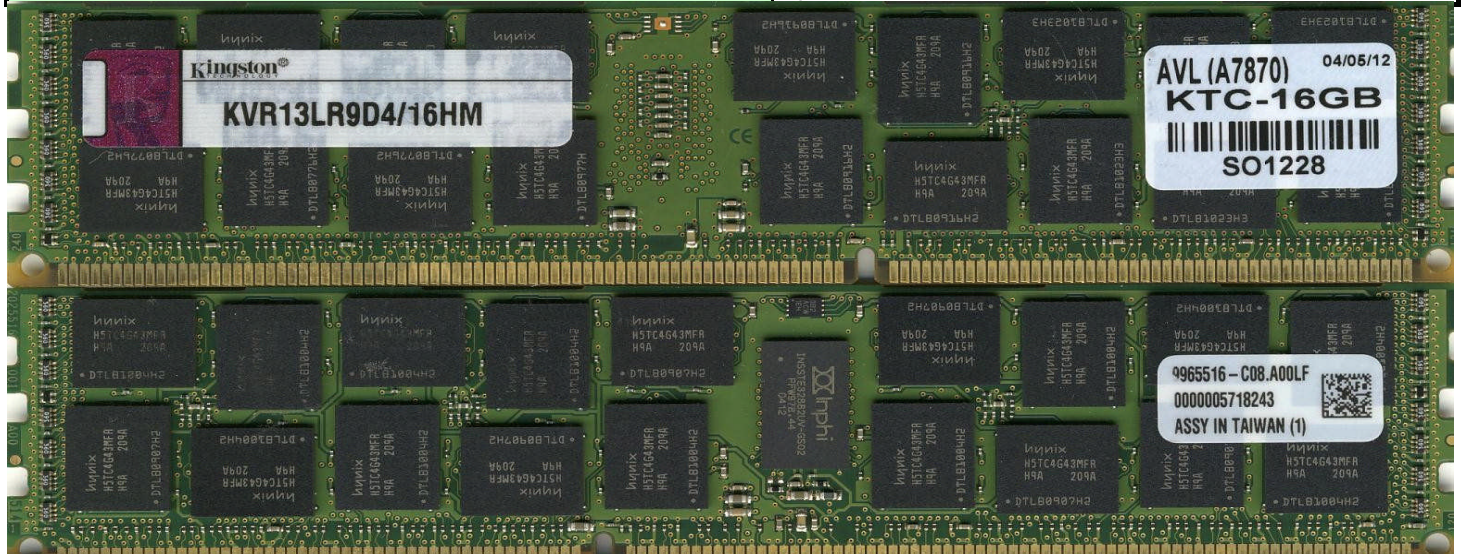
	AVL Supermicro server platform Memory Module Qualification Test		
	Intel E5-2650(SNB-EP) x 2, Intel C602	Test Results	Pass
	PN: KVR13LR9D4/16HM (16GB / RDIMM / ECC) On: X9DR3-LN4F+ Rev.1.1		

RP77D3x-106-KI-SQ-SMC-V1		Module Information		Rev 01/07/2011
AVL WorkOrder #	WC3432	AVL A#	7870	
Start Date	5/8/2012	End Date	5/10/2012	
Tested By	Van N.			
Module Manufacturer	Kingston			
Module Part Number	KVR13LR9D4/16HM			
Module BOM Number	9965516-C08.A00LF			
Module Capacity / Memory Type / ECC	16GB / RDIMM / ECC			
Module Configuration (Width, # of devices, # of Ranks)	2Gx72 /36 Devices / 2 Ranks			
Speed Tested (Data rate of Mbps, CL-tRP-tRCD)	DDR3L-1333			
DRAM Device Vendor	Hynix			
DRAM Device Part Number / Date code	H5TC4G43MFR-H9A			1209
DRAM Die Revision / Process Technology (nm)	M			
DRAM Device Config (Density / Width)	4Gbit / x4 1024Mx4bit/			
Thermal Sensor Device Vendor / Part Number / Revision	IDT			
Register Device Vendor / Part Number / Revision	Inphi	INSSTE32882UV-GS02	UVGS02	



Platform System Information				
Motherboard Info (Model# & MB Revision & MB S/N & AVL S/N)	X9DR3-LN4F+	1.1	0M23S40378	SN9374
BIOS Revision / BIOS Date	1.0b		2/1/2012	
CPU / Speed	Intel E5-2650(SNB-EP) x 2		2.0GHz	
Chipset info (Stepping)	Intel C602			



AVL Supermicro server platform Memory Module Qualification Test

Intel E5-2650(SNB-EP) x 2, Intel C602

PN: KVR13LR9D4/16HM (16GB / RDIMM / ECC) On: X9DR3-LN4F+ Rev.1.1

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	Pass	3 DIMM Per Channel when applicable

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