

	AVL Supermicro server platform Memory Module Qualification Test		
	Intel E5-2650(SNB-EP) x 2, Intel C602	Test Results	Pass
	PN: KVR16R11S4/4HE (4GB / RDIMM / ECC) On: X9DR3-LN4F+ Rev.1.1		

RP77D3x-106-KI-SQ-SMC-V2	Module Information	Rev 05/30/2012
--------------------------	---------------------------	----------------

AVL WorkOrder #	WC6908	AVL A#	9082
Start Date	7/26/2013	End Date	7/30/2013
Tested By	Van N.		
Module Manufacturer	Kingston		
Module Part Number	KVR16R11S4/4HE		
Module BOM Number	9965433-107.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)	DDR3-1600 /11-11-11		
DRAM Device Vendor	Hynix		
DRAM Device Part Number / Date code	H5TC2G43EFR-PBA		1252
DRAM Die Revision / Process Technology (nm)	E		
DRAM Device Config (Density / Width)	2Gbit / x4 / 512Mx4bit		
Thermal Sensor Device Vendor / Part Number / Revision	STMicro		
Register Device Vendor / Part Number / Revision	Inphi	INSSTE32882UV-GS02	2.1



Platform System Information				
------------------------------------	--	--	--	--

Motherboard Info (Model# & MB Revision & MB S/N & AVL S/N)	X9DR3-LN4F+	1.1	0M23S40378	SN9374
BIOS Revision / BIOS Date	2		1/11/2013	
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: KVR16R11S4/4HE (4GB / 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	Comments
			Results	
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	Done	Use proprietary tools
3. Reset Cycle	Run Linux based diags & utility software @ 55°C	50 loops	Pass	1 DIMM Per Channel when applicable
4a. Stress Application Test	Run Linux based diags & utility software @55°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 @55°C -	12hrs	Pass	DIMM Loading per spec
6. Stress Application Test	Run Linux based diags & utility software @55°C	8hrs	Pass	3 DIMM Per Channel when applicable

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