

## DESCRIPTION:

This document describes Aplus 4GBx 64-bit 32GB DDR4 SDRAM (Synchronous DRAM) Dual In-Line Memory Module. The components on this module include sixteen 2GB x 8-bit DDR4 SDRAMs in FBGA packages and a 2048-bit serial EEPROM. Those components were mounted on a 260-pin printed circuit board. This 260-pin SO\_DIMM is used to be mounted into 260-pin edge connector sockets and data I/O transactions could be apply on both edges of DQS. The electrical and mechanical specifications are as follows:

## FEATURES:

- 260-pin, small-outline dual in-line memory module (SODIMM)
- Fast data transfer rates: PC4-2666
- 32GB (4 Gig x 64)
- VDD = 1.20V (NOM)
- VPP = 2.5V (NOM)
- VDDSPD = 2.5V (NOM)
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Dual-rank
- On-board I2C serial presence-detect (SPD) EEPROM
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Gold edge contacts
- Halogen-free
- Fly-by topology
- Terminated control, command, and address bus

## Options

Operating temperature<sup>1</sup>

- Commercial (0°C ≤TA ≤+90°C)

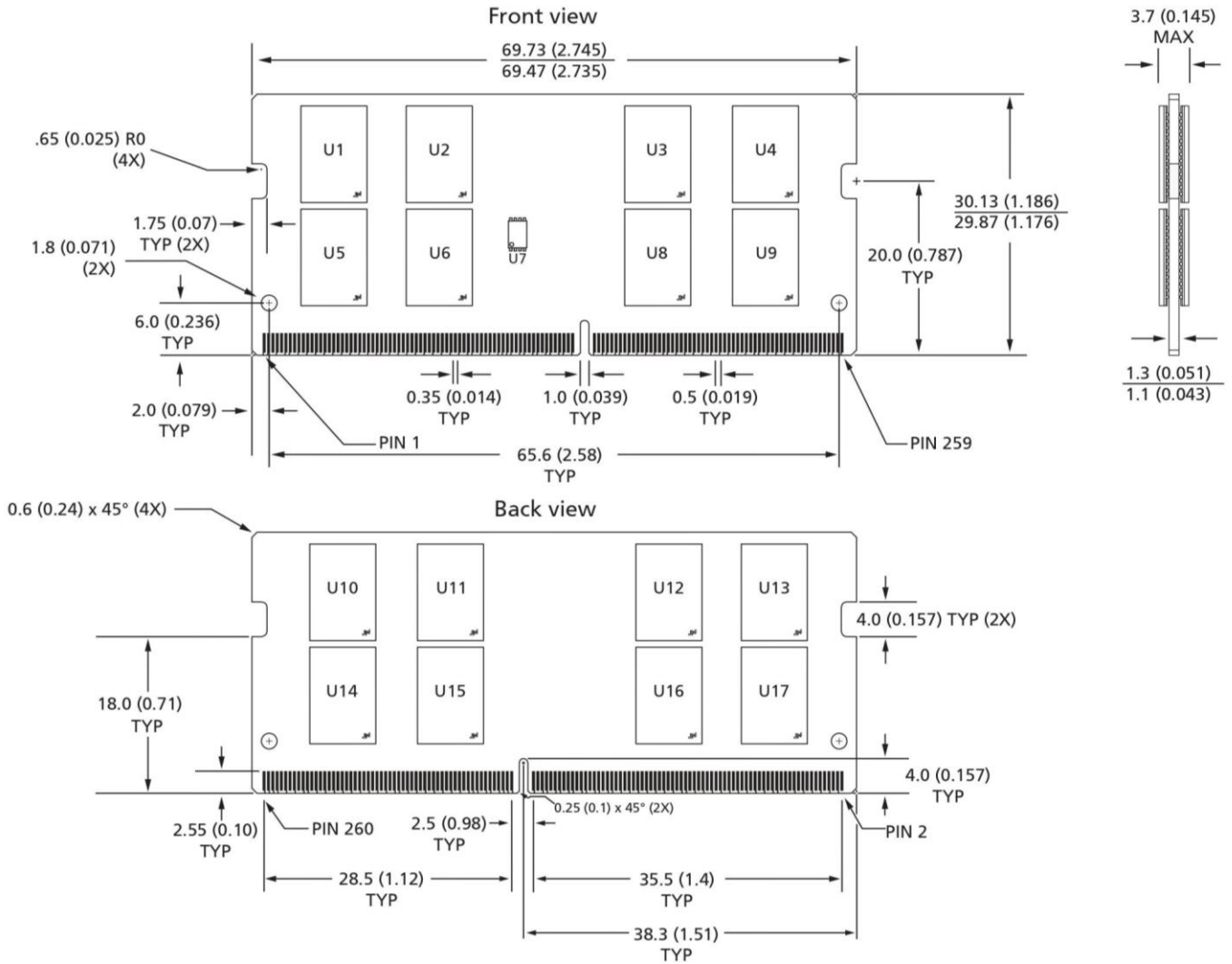
Frequency/CAS latency

- 0.75ns @ CL = 19 (DDR4-2666)

## PERFORMANCE:

Industry	Data Rate (MT/s)	Row Cycle Time (tRCmin)	Refresh to Active/Refresh Command Time (tRFCmin)	Row Active Time (tRASmin)	Clock Cycles (CL-tRCD-tRP)
Nomenclature	CL=19				
PC4-2666	2666	45.75ns(min.)	350ns(min.)	32ns(min.)	19-19-19

## 260-Pin DDR4 SODIMM



- Notes: 1. All dimensions are in millimeters (inches); MAX/MIN or typical (TYP) where noted.  
2. The dimensional diagram is for reference only.