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### S5520UR Urbanna Memory Compatibility Test Report

|                         |               |   |           |                           |                           |          |
|-------------------------|---------------|---|-----------|---------------------------|---------------------------|----------|
| <b>Completed by:</b>    | Andy C        | <b>TEMPERATURE AND VOLTAGE SETTINGS</b> |           |                           |                           |          |
| <b>Completion Date:</b> | 4/23/2015     | Corner                                  | Temp (°C) | CPU 1 Modify DRAM 1.5v to | CPU 0 Modify DRAM 1.5v to | Duration |
| <b>AVL WorkOrder #</b>  | <b>A10339</b> | A                                       | 55°C      | 1.55v                     | 1.55v                     | 6 hrs.   |
| <b>AVL A#</b>           | <b>WD2928</b> | B                                       | 0°C       | 1.55v                     | 1.55v                     | 6 hrs.   |
|                         |               | C                                       | 55°C      | 1.45v                     | 1.45v                     | 6 hrs.   |
|                         |               | D                                       | 0°C       | 1.45v                     | 1.45v                     | 6 hrs.   |

### Memory Modules Tested

| Vendor                        | DIMM P/N / Type        | Voltage              | Size      | Density                | Speed | CL               | R/C | Rank |
|-------------------------------|------------------------|----------------------|-----------|------------------------|-------|------------------|-----|------|
| Kingston                      | KVR16LE11/8I UDIMM ECC | 1.35v                | 8GB       | 1Gx72                  | 1600  | 11               | E   | 2    |
| DRAM Vendor / P/N / Date Code |                        | DRAM Density / Width |           | Register Vendor / Rev. |       | DIMM Composition |     |      |
| Hynix                         | H5TC4G83BFR-PBA 1444   | 4Gb                  | 512Mx8bit |                        |       | (512Mx8)x2*72    |     |      |

### Leveraged Memory Modules

| Vendor   | DIMM P/N / Type       | Voltage | CL | Speed |
|----------|-----------------------|---------|----|-------|
| Kingston | KVR16E11/8I UDIMM ECC | 1.5v    | 11 | 1600  |

### System Configuration

| SETUP     | Red   | Blue             |
|-----------|---|------------------|
| AVL S/N   | SI7040  | SI3680           |
| S/N       | BZUB94004593                                  | BZUB94004589     |
| PBA       | E22554-650                                    |                  |
| BMC       | 60  |                  |
| BIOS      | 61 / 46(Rank Margin Test)                     |                  |
| ME        | 1.12  |                  |
| FUR       | 26  |                  |
| OS        | Win2K3 Enterprise 64bit SP2                   |                  |
| Test Tool | iWVSS 2.1.0, SELViewer, PvMode tool, DDRSpeed |                  |
| CPU 1     | Type  | Westmere 2.8GHz  |
|           |   | Q4EJ-X5650       |
|           |   | B1 Step 95W 1333 |
| Pr. Code  | AT80614005127AA-3952A555                      |                  |
| CPU 2     | Type  | Westmere 2.8GHz  |
|           |   | Q4EJ-X5650       |
|           |   | B1 Step 95W 1333 |
| Pr. Code  | AT80614005127AA-3952A555                      |                  |

### Test Results

### Comments

| 4C                  |        |           |   |   |   |   |
|---------------------|--------|-----------|---|---|---|---|
| Minimum Loading     |        |           |   |   |   |   |
| Start Date          |        | 4/15/2015 |   |   |   |   |
| DIMM                | S/N    | A         | B | C | D |   |
| CPU1 A2             |        |           |   |   |   |   |
| CPU1 A1             | SV6282 | P         | P | P | P |   |
| CPU1 B2             |        |           |   |   |   |   |
| CPU1 B1             | SV6283 | P         | P | P | P |   |
| CPU1 C2             |        |           |   |   |   |   |
| CPU1 C1             | SV6284 | P         | P | P | P |   |
| CPU2 D2             |        |           |   |   |   |   |
| CPU2 D1             | SV6285 | P         | P | P | P |   |
| CPU2 E2             |        |           |   |   |   |   |
| CPU2 E1             | SV6286 | P         | P | P | P |   |
| CPU2 F2             |        |           |   |   |   |   |
| CPU2 F1             | SV6287 | P         | P | P | P |   |
| AC/DC Power Cycling |        |           |   |   |   |   |
| 50 AC Cycles/corner |        |           | P |   |   | P |
| 50 DC Cycles/corner |        |           | P |   |   | P |

| 4C                  |        |           |   |   |   |   |
|---------------------|--------|-----------|---|---|---|---|
| Maximum Loading     |        |           |   |   |   |   |
| Start Date          |        | 3/30/2015 |   |   |   |   |
| DIMM                | S/N    | A         | B | C | D |   |
| CPU1 A2             | SV6361 | P         | P | P | P |   |
| CPU1 A1             | SV6362 | P         | P | P | P |   |
| CPU1 B2             | SV6363 | P         | P | P | P |   |
| CPU1 B1             | SV6364 | P         | P | P | P |   |
| CPU1 C2             | SV6365 | P         | P | P | P |   |
| CPU1 C1             | SV6366 | P         | P | P | P |   |
| CPU2 D2             | SV6367 | P         | P | P | P |   |
| CPU2 D1             | SV6368 | P         | P | P | P |   |
| CPU2 E2             | SV6369 | P         | P | P | P |   |
| CPU2 E1             | SV6370 | P         | P | P | P |   |
| CPU2 F2             | SV6371 | P         | P | P | P |   |
| CPU2 F1             | SV6372 | P         | P | P | P |   |
| AC/DC Power Cycling |        |           |   |   |   |   |
| 50 AC Cycles/corner |        |           | P |   |   | P |
| 50 DC Cycles/corner |        |           | P |   |   | P |



