 Series Chipsets – <i>Purley (Skylake-SP and Lewisburg)</i>		✓			
Intel Xeon Processor E5-2600 v4 Product Family with Intel C612 Chipset – <i>Grantley Refresh (Broadwell-EP + Wellsburg)</i>		✓			
Intel Xeon Processor D-1500 Product Family – <i>Broadwell DE</i>		✓			
Intel Xeon Processor E5-2600 v3 Product Family with Intel Communications Chipset 89xx Series – <i>River Forest (Haswell + Coletto Creek)</i> and Intel Xeon Processor E5-2600 v3 Product Family with Intel® C612 Chipset – <i>Grantley (Haswell-EP + Wellsburg)</i>		✓			

Please verify exact configuration and specification with your Intel or Micron representative.

1. EOL pending; please contact your Micron representative for details.
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- For more details on Micron memory for Intel platforms, go to [www.micron.com/solutions/micron-valued-partner-program/chipset-partner/intel](http://www.micron.com/solutions/micron-valued-partner-program/chipset-partner/intel).