

xCheck ReadMe

xCheck is a Windows application that can analyze a printed circuit board (PCB) design created with the ExpressPCB program and the associated schematic, drawn using ExpressSch, looking for problems that should be fixed before manufacturing the board. The schematic is checked for mistakes or design errors, and the PCB is checked against this schematic to look for shorts, opens, or a number of other differences. The PCB layout is also checked against a list of 16 design tolerances (for example, pad-to-trace spacing) to make sure that the board can be manufactured reliably.

ExpressPCB and ExpressSch are great tools that are easy to use, but they lack the ability to perform most of these checks. **xCheck** provides these missing features to help you finish your layout with confidence.

xCheck can also be used to generate other useful reports from your design, including a netlist and a Bill of Materials.

xCheck is a completely redesigned release of the programs previously known as XGpcb, Xpcb, and Xsch by the same author.

Price

I have invested hundreds of hours of research, development, and testing into producing **xCheck**, and have released it as freeware as a gift to the ExpressPCB community. This is not a crippled or time-limited version, but is fully functional.

If you find this tool useful or if it saves you money by helping you to avoid manufacturing boards with mistakes, why not say “thank you” with a small donation? Doing so will help support the ongoing effort to improve this program and fix any bugs that might be found. Within the program there’s a handy PayPal donate button as well as information for sending a check by mail. Go to Help->Donate for more information.

xCheck is licensed to be used free of charge, for personal use only. I retain all rights to the program. It may not be distributed for profit, nor may it be included in products or otherwise distributed by commercial entities to their clients or customers without the prior written permission of the author.

Compatibility

xCheck is designed to run on Windows systems. It has been tested on Windows XP, Vista, and 7, and requires .NET 2.0 or higher to be installed (this comes standard with Vista and Windows 7).

Installation

*Note: If you have previously installed the XGpcb program, you should uninstall that program yourself, as this program replaces it but the xCheck installer will not automatically remove XGpcb. Do this on XP using **Start/Control Panel/Add or Remove Programs**, on Vista using **Start/Settings/Control Panel/Programs**, and Windows 7 using **Start/Control Panel/Programs**.*

Program Installation

xCheck, documentation, and examples are distributed as a typical Windows installer. Simply double-click on the **xCheck_setup.msi** file and follow the instructions.

If the installer detects that the .NET (v2.0) framework is not present on your system, it will notify you of this and refuse to install. If that occurs, install .NET first (see instructions below) then run the xCheck installer again.

When installation is complete, you have the option to launch xCheck immediately. In the future, launch xCheck from **Start/All Programs/xCheck**.

Installing .NET

xCheck requires .NET 2.0 or higher to be installed on your system. This comes standard with Windows 7 and Vista, but may or may not already be installed on your XP system. If the xCheck installer detects that .NET is missing, you can download it at no cost from Microsoft at the following link:

www.microsoft.com/en-us/download/details.aspx?id=19

Once the file is downloaded, run it to install .NET to your system. It might ask you to reboot your computer when done. Then run the **xCheck_setup.msi** installer to install xCheck.

Documentation

To view the documentation for **xCheck**, run the program and select **Documentation** from the **Help** menu. Or you can view it by selecting **Start/All Programs/xCheck/Documentation**.