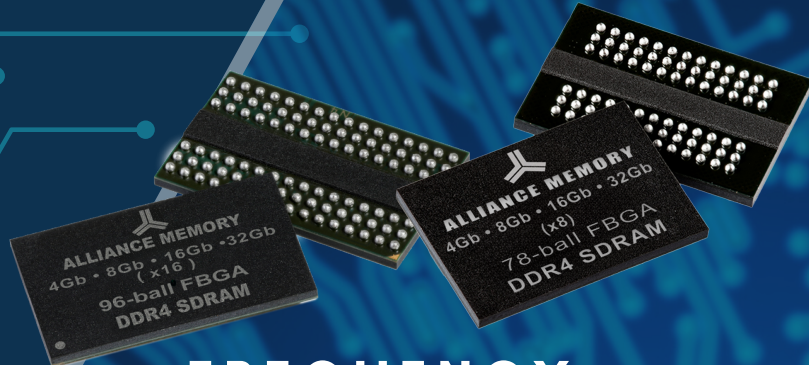




DDR4 SDRAM

Available Now



FEATURES

- VDD = VDDQ = 1.2V $\pm$ 60mV
- VPP = 2.5V, -125mV, +250mV
- 1.2V pseudo open-drain I/O
- 8n-bit prefetch architecture
- Programmable data strobe preambles
- Data strobe preamble training
- Nominal, park, and dynamic on-die termination
- Temperature controlled refresh (TCR)
- Low-Power auto self refresh (LPASR)
- On-die, internal, adjustable VREFDQ generation
- 8 internal banks (x16): 2 groups of 4 banks each
- Command/Address latency (CAL)
- Data bus inversion (OBI) for data bus
- Multipurpose register READ and WRITE capability
- Data bus write cyclic redundancy check (CRC)

FREQUENCY

- 1.20GHz
- 1.33GHz
- 1.60GHz

DATA RATE

- 2.4 Gbps
- 2.6 Gbps
- 3.2 Gbps

TEMPERATURE

- 0°C to 95°C
- -40°C to 95°C

ARCOTEK
Memory, Storage, Solutions since 1994

Alliance Authorized Supplier

Why Engage with Alliance Memory?

- Great customer service and support (initial response <24hrs)
- Strong supply chain strategy (multiple manufacturing sites)
- Pin-to-pin drop-in replacements to mainstream suppliers
- Balanced inventory management (US & Taiwan)
- Minimal or no die shrinks, long-term support
- Industry-best lead times: average 4-8 weeks
- Competitive and stable pricing
- Quick sample turnaround

- Per-DRAM addressability
- Connectivity test
- JEDEC JESD-79-4 compliant
- Self-refresh abort
- Maximum power saving
- Self-refresh mode
- Command/Address (CA) parity
- Output driver calibration
- Write leveling
- Fine granularity refresh

DDR4

PROCESSOR COMPATIBLE MEMORY INTERFACE

NXP

- i.MX 8M Plus
- i.MX 8M Dual/Quad Lite
- i.MX 8M Mini/Nano

- Layerscape LS1xxx
- Layerscape LS2xxx
- T Series T1x/2x/4x

Microchip

- PolarFire

INTEL

- Agilex FPGA
- Agilex SOCs
- Stratix 10 FPGAs

- Stratix 10 SoCs
- Arria 10 FPGAs / SOCs
- eASIC N5X

Lattice

- Avant-E
- Avant-G
- Avant-X

XILINX

- Versal ACAP
- Zynq UltraScale+
- Virtex UltraScale+

- Kintex UltraScale+
- Artix UltraScale+
- Kintex UltraScale
- Virtex UltraScale

Synaptics

- VS-550
- VS-640

TEXAS INSTRUMENTS

- AM65xx
- DRA80X
- AM335x

- AM64x Sitara
- AM62x Sitara
- AM243x Sitara

Ambarella

- CV28
- CV25
- CV2

- H32
- S6LM

CROSS REFERENCES

Density	Alliance PN	Micron PN	Samsung PN	Hynix PN	Nanya PN	ISSI MPN
4Gb (x16)	AS4C256M16D4	MT40A256M16	K4A4G165W	H5AN4G6N	NT5AD256M16	IS43QR16256
4Gb (x8)	AS4C512M8D4	MT40A512M8	K4A4G085W	H5AN4G8N	NT5AD512M8	IS43QR85120
8Gb (x16)	AS4C512M16D4	MT40A512M16	K4A8G165W	H5AN8G6N	NT5AD512M16	IS43QR16512
8Gb (x8)	AS4C1G8D4	MT40A1G8	K4A8G085W	H5AN8G8N	NT5AD1024M8	IS43QR81024
16Gb (x16)	AS4C1G16D4	MT40A1G16	K4AAG165W	H5ANAG6N		
16Gb (x8)	AS4C2G8D4	MT40A2G8	K4AAG085W	H5ANAG8N		IS43QR8K02
32Gb (x16)	AS4C2G16D4	MT40A2G16	K4ABG165W	H5ANBG6N		
32Gb (x8)	AS4C4G8D4	MT40A4G8	K4ABG085W	H5ANBG8N		

LONGEVITY

