KVR24S17S8/4
4GB 1Rx8 512M x 64-Bit PC4-2400
CL17 260-Pin SODIMM

DESCRIPTION
This document describes ValueRAM's 512M x 64-bit (4GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM), 1Rx8, non-ECC, memory module, based on eight 512M x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V. This 260-pin SODIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES
• Power Supply: VDD=1.2V Typical
  • VDDQ = 1.2V Typical
  • VPP - 2.5V Typical
  • VDDSPD=2.2V to 3.6V
• 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
• Single-rank
• On-board I2 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)
• Fly-by topology
• Terminated control command and address bus
• PCB: Height 1.18” (30.00mm)
• RoHS Compliant and Halogen-Free

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL(IDD)</td>
<td>17 cycles</td>
</tr>
<tr>
<td>Row Cycle Time (tRCmin)</td>
<td>45.75ns(min.)</td>
</tr>
<tr>
<td>Refresh to Active/Refresh</td>
<td>260ns(min.)</td>
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<tr>
<td>Command Time (tRFCmin)</td>
<td></td>
</tr>
<tr>
<td>Row Active Time (tRASmin)</td>
<td>32ns(min.)</td>
</tr>
<tr>
<td>Maximum Operating Power</td>
<td>TBD W*</td>
</tr>
<tr>
<td>UL Rating</td>
<td>94 V - 0</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0° C to +85° C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55° C to +100° C</td>
</tr>
</tbody>
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*Power will vary depending on the SDRAM used.
All measurements are in millimeters.