

Diagnosis: Main Board Failure ?

A courtesy customer support explanation of this situation:

By Jon Benjamin – www.exenvoid.com



Examples: Washing Machine,
and LCD monitor main boards



A '**main circuit board**' in any house hold or general electrical appliance is the **primary part** that all the electrically controlled components connect into. The main board is custom made for each particular appliance. It can usually be replaced by locating a replacement part and installing it. Many appliance manufacturers such as washing machines, refrigerators, televisions, computer monitors etc keep stock of these parts for many years to help support their products into the future. The repair is simple, trace and diagnose the fault to be in the main board, order the part from the supplier, install the new main board ~ test the product operations: ~ and that's it.



Examples: Desktop and
notebook computer main
boards



Unfortunately, replacing a **computer main board** is an entirely different process. It is rarely done out of warranty and can be a complete waste of time and effort to attempt this repair on a computer more than 3 years old.

This is the main problem; **Brand name computer manufacturers** will generally keep supply of main boards for your model computer for the duration of the warranty period only. **Non brand name computers** (*assembled by a local computer store using various parts*) will have next to no hope of sourcing a replacement main board of the exact original type, as they go out of production after around 12 months of manufacturing.

So why can't you put another model main board in your dead computer ?

The reason is, that the **Microsoft Windows operating system** installed on the computer's hard drive is '**uniquely setup for the original main board**'. If you install a main board that is not the '**Exact same type and model**', the computer will not start properly and the Windows installation will become totally corrupted.

Technically you can, physically install a new 'alternative model' main board in most standard desktop computers (as long as it is not a custom designed case). *But you cannot under any circumstances replace a **notebook main board** with any other but the same type, as any other model would not operate or even fit.*

HOWEVER:

You would have to reformat / erase the entire hard drive and re-install the Windows operating system all over again from absolute scratch to suit the new main board.

This complex and extremely time consuming process can take over 10 hours to complete and would require a high speed internet connection with a download capacity of around 5 gigabytes. You would have to install all the updates and patches for the operating system. (for Windows XP for example, that is around 10 years of updates and patches) You would then need to install all the original programs, data recovery and restoration, email database recovery and restoration, reinstall your printer/s and accessories and so on.

This is why a main board replacement for a computer out of warranty is generally not attempted nor recommended.

Approximate New Main Board cost:	\$ 190.00
Approximate labour costs (10 hours & \$77 per hour)	\$ 770.00
Total costs	\$ 960.00

FINAL NOTES:

Obviously, the only realistic solution would be to replace the computer. This process will require a certain amount of labour expense, as it is not just a matter of buying a new computer and plugging it in.

Ensure you check your household contents insurance policy to see if your insurance company can help pay for some of the expenses.

A full explanation of the entire recommended processes of replacing of your computer system is available on my website www.exenvoid.com If you currently have no means of accessing the internet from your home, I can print this data out and deliver it to you.



Computer migration services available:

- Loan computer system to keep you connected throughout the process
- Helping you find the right new computer to suit your needs
- Professionally preparing the new computer off-site
- Data recovery / restoration including email messages and address book
- Delivering / installing the new computer and all your accessories
- Printed support manual to help you to take care of your new computer