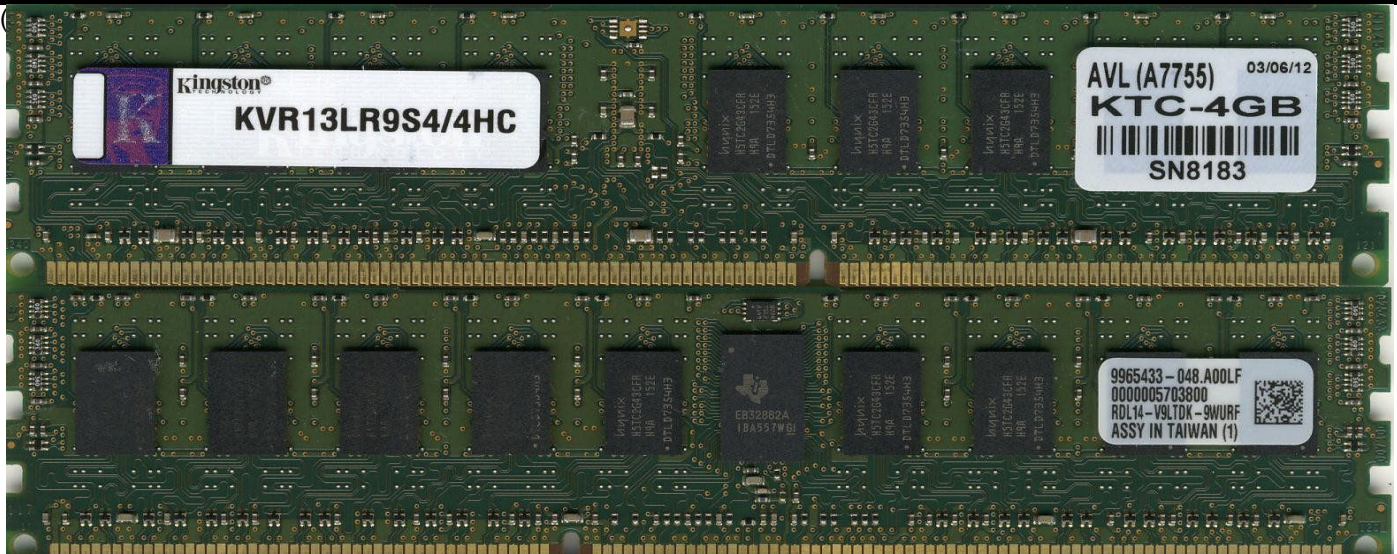
	AVL Supermicro server platform Memory Module Qualification Test		
	AMD Opteron 6128 x1, AMD SR5690 CIMx 1.0.1.0	Test Results	Pass
	PN: KVR13LR9S4/4HC (4GB / RDIMM / ECC) On: H8SGL-F Rev.1.00		

RP77D3x-106-KI-SQ-SMC-V1		Module Information		Rev 01/07/2011
AVL WorkOrder #	WC3169	AVL A#	7755	
Start Date	4/25/2012	End Date	5/1/2012	
Tested By	Andy C.			
Module Manufacturer	Kingston			
Module Part Number	KVR13LR9S4/4HC			
Module BOM Number	9965433-048.A00LF			
Module Capacity / Memory Type / ECC	4GB / RDIMM / ECC			
Module Configuration (Width, # of devices, # of Ranks)	512Mx72 /18 Devices / 1 Rank			
Speed Tested (Data rate of Mbps, CL-tRP-tRCD)	DDR3L-1333 /9-9-9			
DRAM Device Vendor	Hynix			
DRAM Device Part Number / Date code	H5TC2G4CFR-H9A		1152	
DRAM Die Revision / Process Technology (nm)				
DRAM Device Config (Density / Width)	2Gbit / x4		/ 512Mx4bit	
Thermal Sensor Device Vendor / Part Number / Revision	STMicro			
Register Device Vendor / Part Number / Revision	TI	EB32882A	V 5.0	



Platform System Information				
Motherboard Info (Model# & MB Revision & MB S/N & AVL S/N)	H8SGL-F	1.00	OM12S7013	SL2697
BISO Revision / BIOS Date / MRC Rev.	2.0a	11/11/2011	N/A	
CPU / Speed	AMD Opteron 6128 x1		2.0GHz	
Chipset info (Stepping)	AMD SR5690 CIMx 1.0.1.0			



AVL Supermicro server platform Memory Module Qualification Test

AMD Opteron 6128 x1, AMD SR5690 CIMx 1.0.1.0

PN: KVR13LR9S4/4HC (4GB / RDIMM / ECC) On: H8SGL-F Rev.1.00

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	Per test platform, DIMM & config spec	Done	Record memory size & speed at each test only
2. SPD Check	Memory module SPD content check for JEDEC compliance	JEDEC	Pass	Use proprietary tools
3. Sisoftware Sandra Benchmark	Run Windows based diags & utility software @50°C - DIMM max loading. Test run under 1.35v	1 loop per config	Done	Force 1066 in BIOS
4. Passmark Burn-In		6 Hour per config	Pass	Force 1066 in BIOS
5a. Stress Application Test	Run Linux based diags & utility software @50°C - DIMM max loading. Test run under 1.35v	8 Hour per config	Pass	Force 1066 in BIOS
5b. Stream Benchmark Test		5 loop per config	Done	Force 1066 in BIOS
5c. Reset Cycle		500 loop per config	Pass	Force 1066 in BIOS
6. Functional Stress Test (Corner 1)	Run RST Premium @50°C - 1 DIMM Per Ch Test run under 1.35v 1333	8 Hour or 2+ Loops per config	N/A	Run @ Max module speed
7. Functional Stress Test (Corner 2)	Run RST Premium @50°C - 2 DIMM Per Ch Test run under 1.5v	8 Hour or 2+ Loops per config	Pass	Full Load
8. Functional Stress Test (Corner 3)	Run RST Premium @0°C1 DIMM Per Ch Test run under 1.35v 1333	8 Hour or 2+ Loops per config	N/A	Run @ Max module speed

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