AVL Supermicro server platform Memory Module Qualification Test

Intel E5-2650(SNB-EP) x 2, Intel C602	Test Results	Pass
PN: KVR16E11/4HC (4GB / UDIMM ECC / ECC) On: X9DR3-LN4F+ Rev.0		

RP77D3x-106-KI-SQ-SMC-V1	Module Information		Rev 01/07/2011
AVL WorkOrder #	wc3376	AVL A#	7844
Start Date	4/18/2012	End Date	4/24/2012
Tested By		Van N.	
Module Manufacturer		Kingston	
Module Part Number		KVR16E11/4HC	
Module BOM Number		9965525-023.A00LF	
Module Capacity / Memory Type / ECC		4GB / UDIMM ECC / ECC	
Module Configuration (Width, # of devices, # of Ranks)		512Mx72 /18 Devices / 2 Ranks	
Speed Tested (Data rate of Mbps, CL-tRP-tRCD)		DDR3-1600 /11-11-11/	
DRAM Device Vendor		Hynix	
DRAM Device Part Number / Date code		H5TQ2G83CFR-PBC 1209	
DRAM Die Revision / Process Technology (nm)		C	
DRAM Device Config (Density / Width)		2Gbit / x8 / 256Mx8bit	
Thermal Sensor Device Vendor / Part Number / Revision			
Register Device Vendor / Part Number / Revision		N/A	
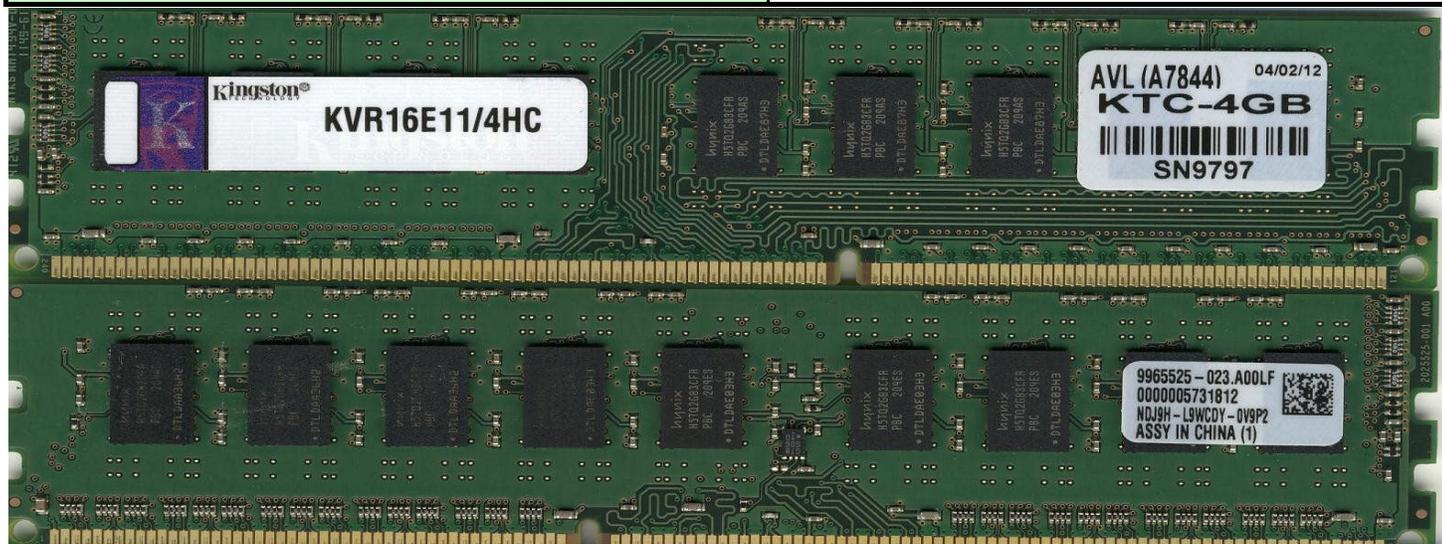
Platform System Information			
Motherboard Info (Model# & MB Revision & MB S/N & AVL S/N)	X9DR3-LN4F+	0	0	SN9374
BIOS Revision / BIOS Date	1.0b	1/0/1900	
CPU / Speed	Intel E5-2650(SNB-EP) x 2	2.0GHz	
Chipset info (Stepping)	Intel C602		

AVL	**AVL Supermicro server platform Memory Module Qualification Test**
ADVANCED VALIDATION LABS, INC.	**Intel E5-2650(SNB-EP) x 2, Intel C602** **PN: KVR16E11/4HC (4GB / UDIMM ECC / ECC) On: X9DR3-LN4F+ Rev.0**

Test Results:	**PASS**
Comments:	

AVL Memory Module Qual Test Results Summary

Test # and name	Test Description	Specs	Test Results	Comments
1. Latest BIOS Upgrade & Configuration	Download / Upgrade latest BIOS & record size and speed detection		**Done**	
2. SPD Check	Memory module SPD content check for JEDEC compliance	JEDEC	**Pass**	Use proprietary tools
3. Reset Cycle	Run Linux based diags & utility software @ 50°C	50 loops	**Pass**	1 DIMM Per Channel when applicable
4a. Stress Application Test	Run Linux based diags & utility software @50°C	8 Hour per config	**Pass**	DIMM Loading per spec
4b. Stream Benchmark Test		5 loop per config	**Pass**	DIMM Loading per spec
4b. Reset Cycle		200 loop per config	**Pass**	DIMM Loading per spec
5. Functional Stress Test	Memory Stress Test @50°C -	12hrs	**Pass**	DIMM Loading per spec
6. Stress Application Test	Run Linux based diags & utility software @50°C	6hrs	**N/A**	3 DIMM Per Channel when applicable

Note: All test under IMC Vdd=Nom, Vref=Vddnom/2