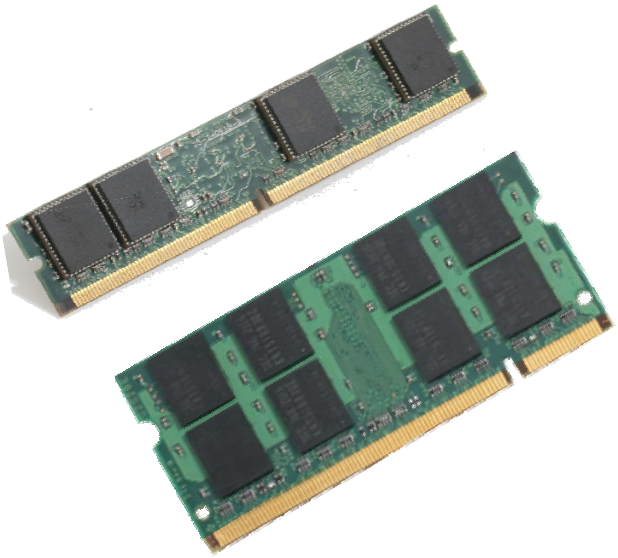
DDR3 Unbuffered Non-ECC VLP and Standard SODIMMs



Features:

- 204-pin, Unbuffered Non-ECC VLP and standard small outline dual in-line memory modules (SODIMMs)
- Proposed JEDEC pin-out
- 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: 0°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
- Available option: Thermal Sensor

Benefits:

- Very Low Profile
- Low Power
- High densities
- High operational frequency

Applications:

- Single Board Computers
- Embedded Computing Platforms
- Telecommunication Servers
- Networking & Storage Appliances
- Military & Aerospace Systems

Description:

Virtium offers DDR3 unbuffered Non-ECC in VLP (Very Low Profile: 0.72” high) and standard small outline dual in-line memory modules (SODIMM) in a selected range of densities, speeds and features.

The VLP form-factors are well suited for space constrained systems with height restrictions and low airflow requirements.

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

VLP (Very Low Profile) SODIMM

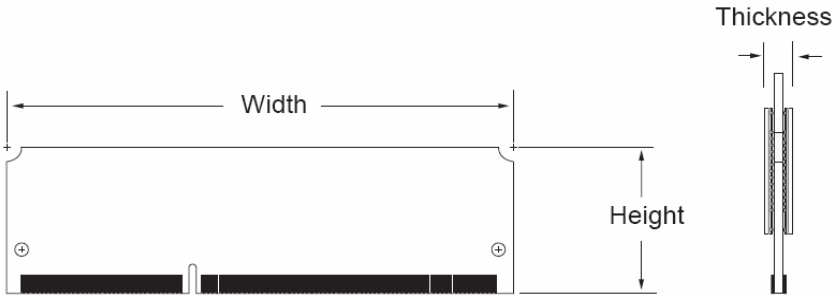
DENSITY	HGT.	THICKNESS	MAX SPEED	COMP. DENSITY	COMP. PACKAGE	COMP. CONFIG.	MODULE RANKS	CL	PART NUMBER
2GB	0.72”	0.320”	PC3-10600	1Gbit	BGA stack	x8	2	9	VL47B5669E-K9
2GB	0.72”	0.320”	PC3-8500	1Gbit	BGA stack	x8	2	8	VL47B5669E-G8
2GB	0.72”	0.320”	PC3-8500	1Gbit	BGA stack	x8	2	7	VL47B5669E-F8
1GB	0.72”	0.140”	PC3-10600	1Gbit	Monolithic	x8	1	9	VL47B2863E-K9
1GB	0.72”	0.140”	PC3-8500	1Gbit	Monolithic	x8	1	8	VL47B2863E-G8
1GB	0.72”	0.140”	PC3-8500	1Gbit	Monolithic	x8	1	7	VL47B2863E-F8

Standard SODIMM

DENSITY	HGT.	THICKNESS	MAX SPEED	COMP. DENSITY	COMP. PACKAGE	COMP. CONFIG.	MODULE RANKS	CL	PART NUMBER
4GB	1.181”	0.140”	PC3-10600	2Gbit	Monolithic	x8	2	9	VL47B5263A-K9
4GB	1.181”	0.140”	PC3-8500	2Gbit	Monolithic	x8	2	8	VL47B5263A-G8
4GB	1.181”	0.140”	PC3-8500	2Gbit	Monolithic	x8	2	7	VL47B5263A-F8
2GB	1.181”	0.140”	PC3-10600	1Gbit	Monolithic	x8	2	9	VL47B5663A-K9
2GB	1.181”	0.140”	PC3-8500	1Gbit	Monolithic	x8	2	8	VL47B5663A-G8
2GB	1.181”	0.140”	PC3-8500	1Gbit	Monolithic	x8	2	7	VL47B5663A-F8
1GB	1.181”	0.140”	PC3-10600	1Gbit	Monolithic	x8	1	9	VL47B2863A-K9
1GB	1.181”	0.140”	PC3-8500	1Gbit	Monolithic	x8	1	8	VL47B2863A-G8
1GB	1.181”	0.140”	PC3-8500	1Gbit	Monolithic	x8	1	7	VL47B2863A-F8

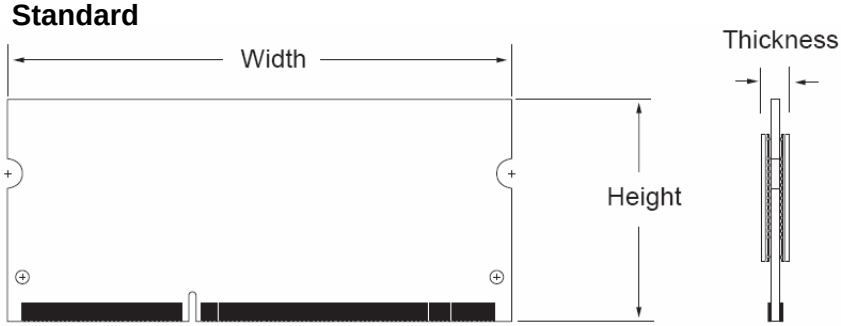
Mechanical Outlines

VLP



Unit	Width	Height	Thickness
Inches	2.661	0.720	0.14 - 0.320
Millimeters	67.60	18.29	3.56 – 8.13

Standard



Unit	Width	Height	Thickness
Inches	2.661	1.181	0.14 - 0.320
Millimeters	67.60	30.00	3.56 – 8.13

Additional Virtium Memory Products

Virtium DDR3, UDIMM (Unbuffered) with ECC & Non-ECC

- 240-pin dual in-line memory module
- Standard 1.18” and VLP 0.72” heights
- Unbuffered or UDIMM in 4GB, 2GB and 1GB densities
- Fast data transfer rates: PC3-10600, PC3-8500 or PC3-6400
- JEDEC Standard form factor
- Targeted for high-speed operations
- RoHS compliance

Virtium Technology, Inc.

Virtium Technology provides memory and solid state storage solutions for single board computers and platforms.

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