

	AVL Supermicro server platform Memory Module Qualification Test		
	Intel E5-2650(IVB) x 2, Intel C602		Test Results
	PN: KVR16LR11S8/4KF (4GB / RDIMM / ECC) On: X9DR3-LN4F+ Rev.1.2		Pass

RP77D3x-106-KI-SQ-SMC-V2		Module Information		Rev 05/30/2012
AVL WorkOrder #	WC9348	AVL A#	9645	
Start Date	2/3/2014	End Date	2/5/2014	
Tested By	Van N.			
Module Manufacturer	Kingston			
Module Part Number	KVR16LR11S8/4KF			
Module BOM Number	9965439-092.A00LF			
Module Capacity / Memory Type / ECC	4GB / RDIMM / ECC			
Module Configuration (Width, # of devices, # of Ranks)	512Mx72 /9 Devices / 1 Rank			
Module Speed (Data rate of Mbps, CL-tRP-tRCD)	DDR3L-1600 /11-11-11			
DRAM Device Vendor	Kingston			
DRAM Device Part Number / Date code	D5128ED1FPGGB		1345	
DRAM Die Revision / Process Technology (nm)	F			
DRAM Device Config (Density / Width)	4Gbit / x8		512MX8bit	
Thermal Sensor Device Vendor / Part Number / Revision	On-Semi			
Register Device Vendor / Part Number / Revision	Montage	M88SSTE32882H0	H0	



Platform System Information				
Motherboard Info (Model# & MB Revision & MB S/N & AVL S/N)	X9DR3-LN4F+	1.2	0M23S40378	SN9374
BIOS Revision / BIOS Date	3.0		7/5/2013	
CPU / Speed	Intel E5-2650(IVB) x 2		2.6GHz	
Chipset info (Stepping)	Intel C602			


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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