

## Rugged DDR3 Unbuffered Non-ECC SODIMMs

### Ruggedized Features:

- Thermal Heat-spreader
- Temperature Screening
  - Industrial Extend-Temp: -40°C to +85 °C

### Available Options:

- Conformal Coated
- Under-fill
- Thermal Sensor
- Temperature Screening



### DESCRIPTION:

Virtium offers DDR3 unbuffered Non-ECC small outline dual in-line memory modules (SODIMM) in a selected range of densities, speeds and features.

Virtium's SODIMMs are designed to satisfy the demanding memory applications for Embedded, Telecom, Networking, Storage, Military, Aerospace and Ruggedized Computer marketplace.



### FEATURES:

- 204-pin, Unbuffered Non-ECC small outline dual in-line memory module (SODIMMs)
- Proposed JEDEC pin-out
- PC3-12800, PC3-10600, PC3-8500, PC3-6400
- VDD = VDDQ = 1.5V +/- 0.075V
- VDDSPD = 3V to 3.6V
- JEDEC standard 1.5V +/- 0.075V I/O (SSTL\_15 compatible)
- Operating temperature: -40°C to +85°C
- Industrial temperature range also available
- 8 Banks
- 8-bit pre-fetch architecture
- Bi-directional Differential Data-Strobe
- Programmable Burst Length (8)
- On-die termination (ODT)
- Average Refresh Period 7.8us
- Serial presence detect with EEPROM
- Fly-by topology
- Lead-free, RoHS compliant

### BENEFITS:

- Low Power
- High densities
- High operational frequency

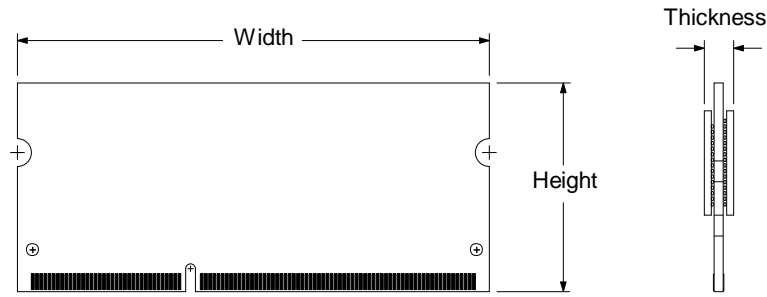
### APPLICATIONS:

- Single Board Computers
- Embedded Computing Platforms

### Non-ECC SODIMM

DENSITY	HEIGHT	THICKNESS	MAX SPEED	COMP. DENSITY	COMP. PACKAGE	COMP. CONFIG.	MODULE RANKS	CL	PART NUMBER
4GB	1.232"	0.181"	PC3-12800	2Gbit	Monolithic	x8	2	11	VL47B5263A-K0
4GB	1.232"	0.181"	PC3-10600	2Gbit	Monolithic	x8	2	9	VL47B5263A-K9
4GB	1.232"	0.181"	PC3-8500	2Gbit	Monolithic	x8	2	7	VL47B5263A-F8
2GB	1.232"	0.181"	PC3-12800	1Gbit	Monolithic	x8	2	11	VL47B5663A-K0
2GB	1.232"	0.181"	PC3-10600	1Gbit	Monolithic	x8	2	9	VL47B5663A-K9
2GB	1.232"	0.181"	PC3-8500	1Gbit	Monolithic	x8	2	7	VL47B5663A-F8
1GB	1.232"	0.181"	PC3-12800	1Gbit	Monolithic	x8	1	11	VL47B2863A-K0
1GB	1.232"	0.181"	PC3-10600	1Gbit	Monolithic	x8	1	9	VL47B2863A-K9
1GB	1.232"	0.181"	PC3-8500	1Gbit	Monolithic	x8	1	7	VL47B2863A-F8

## Mechanical Outline



Unit	Width	Height	Thickness
Inches	2.661	1.232	0.181
Millimeters	67.60	31.30	4.60

## Additional Virtium Memory Products

**VLP (Very Low Profile) SODIMM**

**Unbuffered ECC SODIMM (SO-UDIMM)**

**Registered ECC SODIMM (SO-RDIMM)**



*Virtium Technology provides memory and solid state storage solutions for single board computers and high-reliability systems.*

30052 Tomas, Rancho Santa Margarita, CA 92688 USA Tel 949.888.2444 [www.virtium.com](http://www.virtium.com)

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