# ATP DDR3 DRAM Solutions

Intense Performance for Intense Workloads

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.
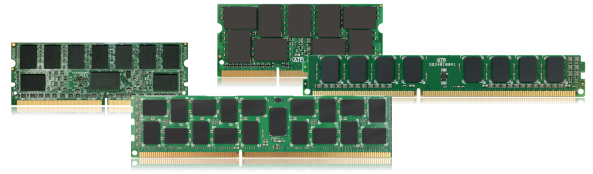
Key Features

- Density: 1 GB to 32 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)

Applications

- The Internet of Things (IoT)
- Networking systems
- Telecommunication
- Gaming
- Healthcare
- Industrial PCs
- Micro servers

Industrial Temperature	Anti-Sulfur Resistors	Conformal Coating	Thicker Gold Finger	Test During Burn-In (TDBI)	Complete Drive Test

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 32 GB	1 GB to 16 GB	1 GB to 16 GB	1 GB to 16 GB	1 GB to 16 GB	1 GB to 16 GB	1 GB to 16 GB
Speed up to (MT/s)	1866	1866	1866	1866	1866	1600	1600
PCB Height*	Low profile / VLP / ULP	Low profile / VLP / ULP	Low profile / VLP / ULP	Low Profile	Low Profile	Low profile / VLP / ULP	Low profile / VLP / ULP
Operating Temperature	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°C	0°C to 85°C / −40°C to 95°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	Yes	No	Yes	Yes	No	Yes
Density	32 GB	16 GB	16 GB	16 GB	16 GB	16 GB	16 GB
Org	4G x 72	2G x 72	2G x 64	2G x 72	2G x 72	2G x 64	2G x 72
Ranks	4	2	2	2	2	2	2
Component Org	1G x 4 x 2R	1G x 4 x 2R	1G x 8	1G x 8	1G x 8	1G x 8	1G x 8
Component Qty.	36 / 72 Die	18 / 36 Die	16	18	18	16	18
Speed up to (MT/s)	1333	1600	1600	1600	1600	1600	1600
Technology	DDP	DDP	Mono	Mono	Mono	Mono	Mono

ATP Global Footprint

To learn more about this product, contact your ATP Representative.

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