

MIC-5332 Memory Compatibility Test Report

Version 1.0

CFD-B			DQA		
Approved by			Approved by		

1. COMPATIBILITY TEST

1.01 Memory Compatibility

Test Date: 2012/09/05

Test Site: Advantech DQA

Performed by: Peggy.Tsai

1.01.1.01 Test Purpose

Evaluate whether functions are working well in different memory combinations and maintained in a stable condition

1.01.1.02 Test Standard:

Please refer to the following documents:

A-01.MIC-5332 A102 20110526D

A-02.MIC-5332-HW-Spec-V010_20110311C

1.01.1.03 Test Equipment:

1. USB Keyboard/Mouse
2. SATA HDD: Seagate Constellation.2 250GB (ST9250610NS)

1.01.1.04 Sample Configuration & Quantity Under Test:

Configuration:	A
1. MB Rev.	MIC-5332 A102-1
-S/N:	EPD0063726
-CPU:	Intel Xeon E5-2658 2.1GHz (QBJH)
-RAM:	See Table 1.01.1
-BIOS Version:	5322V110
-IPMC Version:	01.08
-FPGA Version	02.28
2. FMM Board Rev.	FMM-5002 B101-1
-S/N:	ESE0082277
3. Power supply:	Mean Well 600W (PSP-600-48)

1.01.1.05 Test Condition:

1. Test environment: Room temperature
2. O.S: Embedded Linux (Kernel 2.6.18-92)
2. Software: Memtest86+ V4.20

1.01.1.06 Test Procedure:

1. Insert all memory and turn on EUT.
2. Check the memory frequency and total capacity.
3. Run Memtest86+ V4.20, it shall be PASS 3 loop and no any error report.
4. Boot into Embedded Linux (Kernel 2.6.18-92), it will record boot times and memory size.
5. Follow [Table 1.01.1](#) to change different memory module combination and repeat test steps 1 to 4.

**1.01.1.07 Test Data:
Configuration: A.**

Table 1.01.1 Memory Compatibility combination table

Memory Vendor & Type	Criteria			Measurement			Judgment
	Frequency	Total Capacity	System On/Off Check	Frequency	Total Capacity	System On/Off Check	
Transcend 4G DDR3 1600 REG (TS512MKR72V6NL)	1600 MHz	32768MB	All memory shall be detected on every boot up time (500 times)	1600 MHz	32768MB	PASS	PASS

Table 1.01.2 Memtest86+ result check

Memory Vendor & Type	Criteria	Measurement	Judgment
Transcend 4G DDR3 1600 REG (TS512MKR72V6NL)	There shall be no error during 3 Loops test.	PASS	PASS

1.01.1.08 Evaluation Criteria:

1. The memory Frequency and capacity shall be correct.
2. Memtest86+ test result should be PASS and without any error report.
3. Total capacity shall be detected correctly on every boot up time.

1.01.1.09 Test Result:

PASS

1.01.1.10 Conclusion

PASS