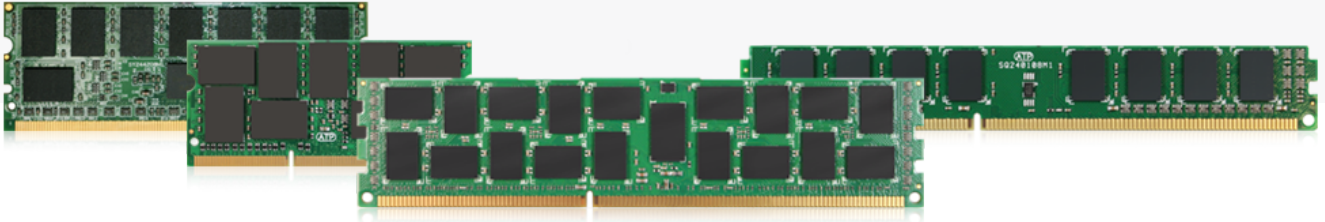# DDR3

The Global Leader in Specialized Storage and Memory Solutions

Key Features

- Density: 1 GB to 16 GB
- Chipkill support
- Fly-by command/address/control bus with on-DIMM termination

- Higher bandwidth performance, effectively up to 1866 MT/s
- Better performance at low power; 1.5V (Normal) and 1.35V (Low Voltage)

Operating at 1.5V (normal) and 1.35V (low voltage) and with a transfer speed of up to 1866 MT/s, ATP DDR3 modules deliver better performance while consuming significantly less power than DDR2 memory. ATP DDR3 modules are supported by the Intel® Core™ i7 Series, the AMD AM3 Phenom™ processor, and the latest AMD Embedded Enterprise Chipsets. DDR3 modules are not pin-compatible with the prior-generation modules and have alignment notches preventing them from being inserted into incompatible slots.

ATP offers DDR3 SDRAMs in a wide range of form factors and features including SO-DIMM and Mini-DIMM with low profile, very low profile (VLP) and ultra-low profile (ULP) options.

In addition to standard offerings, ATP's DDR3 product line has enhanced reliability options such as conformal coating for protection against dust, chemicals, extreme temperatures and corrosion. The 30μ" thickness of the gold finger plating ensures better durability and signal transmission quality.

Technologies & Add-On Services	30μ" Golden Finger	ATP TDBI	Wide Temperature	Anti-Sulfur Resistors	Conformal Coating	PCB Chamfer
RDIMM	●	●	▲	▲	—	▲
ECC UDIMM	●	●	▲	▲	▲	▲
Non-ECC UDIMM	●	●	▲	▲	▲	▲
ECC SO-DIMM	●	●	▲	▲	▲	▲
Non-ECC SO-DIMM	●	●	▲	▲	▲	▲
Mini-RDIMM	●	●	▲	▲	—	—
Mini-UDIMM	●	●	▲	▲	—	—

▲: Optional

Specifications

DDR3							
DIMM Type	RDIMM	ECC UDIMM	Non-ECC UDIMM	ECC SO-DIMM	Non-ECC SO-DIMM	Mini-RDIMM	Mini-UDIMM
Density	1 GB to 8 GB	1 GB to 16 GB				1 GB to 8 GB	
Speed up to (MT/s)	1866					1600	
PCB Height*	Low profile / VLP / ULP		Low profile / VLP	Low profile / ULP	Low profile	Low profile / VLP / ULP	
Operating Temperature	0°C to 85°C / -40°C to 85°C						

* VLP: 0.74", ULP: below 0.74"

DDR3 8Gbit Component							
Form Factor	RDIMM	VLP RDIMM	UDIMM	UDIMM ECC	ULP UDIMM ECC	SO-DIMM	SO-DIMM ECC
ECC	Yes		No	Yes		No	Yes
Density	32 GB	16 GB					
Org	4G x 72	2G x 72	2G x 64	2G x 72		2G x 64	2G x 72
Ranks	4	2					
Component Org	1G x 4 x 2R		1G x 8				
Component Qty.	36 / 72 Die	18 / 36 Die	16	18		16	18
Speed up to (MT/s)	1333	1600					
Technology	DDP		Mono				

Hot Items Ordering Information					
SPEED	SIZE	CHIP	HEIGHT	Ranks	P/N
Unbuffered Non ECC Module DDR3-1600	4 GB	512x8	1.18"	1	AQ12P64A8BLK0M
Unbuffered Non ECC Module DDR3-1600	8 GB	512x8	1.18"	2	AQ24P64B8BLK0M
Unbuffered Non ECC SO-DIMM DDR3-1600	4 GB	512x8	1.18"	1	AW12P6438BLK0M
Unbuffered Non ECC SO-DIMM DDR3-1600	8 GB	512x8	1.18"	2	AW24P64F8BLK0M

Product spec and its related information are subject to change without advance notice.
Please refer to www.atpinc.com for latest information

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