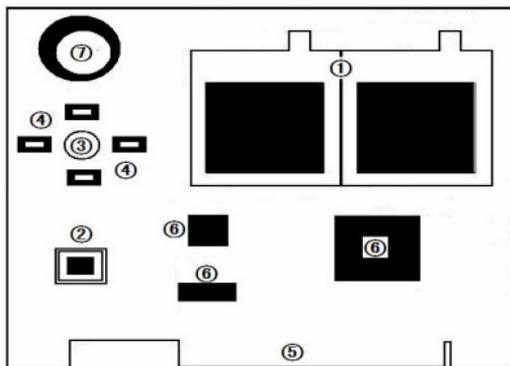


Memory Test Card Model MT32 and Model MT35 User Guide

- 01. Memory Test Card System Structure
- 02. Memory Test Card Main LCD Display Interface
- 03. Memory Test Card Test Mode Select Switch
- 04. Memory Test Card LED and Speaker
- 05. Memory Test Card Four Functional Buttons
- 06. Memory Test Card User Auto Configuration
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- 08. Memory Test Card Product Registration
- 09. Memory Test Card Error Message
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1: Memory Test Card System Structure



- ① LCD Screen to display DIMM information and test result
- ② Switch to select Fast Test Mode or Full Test Mode
- ③ LED Indicator to Show Hardware Test Status
- ④ Button to Select the Functions
- ⑤ PCI Bus to Connect Memory Test Card to Motherboard
- ⑥ ASIC in Memory Test Card
- ⑦ Speaker to Show Hardware Test Status

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2: Memory Test Card Main LCD

Display Interface

Memory Test Card has two LCD screens. The left LCD screen show DIMM information, test system configuration, and DIMM test progress. DIMM main information includes: DIMM type (DDR2/DDR3), DIMM size, DIMM frequency. Test system configuration will show which kind of system configuration is used: Default or User. DIMM test progress includes: the ongoing test items (Addr Scan/Fast Test/Full Test) and the current tested address. When memory testing is ongoing, DIMM main information and system configuration will be fixed, and DIMM test progress will change by the test status. For the test item, which is ongoing, it will show red panes, for the test items, which have been finished, it will show green panes, for the test items, which isn't tested yet, it will show white panes. Also, it will use number to show the current tested memory position.

Memory Test Card right LCD shows the DIMM test result, and it includes three parts. The first part show the DIMM first Rank test result, the second part shows the second Rank test result. The third part shows the DIMM address line scan result. In the first part and the second part, it will also show how many memory chips in this Rank.

1. If both the first part and second part show 8 pieces memory chips, it means this DIMM has two Ranks, and every Rank includes 8 pieces memory chips. So, totally, there are 16 pieces chips in this DIMM.

2. If the first part show 8 pieces memory chips, and the second part show zero, it means this DIMM just has one Rank, and this Rank includes 8 pieces memory chips. So, totally, there are 8 pieces chips in this DIMM.

About memory chips amount, please refer to this table :

Rank Amount	Chips Amount	The Display
1	4	The 1st part 04, The 2nd part 00
1	8	The 1st part 08, The 2nd part 00
1	16	The 1st part 16, The 2nd part 00

```
DIMM TYPE:DDR2
DIMM SIZE:1024 M
DIMM FREQ:0800
SYS CFG:■Def □User
ADDR SCAN:  □□
FAST TEST:  □□
FULL TEST:  □□
TEST ADDR:0618 M
```

```
DIMM RANK1: 08 PCS
 1 2 3 4 5 6 7 8
□□□□,□□□□
DIMM RANK2: 08 PCS
 1 2 3 4 5 6 7 8
□□□□,□□□□
ADDR A0→A9:
0 1 2 3 4 5 6 7 8 9
□□□□□□□□□□
```

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2	8	The 1st part 04, The 2nd part 04
2	16	The 1st part 08, The 2nd part 08
2	32	The 1st part 16, The 2nd part 16

Note: The above Rank concept is different from the Side, which you can see with your eye in physical way. For example, assuming there is a DIMM, which is a single Rank with 8 pieces memory chips. In the physical topology, it can put 4 pieces memory chips in the DIMM top side, and the left 4 pieces memory chips in the DIMM bottom side. Also, for a DIMM, which is two Ranks with 16 pieces memory chips, in the physical topology, it can put 8 pieces memory chips in the DIMM top side, and the left 8 pieces memory chips in the DIMM bottom side. Or it can also put all 16 pieces memory chips in the DIMM top side. Users can't simply adjust the Ranks amount based on the physical Side amount, which can be seen with eye. Memory Test Card shows these

Ranks and memory chips amount information based on the DIMM SPD data. If the DIMM SPD data is incorrect, Memory Test Card will also show the incorrect information here. When this occurs, users should correct their DIMM SPD data first.

In the first Rank and the second Rank, they use 8 panes to be responding to 8 memory chips in the DIMM. When every DIMM Rank has 8 pcs memory chips, every pane will be corresponding to one memory chip. When every DIMM Rank has 4pcs memory chips, every two panes will be corresponding to one memory chip. When every DIMM Rank has 16 pieces memory chips, every pane will be corresponding to two memory chips.

User can refer the below table for this:

Panes Amount	Chips Amount	The relationship
8	4	2 panes to represent 1 chip
8	8	1 panes to represent 1 chip
8	16	2 panes to represent 2 chips

During DIMM test, if a memory chip fails in the test, its corresponding pane will show Red color. If it passes, its corresponding pane will show Green color. For a single Rank DIMM, the second part will show zero piece memory chips, and all panes will be with white color.

In most of DDR2 and DDR3 DIMM design, the first pane is corresponding to the



MEMORY TEST CARD HANDBOOK

first memory chip in the DIMM, and the second pane is corresponding to the second memory chip in the DIMM, and the like. But please be noted that there can be some exception so that the position of the panes may not have the same array as the memory chip position in the DIMM. This can be various depending on different motherboard design and different DIMM PCB design. But for the same motherboard and the same DIMM PCB design, it will be almost the same. In order to find out the array relationship between panes and memory chips, users can use a small piece white paper to block the DIMM golden finger to create the golden finger contact issue, then adjust the panes and memory chips corresponding relationship based on the Memory Test Card test result.

In the third part of Memory Test Card right LCD screen, it uses 10 panes to represent 10 DIMM address line. Because memory chip uses multiplexing row and column address lines, this 10 pane can almost represent all address line problems. When something is wrong in the address line, it the right side of the third part, it will show a error sign "X", then the corresponding address panes will become Red. If there is no error in address lines, error sign "X" will be disappear, and all address line panes will be with Green color. Because memory address lines test result is interactional with memory data lines test result, we can't simply separate address line test result and data lines test result. Usually, users should use the below rule to eliminate the problems.



1. When address error sign "X" appears, and all 8 panes in the first part show Red color, user should eliminate the address line error first. That using multi-meter to measure the resistor value of every address line is the most efficient way to find out an address line error. User can refer the address line Red pane to use multi-meter to try to find the address line error. But because memory chip address lines are complex, and every address line will be connected to all memory chips, even there doesn't show the Red pane in address line portion, we still suggest users to check all address lines with multi-meters.

2. When address error sign "X" appears, but not all panes are with Red color in the first part, users should try to find out memory data lines or memory chips problems first

MEMORY TEST CARD HANDBOOK

based on the Red color pane in the first part.

When test is done, the left LCD screen will show the test end message. This message will tell users whether the finished test is with Fast Test Mode or Full Test Mode, and also reminder users that they can shut down the motherboard power by pressing the right button in the four functional buttons.

3. Memory Test Card Test Mode Selection Switch

Memory Test Card provides two test modes: Fast Test Mode and Full Test Mode. Fast Test Mode is focus on helping users to find out open and short soldering issue in several seconds. Full Test Mode is focus on helping users to repair the DIMMs, which can't boot the computer. A switch is used for user to select the different mode. When pressing down the switch, Memory Test Card will work in Fast Test Mode. When pressing up the switch, Memory Test Card will work in Full Test Mode. The LED indicator will also reflect the test mode. LED indicator will flicker fast in Fast Test Mode, and slow in Full Test Mode. Before finishing Fast Test, user can change this switch to decide if they want to run Full Test or Fast Test.

Fast Test includes Memory Address Lines Scan, Memory Fast Test. Full Test includes the entire test in Fast Test, then plus an all memory units read and write test. Users can terminate the test by powering off the motherboard at any time. When test is finished, Memory Test Card will remind the user whether this test is Fast Test or Full Test.

For a DIMM, which is with 1G memory size, Fast Test will take about ten seconds or a little longer. Full Test will take about two or three minutes. For the DIMM, which passes the Full Test, in most of the cases, it can always boot the PC successfully. Memory Test Card trends to helping users to find out the DIMM problems in a short time, so that the DIMM can boot the motherboard successfully after repair. After the DIMM boots the PC successfully, base on the real situation, users can also choose to use the other memory test software to do the memory stress test in hours.

```
TEST MODE: FULL
STATUS: COMPLETE
PUSH >> To Power Off
```

```
DIMM TYPE: DDR2
DIMM SIZE: 1024 M
DIMM FREQ: 0800
SYS CFG:  Def  User
ADDR SCAN:   
FAST TEST:   
FULL TEST:   
TEST ADDR: 0618 M
```

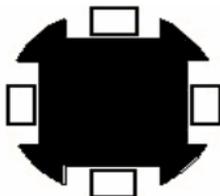
4: Memory Test Card LED Indicator and Speaker

Memory Test Card LED indicator will flicker during the whole test. There will be two kinds of flicker: Fast and Slow. In Fast Test mode, LED indicator will flicker faster, and in Full Test mode, LED indicator will flicker slower. If LED keeps in on status or off status, it may be something wrong in hardware. When this occurs, users should shut down the motherboard power supply, then power on the motherboard again for the test.

Memory Test Card speaker will beep for several seconds when test is done.

5: Memory Test Card Four Functional Buttons

Memory Test Card provides 4 functional buttons. After test is done, users can push those buttons for different features.



1. The Left button to show help information
2. The Right button to shut down the motherboard power
3. The Up button to show DIMM SPD data.
4. The Down button to show product SN

Note: the above buttons only work after the test is done. That pressing those buttons during test will not work.

Besides the above function, these four buttons also provide the below three features. Before power on the motherboard, pressing the “LEFT” button and power on the motherboard, Memory Test Card will show help information directly. Pressing the “UP” button and power on the motherboard, Memory Test Card will enter system configuration user configuration mode. Pressing the “DOWN” button and power on the motherboard, Memory Test Card will erase all user configurations, and use default system configuration for DIMM test.

When pressing those functional buttons, the Memory Test Card will display the corresponding message in the LCD screen. After those messages appear, users should release the buttons so that memory test card can go to implement those instructions. Holding those buttons for a long time may lead to an abnormal operation in memory test card.

When pressing those functional buttons, the Memory Test Card will display the corresponding message in the LCD screen. After those messages appear, users should release the buttons so that memory test card can go to implement those instructions. Holding those buttons for a long time may lead to an abnormal operation in memory test card.

6: Memory Test Card User Auto Configuration

User Guide	
	L:View Help R:Power Off U:View SPD D:View SN
	DN:FAST TEST UP:FULL TEST
Support G41+ICH7 MB	

MEMORY TEST CARD HANDBOOK

To run the memory test in the optimized way, Memory Test Card allows users to configure their memory test parameters. Currently, DDR2 and DDR3 run in a very high speed, different motherboards and different DIMM PCB designs may lead to different test result. So, this requests us to use different memory parameters in different motherboard and DIMM to improve the test precision. Memory Test Card forsakes the traditional single memory test parameter way, then replaces it with this patent technology. This patent technology allows us to use Memory Test Card in most of INTEL G41+ICH7 motherboards, also help us to get accurate test result in different motherboards and DIMM types combination. Based on the above reasons, we suggest users to run user auto configuration to optimize the memory test parameters before they begin to test and repair the defect DIMM.

To run auto configuration, users should prepare a good DIMM, which has the same configuration as the defective DIMM. If it is hard to do this, user can also use a good DIMM, which has similar configuration as the defective DIMM. This good DIMM should meet below requirements:

1. DIMM type must be the same. If the defective DIMM is DDR2, this good DIMM also need to be DDR2. The same as DDR3.
2. DIMM frequency must be the same. If the defective DIMM is DDR2-800, this good DIMM also needs to be DDR2-800. If the defective DIMM is DDR3-1333, then this good DIMM also needs to be DDR3-1333.
3. DIMM Ranks amount must be the same. If the defective DIMM is single rank with 8 pieces memory parts, then the good DIMM also needs to be single rank with 8 pieces memory parts.

After the good DIMM is ready, user can install this DIMM to the motherboard, then push and hold the "UP" functional button, then power on the motherboard. The LCD screen will show the message that the Memory Test Card is working in user auto configuration mode. Releasing the button after you see that message, the memory test card will begin to do auto configuration, and begin to test the DIMM. After test is done, if there is no error sign in the right LCD screen, it means user auto configuration has been done successfully. If it fails in the test, the panels in the right LCD screen will become red color, and it means user auto configuration fails. User will need to try to use different DIMM slot to do the user auto configuration again, until the user auto configuration passes.

Setting User
Configuration By
the Test System.

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For the motherboard, which has multiple DIMM slots, user can only do the auto configuration in one slot, then use that slot to test the defective DIMM only. Or user can do the auto configuration for all slots, then test the defective DIMM in any of these configured slots.

Memory Test Card also allows user to restore the System configuration value to the default status. Pushing and holding the "DN" functional button, then power on the motherboard. Memory Test Card will show the message to tell user it will reset the system configuration value to the system default value. After releasing this button, Memory Test Card will begin to use default system configuration value to test the DIMM.

During the test, user can know which kind of configuration is used for test from the left screen. In the SYS CFG part, if the left panel is with red color, it means system default value is used, if the right pane is with red color, it means user auto configuration value is used.

In some cases, if user can't find a good DIMM to do user auto configuration, they can download the exact BIOS from our website so that they can use the default system configuration value for the test.

In summarization, in order to use the best test parameters for DIMM test to get the precise test result, user can regularly get the most suitable BIOS from us so that they can use the default system configuration parameters to do the DIMM test, or user can generate their own parameters to test the DIMM.

In most of cases, users shouldn't use the defective DIMM to do user auto configuration. By doing this, Memory Test Card may halt so that the configuration will fail. In this case, user should shut down the motherboard power, and use a good DIMM to re-do the auto configuration.

7: Memory Test Card ---Test Procedure

Traditional memory test software needs user to boot their PC successfully first. Different from those kinds of software, Memory Test Card does the DIMM test by programming the DIMM Controller in the chipset directly so

```
Reseting System
Configuration to
Default Status.
```

```
DIMM TYPE:DDR2
DIMM SIZE:1024 M
DIMM FREQ:0800
SYS CFG: Def User
ADDR SCAN: 

|    |    |
|----|----|
| 00 | 00 |
|----|----|


FAST TEST: 

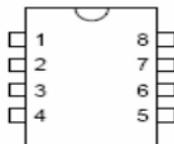
|    |    |
|----|----|
| 00 | 00 |
|----|----|


FULL TEST: 

|    |    |
|----|----|
| 00 | 00 |
|----|----|


TEST ADDR:0618 M
```

BIOS 芯片



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that Memory Test Card can test the DIMM, which can't boot motherboard. User needs to replace the motherboard original BIOS chip with our special memory test BIOS chip. User can also download the memory test BIOS file from our website, then programming it into motherboard. After replacing with memory test BIOS chip. The motherboard will not be able to boot as normal, and the monitor will not be able to be lighted on either. Suggesting users to keep a backup of the motherboard original BIOS in case you want to use these motherboards as normal in the future. Below is the detail test procedure:

Step 1: Be ready for Motherboard. Currently, Memory Test Card only supports the motherboard with G41+ICH7 serial chipsets. The verified motherboards include ONDA G41C+(support both DDR2 and DDR3), ASUS P5G41T-MLX (DDR3 only) and etc... Our website will upload more verified motherboard information regularly. And users are encouraged to try the new the motherboards, which aren't in our verified list yet. The default Memory Test Card BIOS setting is based on the below configuration:

1. ONDA G41C+ motherboard
2. FSB=800M LGA775 CPU
3. Desktop DDR2-800M dual ranks 1G DIMM with 16 pcs memory chips.
4. Desktop DDR3-13333 single rank 1G DIMM with 8 pcs memory chips

Step 2: Using the enclosed BIOS chip to replace the motherboard original BIOS chip. When installing the BIOS, please be careful with the BIOS direction. Incorrect installation may damage the motherboard and the BIOS chip.

Step 3: Install the Memory Test Card to motherboard via PCI slot. Please make sure there has a well contact between motherboard and Memory Test Card.

Step 4: Power on the motherboard, Memory Test Card will show the model information. Memory Test Card has two models: DDR2+DDR3 unlimited (Model -MT35) and DDR2+DDR3 LIMIT (Model -MT32). The current model will be shown with red color in the panel. For DDR2+DDR3 LIMIT (Model -MT32), users can test desktop and notebook DDR2 without times limitation, but users can only test 1000 times desktop and notebook DDR3. When DDR3 test times is used out, users can continue to test DDR2 DIMM, but not be able to continue to test DDR3 DIMM. DDR2+DDR3 UNLIMITED (Model -MT35) allows users to test



MEMORY TEST CARD HANDBOOK

desktop and notebook DDR2 and DDR3 without times limitation.

Usually, Memory Test Card needs several seconds to configure the DIMM test parameters. During booting, in the Memory Test Card left LCD, it will show the progress with red panels. If it stops at one panel for over 10 seconds, please check the contact between the Memory Test Card and the motherboard.

Step 5: Users can try to use the default system configuration to test the DIMM. But if the default configuration is unsuitable for use, the test result will show error even the DIMM is no defect. In this kind of case, user can try to change the BIOS to the more suitable one, or follow the above instruction in part-6 to do user auto configuration.

Step 6: Checking the DIMM information and the current used system configuration type. If user uses the DDR2+DDR3 LIMIT (Model -MT32) model to test DDR3. Memory Test Card will remind the left use times.

Step 7: Check the test result in the Memory Test Card right LCD. If all panels are with red color, it might mean the current used system configuration isn't suitable. User should use more suitable BIOS or follow the above instruction in part-6 to do user auto configuration. If no panel is with red color, it means the test passes. And it also means the current system configuration is suitable for use to test this kind of DIMMs.

Step-8: After test is done, the Memory Test Card speaker will beep for some seconds, then remind user the test is done. User can push the Right functional button to power off the motherboard, or use the other ways to turn off the motherboard power directly.

Note: When users install a DIMM to motherboard, they need to eliminate the POWER and GND short issue first. If a DIMM is with POWER and GND short, after installing it to motherboard, motherboard ATX power supply will enter self-protection status to shut off all of the power rails so that Memory Test Card can't run because of no power. Also, installing this kind of DIMM to motherboard may damage the motherboard, DIMM or others. Below is a simple way to

```
DIMM TYPE:DDR2
DIMM SIZE:1024 M
DIMM FREQ:0800
SYS CFG:■Def □User
ADDR SCAN:  000
FAST TEST:  000
FULL TEST:  000
TEST ADDR:0618 M
```

```
DIMM RANK1: 08 PCS
 1 2 3 4 5 6 7 8
 0 0 0 0 0 0 0 0
DIMM RANK2: 08 PCS
 1 2 3 4 5 6 7 8
 0 0 0 0 0 0 0 0
ADDR A0→A9:
0 1 2 3 4 5 6 7 8 9
0 0 0 0 0 0 0 0 0 0
```

```
TEST MODE: FULL
STATUS: COMPLETE
PUSH >> To Power Off
```

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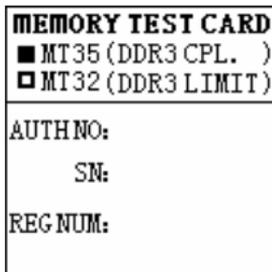
check if the DIMM has POWER and GND short. Using a multi-meter to measure the resistor value between POWER and GND capacitor, if the measured value is zero, it means the DIMM is with POWER and GND short. Usually, Power and GND short issue is caused by bad DIMM PCB or a very bad soldering.

8: Memory Test Card ---Registration

Every Memory Test Card has a unique SN and register code. User needs to provide the authorization code, SN and registration code for registration. There are two ways to view the register number:

Way-1: After test is done, push the "DN" button in functional buttons, it will show the SN and register code.

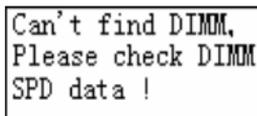
Way-2: Before motherboard is power up, push the "Left" button in functional buttons, it will show help information, then push the "DN" button, it will show the SN and register code.



9: Memory Test Card error message

Memory Test Card gets the DIMM information from the DIMM SPD. If Memory Test Card can't find the DIMM SPD data or the SPD data is wrong, the Memory Test Card will show the error message. When this occurs, user should use the dedicated SPD tool to check the DIMM SPD data. Please be noted that Memory Test Card can't test a memory, which has a wrong SPD data.

For the DIMM with the incorrect SPD data, Memory Test Card isn't always able to remind the user, and sometimes, it is possible that Memory Test Card will test the memory based on that SPD data, then lead to an incorrect test result. So, before using Memory Test Card to test the DIMM, user needs to make sure their SPD information is correct.



During the DIMM test, Memory Test Card will check the authorization. When it fails in authorization, the DIMM test result will be invalid. For the user, who uses DDR2+DDR3 LIMIT (Model -MT32), once the allowed DDR3 use times becomes zero, the Memory Test Card will show authorization failure message, at this time, all test result is invalid.

10: Memory Test Card Question and Answer

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Question 1: What the differences are between Memory Test Card and the pure software memory test software.

Answer:

Difference-1: test methodology is different

- 1) Memory Test Card uses a patent technology to test the memory by programming the memory controller in G41 chipset directly so that DIMM can be test in a very early stage.
- 2) Pure software memory test software needs the motherboard boot successfully first, then it boots from U-disk or hard-disk or others equipments for test.

Difference-2: Display mode is different

- 1) Regarding of a defective DIMM or a non defect DIMM, Memory Test Card uses its LCDs to show the DIMM information and test result when motherboard is power up.
- 2) Pure software memory test software uses monitor to show information. Before it can use monitor, the motherboard need to boot successfully first since monitor needs to use DIMM space for configuration and display. So when you use some bad DIMM, in most of time, the monitor will not be able to show any message.

Difference-3: Pure software memory test software needs to use a non defective DIMM to assist the test

- 1) Memory Test Card doesn't need to use a no defect DIMM to assist the test, and it can test the defective DIMM directly.
- 2) Because of the above two reasons, Pure software memory test software needs to boot successfully before it is run, so it needs to use a non defective DIMM to try to assist the motherboard to boot.

Question 2: Why Memory Test Card must use specified Memory Test BIOS, and can't use Monitor to show message.

Answer: As we know, in a normal motherboard, when using a defective DIMM, the motherboard will not be able to boot, and it halts in a very early stage, and monitor can't be lighted on because monitor depends on a good DIMM to show message.

Memory Test Card uses a patent technology to test the memory by programming the memory controller in G41 chipset directly so that DIMM can be test in a very early stage. This is the reason that why user must use G41 chipset and use dedicated Memory Test BIOS chips.

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Question 3: When using Memory Test Card , do I need to connect a Monitor, U-disk, Hard-disk or others?

Answer: No, you don't. Memory Test Card trends to be a hardware level memory test by programming the G41 chipset directly. It tests the memory when power is up in motherboard, and it doesn't need to boot the motherboard. This is the reason that why Memory Test Card can test a DIMM, which has soldering issue.

Question 4: Memory Test Card uses desktop motherboard, which hasn't notebook DIMM slots, how can we test the notebook DIMM?

Answer: When using Memory Test Card to test notebook DIMMs, user needs to use a converter. Because SO-DDR2 and SO-DDR3 work in high frequency, user should use a high quality converter. Please be noted that after you finish to use Memory Test Card to test and repair the notebook DIMMs, you will need to use notebook motherboard to test those notebook SO-DIMMs since a lot of desktop motherboards don't support to use notebook SO-DIMM to boot the system.

Question 5: Can I use any G41+ICH7 series motherboards?

Answer: Memory Test Card uses a patent technology, which allow user to auto configure their motherboards, so, in theory, user can choose any G41+ICH7 motherboard, and then follow the part-6 to do the user auto configuration.

Question 6: Do I need to use a good DIMM to assist the defective DIMM?

Answer: No. Memory Test Card is different from the pure software memory test software. Memory Test Card trends to a hardware level DIMM test, and it programs the memory controller directly in the G41 chipset. During the test, user can only install one defective DIMM.

Question 7: My DIMM has memory chips in top side and bottom side, why the Memory Test Card shows it is a single Rank DIMM?

Answer: The concept of single rank or dual ranks isn't depended on the physical observation. Please refer the part-2 to get more information for this.

Question 8: Memory Test Card stops in the booting interface.

Answer: In normal, Memory Test Card needs 10 seconds or a little longer to boot. If the Memory Test Card stops in booting screen over 20 seconds or longer, please check the contact between your Memory Test Card PCI golden fingers and Motherboard. Please also make sure you have correctly installed the Memory Test BIOS chip.

Question 9: My DIMM is a good DIMM, why Memory Test Card shows the error test.

MEMORY TEST CARD HANDBOOK

Answer: It is possible that the current used system configuration parameters aren't suitable for your platform. Please refer the part-6 to do the user auto configuration.

Question 10: After changing to the Memory Test BIOS, my motherboard can't boot in normal, and the monitor hasn't display.

Answer: This is right. Memory Test Card is different from the pure software memory test software. Memory Test Card trends to a hardware level DIMM test, and it programs the memory controller directly in the G41 chipset. So after replacing with the Memory Test BIOS, user can only use this motherboard to work with Memory Test Card Suggesting user to do a BIOS backup before installing the Memory Test BIOS in case you might want to restore your motherboard back to normal in the future.

Question 11: After using some time, Memory Test Card shows authorization error when testing DDR3.

Answer: You are using DDR2+DDR3 LIMIT (Model MT32) version, which allows users to test DDR3 1000 times only. When it is used out, user will not be able to use it to test DDR3 again, but user can also choose to upgrade it to DDR2+DDR3 COMPLETE (Model MT35) version.

Question 12: Memory Test Card shows version is mismatch

Answer: Please check the version information in the Memory Test Card right screen. If this occurs after your change your motherboard Memory Test BIOS, this usually means your hardware doesn't support this new Memory Test BIOS. You can change the motherboard Memory Test BIOS back to the original one, or upgrade your Memory Test Card hardware to support this Memory Test BIOS.

Question 13: Memory Test Card halt, and the LED indicator doesn't twinkle

Answer: This kind of issue is usually caused by Memory Test Card hardware issue. Please carefully check if it has physical damage in the Memory Test Card, if this keeps happen, please contact the seller for repair.