GENE-CV05

PCB Rev. A0.2

Temperature/Humidity Test Report

Report NO:

Summary	☐ Pass ☐ Fail Note : There is/are ___ defect(s) not list in the report, please check it in the DTS Website. ■ Pass with Deviation The "COM port detected a Receive Overrun Error" occurs if data is received by the UART receive buffer when the receive FIFO buffer is full. That is, before a COM port interrupt is serviced by the CPU to copy the receive buffer to RAM. The COM port interrupt trigger level is a Windows setting, this is typically defaulted to 14 - ie. generate a CPU interrupt when 14 of the 16 bytes in the UART buffer are full. In this case the last byte in the UART receive FIFO is overwritten and that data is lost. So, RD has followed PASSMARK's recommendation to reduce the COM port speed for fixing overrun issue. Please see the PASSMARK USER GUIDE for details.

Issue date	Approval	Test Engineer
2011-11-28	Benson Lee	Chienkow Liao

Test item list

Testing Result

Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

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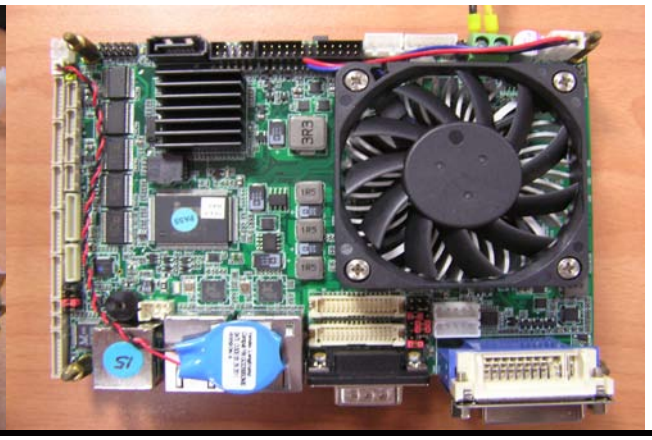
Configuration of EUT

Test Product: GENE-CV05

Sample Configuration & Quantity Under Test:

1. CPU: Intel Cedarview-D D2700 (512KB L2 Cache, 2.16 GHz)
2. Chipset: Intel NM10 Express Chipset
3. VGA: Cedarview-D integrated, GFx @640MHz
4. Memory: Transcend 2G DDR3 1066 SODIMM CL7 / 580963-0024 H5TQ2G83BFA H9C
5. BIOS Reversion: A0.5
6. CFD: Transcend / 16GB (for Power On/Off test)
7. SATA HDD: Seagate 160GB SATA2 ST9160412AS
8. Test Software: Windows 7 x32 with SP1/ Run PassMark BurnInTest Pro v6.0 build 1029
9. Power Supply: BLUE DIAMOND II/PPA4001900 (AT-Mode)
10. Cooler:



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Temp./humidity power on/off test

Test Date: 2011/11/15~16

Test Site: AAEON Taichung Internal Lab

Test Standard: Reference IEC 68-2-30 Testing procedures
Test Db: Damp Heat Test

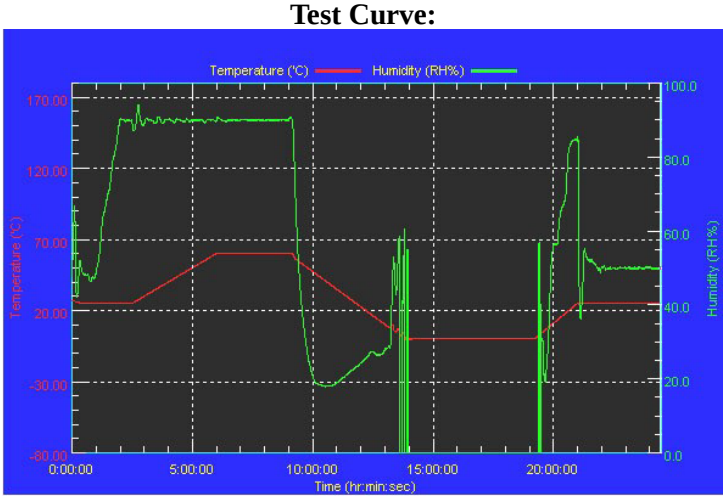
Test Equipment: Programmable Temperature & Humidity Chamber
TERCHY. TECH. CORP.
Model: MHK-225NK
Date of Calibration: 2011/03/16
Serial Number: 1000122

Temperature & Humidity Power On/Off Test:

Testing Specification:

Step	Temperature (℃)	Humidity (%RH)	Duration (HH:MM)
1	25	50	00:30
2	25	50	00:30
3	25	90	01:00
4	25	90	00:30
5	60	90	03:30
6	60	90	03:00
7	0	0	04:50
8	0	0	05:23
9	25	50	01:47
10	25	50	03:00

Test Curve:



Test Result:

No problem was found during the temperature & humidity power on/off test.

Test Method	Actual	Successful	Failure rate
Power On/Off	1914/times	1914/times	0 %
Note: Failure rate need to under 0.2%.			

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Temperature variation operation test

Test Date: 2011/11/16~17

Test Site: AAEON Taichung Internal Lab

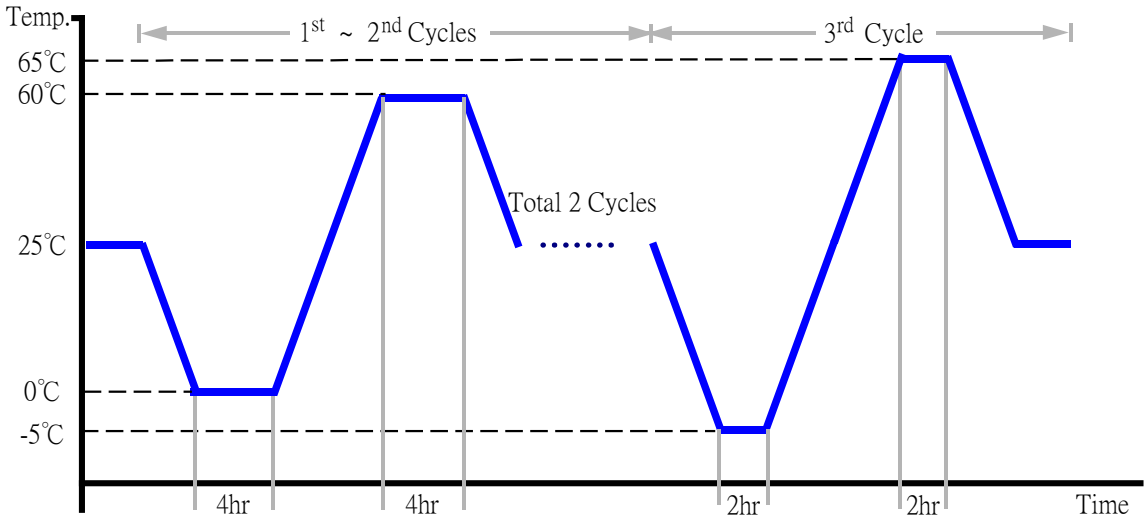
Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
TERCHY. TECH. CORP.
Model: MHK-225NK
Date of Calibration: 2011/03/16
Serial Number: 1000122

Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0℃ (1~2 cycles)
   -5℃ (3rd cycle)
2. Test High Temperature: 60℃ (1~2 cycles)
   65℃ (3rd cycle)
3. Test dwell time: 4Hrs (1~2 cycles)
   2Hrs (3rd cycle)
4. Temperature slope: 2℃/min
5. Test cycle: 3 cycles
6. Test Environment Curve:



Test Result:

No problem was found during the temperature variation operation test.

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Cold start and hot start test

Test Date: 2011/11/25

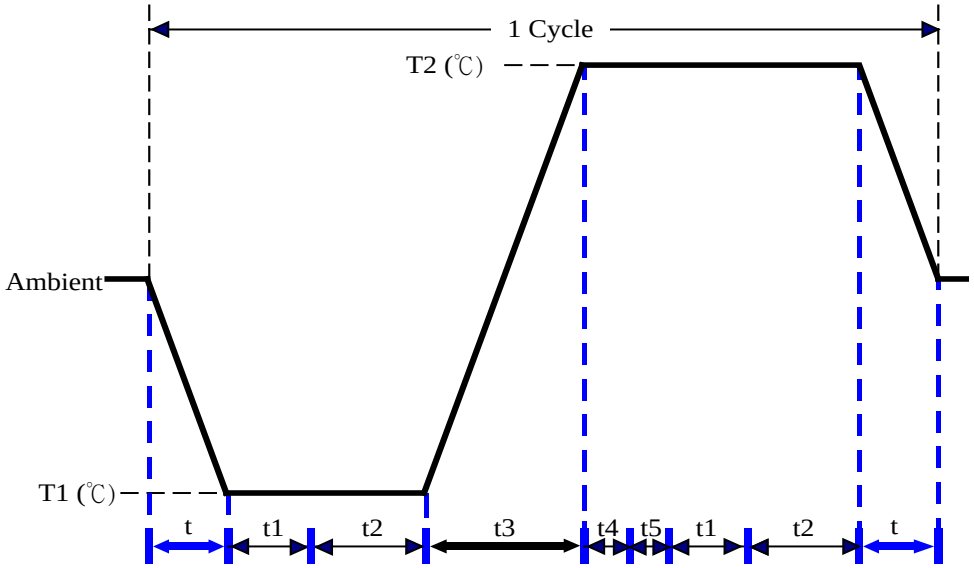
Test Site: AAEON Taichung Internal Lab

Test Standard: Reference IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber
TERCHY. TECH. CORP.
Model: MHK-225NK
Date of Calibration: 2011/03/16
Serial Number: 1000122

Test Condition:



Parameters	Description
T1	-5℃
T2	65℃
t1	1 hrs
t2	2 hrs
t4, t5	30 mins
t, t3	2℃/min
n (Cycle)	1

t, t3 = temperature slope
t, t1: Power Off
t2 Power On/Off test 10 times (On 2mins / Off 5mins)
t5: Windows soft restart test 2 times
Test software: Windows 7 Ultimate x32 Edition

Test Result:

During high and low temperature, problems were encountered with the COM ports. Adjust the COM ports speed down to 9600bps in Configuration of BurnInTest V6.0 which were passed with no problem occurred. (Conditional Passed)

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