



Advanced Validation Labs, Inc.

17665B Newhope Street, Fountain Valley, CA 92708 (714) 435-2630



| Intel PCSD Server Memory Compatibility Test Certificate | |
|---|--------------------------|
| Test System: Intel S2600WT (Wildcat Pass) | Test Result: Pass |

Leveraged System(s): MCB2208WAF4, MCB2208WAF5, MCB2312WHY2, R1208WT2GSR, R1208WTTGS, R1208WTxxx, R1208WTTGSR, R1280WTTGSSPP, R1304WT2GS, R1304WT2GSR, R1304WTTGS, R1304WTxxx, R2000WTxxx, R1304WTTGSR, R2208WT2YS, R2208WTTYSR, R2208WTTYC1, R2208WTTYC1R, R2208WTTYS, R2208WTTYSR, R2224WTTYS, R2224WTTYSR, R2308WTTGS, R2308WTTYS, R2308WTTYSR, R2312WTTYS, R2312WTTYSR, R2312WTxxx, S2600WT, S2600WT2, S2600WT2R, S2600WTT, S2600WTTT, S2600WTTSR

| Modules Information | | | | | | | | | |
|---------------------|------------------|----------------------------------|---------|------|------------------------|-------|------------------|-----|------|
| DIMM Vendor | DIMM Part Number | Type | Voltage | Size | Config. | Speed | CL | R/C | Rank |
| Kingston | KSM26RDL16MEI | RDIMM | 1.2V | 16GB | 2Gx72 | 2666 | 19 | H | DR |
| DRAM Vendor | DRAM Part Number | DRAM Density / Width / Date Code | | | Register Vendor / Rev. | | DIMM Composition | | |
| Micron | MT40A1G8SA-075:E | 8Gb 1024Mx8bit 1804 | | | IDT B | | (1024Mx8)*2*72 | | |

| System Configuration | | |
|----------------------|--|---------------------|
| SETUP | System #1 | System #2 |
| AVL S/N | SV2346 | SV2347 |
| System S/N | BQWL42200131 / LVPP | BQWL42200377 / HVPP |
| Board Rev. (PBA) | G92187-300 | |
| CPU Type | E5-2690 v4 / 2.60 GHz | |
| Chipset | C610 | |
| BIOS | 01.01.0024 | |
| BMC / ME | 01.50.10802 / 03.01.03.043 | |
| FUR/SDR | 1.17 | |
| OS | Windows Server 2012 R2 | |
| Test Tool | iVSS 2.7.0, SELViewer, Syscfg, WinPIRA | |

| Testing Summary | | |
|--|--|----------------------|
| Test Items | Test Description | Test Results |
| 1. Latest BIOS Upgrade & Configuration check | Record memory Size and Speed detection from BIOS | Done |
| 2. SPD Check | DIMM SPD content check for JEDEC compliance | Pass |
| 3. Memory Stress | Test for 6 hours @ Max and Min Loading | HVDD/HVPP Hot: Pass |
| 4. Memory Stress | | HVDD/HVPP Cold: Pass |
| 5. Memory Stress | | LVDD/LVPP Hot: Pass |
| 6. Memory Stress | | LVDD/LVPP Cold: Pass |
| 6. Power Cycle | Test each corner for 50 cycle in room temp | Pass |

Note:

Memory Module Image



| AVL USE ONLY: | | | | | | | |
|---------------|------------|------------------|------------|--------|---------|---------|-------|
| Completed by: | Andy Chang | Completion Date: | 06/29/2018 | AVL A# | U181145 | AVL W/O | WF000 |

Comments:

Test Results

| 4C | | | | | |
|---------------------|---------|----------------|---|---|---|
| Minimum Loading | | | | | |
| Start Date | | 6/7/2018 | | | |
| DIMM Voltage | | 1.22v / 1.16v | | | |
| DIMM VPP | | 2.64v / 2.422v | | | |
| DIMM | S/N | A | B | C | D |
| CPU1 A1 | 45-0009 | P | P | P | P |
| CPU1 A2 | | | | | |
| CPU1 A3 | | | | | |
| CPU1 B1 | 45-0010 | P | P | P | P |
| CPU1 B2 | | | | | |
| CPU1 B3 | | | | | |
| CPU1 C1 | 45-0011 | P | P | P | P |
| CPU1 C2 | | | | | |
| CPU1 C3 | | | | | |
| CPU1 D1 | 45-0012 | P | P | P | P |
| CPU1 D2 | | | | | |
| CPU1 D3 | | | | | |
| CPU2 E1 | 46-0009 | P | P | P | P |
| CPU2 E2 | | | | | |
| CPU2 E3 | | | | | |
| CPU2 F1 | 46-0010 | P | P | P | P |
| CPU2 F2 | | | | | |
| CPU2 F3 | | | | | |
| CPU2 G1 | 46-0011 | P | P | P | P |
| CPU2 G2 | | | | | |
| CPU2 G3 | | | | | |
| CPU2 H1 | 46-0012 | P | P | P | P |
| CPU2 H2 | | | | | |
| CPU2 H3 | | | | | |
| AC Power Cycling | | | | | |
| 50 AC Cycles/corner | | P | P | P | P |

| 4C | | | | | |
|---------------------|---------|----------------|---|---|---|
| Middle Loading | | | | | |
| Start Date | | 06/07/18 | | | |
| DIMM Voltage | | 1.22v / 1.16v | | | |
| DIMM VPP | | 2.64v / 2.422v | | | |
| DIMM | S/N | A | B | C | D |
| CPU1 A1 | 45-0001 | P | P | P | P |
| CPU1 A2 | 45-0002 | P | P | P | P |
| CPU1 A3 | | | | | |
| CPU1 B1 | 45-0003 | P | P | P | P |
| CPU1 B2 | 45-0004 | P | P | P | P |
| CPU1 B3 | | | | | |
| CPU1 C1 | 45-0005 | P | P | P | P |
| CPU1 C2 | 45-0006 | P | P | P | P |
| CPU1 C3 | | | | | |
| CPU1 D1 | 45-0007 | P | P | P | P |
| CPU1 D2 | 45-0008 | P | P | P | P |
| CPU1 D3 | | | | | |
| CPU2 E1 | 46-0001 | P | P | P | P |
| CPU2 E2 | 46-0002 | P | P | P | P |
| CPU2 E3 | | | | | |
| CPU2 F1 | 46-0003 | P | P | P | P |
| CPU2 F2 | 46-0004 | P | P | P | P |
| CPU2 F3 | | | | | |
| CPU2 G1 | 46-0005 | P | P | P | P |
| CPU2 G2 | 46-0006 | P | P | P | P |
| CPU2 G3 | | | | | |
| CPU2 H1 | 46-0007 | P | P | P | P |
| CPU2 H2 | 46-0008 | P | P | P | P |
| CPU2 H3 | | | | | |
| AC Power Cycling | | | | | |
| 50 AC Cycles/corner | | P | P | P | P |

| 4C | | | | | |
|---------------------|---------|----------------|---|---|---|
| Maximum Loading | | | | | |
| Start Date | | 6/7/2018 | | | |
| DIMM Voltage | | 1.22v | | | |
| DIMM VPP | | 2.64v / 2.422v | | | |
| DIMM | S/N | A | B | C | D |
| CPU1 A1 | 45-0001 | P | P | P | P |
| CPU1 A2 | 45-0002 | P | P | P | P |
| CPU1 A3 | 45-0003 | P | P | P | P |
| CPU1 B1 | 45-0004 | P | P | P | P |
| CPU1 B2 | 45-0005 | P | P | P | P |
| CPU1 B3 | 45-0006 | P | P | P | P |
| CPU1 C1 | 45-0007 | P | P | P | P |
| CPU1 C2 | 45-0008 | P | P | P | P |
| CPU1 C3 | 45-0009 | P | P | P | P |
| CPU1 D1 | 45-0010 | P | P | P | P |
| CPU1 D2 | 45-0011 | P | P | P | P |
| CPU1 D3 | 45-0012 | P | P | P | P |
| CPU2 E1 | 46-0001 | P | P | P | P |
| CPU2 E2 | 46-0002 | P | P | P | P |
| CPU2 E3 | 46-0003 | P | P | P | P |
| CPU2 F1 | 46-0004 | P | P | P | P |
| CPU2 F2 | 46-0005 | P | P | P | P |
| CPU2 F3 | 46-0006 | P | P | P | P |
| CPU2 G1 | 46-0007 | P | P | P | P |
| CPU2 G2 | 46-0008 | P | P | P | P |
| CPU2 G3 | 46-0009 | P | P | P | P |
| CPU2 H1 | 46-0010 | P | P | P | P |
| CPU2 H2 | 46-0011 | P | P | P | P |
| CPU2 H3 | 46-0012 | P | P | P | P |
| AC Power Cycling | | | | | |
| 50 AC Cycles/corner | | P | P | P | P |