

Hardware Specifications

Cache and RAM (memory)

The difference between the different CPU (Central Processors) is of course the speed, and the cache (memory built into the processor itself). An AMD CPU normally will perform faster than an Intel CPU at the same speed. Celeron CPU normally has less cache than Pentium.

The application (EPFX) will first look for the instructions it needs to perform in cache memory built into the CPU itself: this is extremely fast. If it does not find the relevant instructions there it will go to memory built into the motherboard, slower but still fast. (this is the RAM). If it does not find the instructions there it has to go to the hard drive (slow) and execute the instructions: this will generally only happen with the Clasp program at very low RAM (e.g. 64 Mb). Thus the program may run but slowly.

EPFX is as we know a large program (application) running in real time. Windows does not run in real time so we have 2 programs running in parallel and they are not particularly fond of each other because they are both fighting for available resources. EPFXCI is using a Borland Database engine stretched beyond what Borland themselves has any experience with.

The specifications focus on the RAM: however "Cache is also important".

Here is some background to selection. The aim is to have the best platform and so minimize potential problems.

Hardware

1. Computers are not expensive that you need to use it for other things. It is affordable to dedicate a laptop to the program.
2. If there is a need or desire to do run other programs then use a desktop for these if possible: desktops are relatively cheap.
3. By keeping other programs off the Clasp computer the possible complications with anti virus and internet/ viruses are eliminated. There are not always complications BUT many of the Clasp program issues do come from a non dedicated computer.
4. CPU speed over 1 GHz preferably not Celeron, because of less cache.
5. 512 ram (different kinds) built into the machine, motherboard it self.
6. A brand known to be compatible with the Clasp software. Clones will often work but it is another possible source of problems.
7. Connection port to the EPFX interface box: this is currently a parallel port. Parallel ports are disappearing from both laptops and desktops, being superceded by USB ports. (Parallel port is the slowest but uses several lines at the same time. Serial port is one data at a time and has speed limit most new notebooks does no have a serial port anymore

Connections

Computer manufacturers are stopping providing parallel ports and seem also to be stopping serial ports. The QXCI will only operate on a parallel connection and this will not change. The SCIO was originally designed to operate on a serial port but will also operate on a USB via a supplied converter. The Parallel Port is the slowest but uses several lines at the same time. Serial Port is one data at a time and has speed limit. USB Ports: There are two types, USB 1 and USB 2 (faster). Current models include these two ports.

USB 1 is the new kind of serial port and Version USB 2 is the fastest.) The SCIO (new QX system) does operate on PROVIDED the QX standard of Gemini USB to serial converter is used with the QX supplied installation driver CD.

To use the existing QX interfaces a parallel port is needed. It is still possible to specify a parallel port (BUT do not assume that it is standard). In addition specify minimum 2(two) USB ports and preferably 3-4. This allows for the future and also to have a USB printer directly connected to your computer for report printing. (It is not recommended to connect a printer to the QX interface box as printer technology exceeds the isolating capability of the interface switch).

It may be possible to use a PCMCIA adapter card to parallel port converter. Use the Quatech SPP-100 Single channel parallel port EPP PCMCIA card that supports the bi-directional communication that is required and is an IEEE 1284 EPP compatible interface. IT IS CRUCIAL that the resource is settable to 0378: this is the standard LPT! (parallel) port address AND IS NOT settable in all computers. Sources are <http://www.dpie.com/pcmcia/spp100.html> in the UK and www.superlogics.com in the USA.

	QXCI	QXCI	SCIO	SCIO
PARAMETER	Minimum	Preferred	Minimum	Preferred
<i>Operating System</i>	Note 2	Note 2	Note 2	Note 2
Windows 95	Note 1		No	No
Windows 98/Me	To V Sept02		No	No
Windows 2000		Seems OK	Seems OK	Seems OK
XP Home		Seems OK	Seems OK	Seems OK
XP Pro		Yes	Yes	Yes
<i>Accessory Software</i>	See also below			
Microsoft Word	Yes	Yes	Yes	Yes
Norton Utilities	Yes	Yes	Yes	Yes
Norton Antivirus	Note 3	Note 3	Note 3	Note 3
<i>Hardware</i>				
Brand/Model	See below	See below	See below	See below
Processor	Pentium/AMD	Pentium/AMD	Pentium/AMD	Pentium/AMD

Processor Speed		P2/550Mhz	P3/100Mhz	P4
Hard Drive	3Gb	10Gb	10Gb	20Gb
RAM	64 (Note 4)	256Mb	256Mb	512Mb-1 Gb
Screen >14 "	TFT/XGA	TFT/XGA	TFT/XGA	TFT/XGA
Screen Resolution	1024x768- note 5	1280x1024	1280x1024	1280x1024 true
CD ROM 16X	Essential			
CD-DVD Reader	Note 7	Essential	Essential(30Jan04)	Essential(30Jan04)
Sound card	Quality	Quality	Quality	Quality
Video card	8Mb	16-32Mb	16Mb	32Mb + (more is better)
Floppy	Optional	Optional	Optional	Optional
<i>Connections/Ports</i>	See below	See below	See below	See below
Parallel	Essential	Essential	NA	NA
Serial	NA	NA	Useful but not essential	Useful but not essential
USB	NA	NA	Note 6	Note 6

Note 1: it is possible to run only 2-3 year old software. There has been much program development since then.

Note 2: XP pro is the QX platform for all software development. It is possible in the future that W2000 may not run the program (as has happened with W98, for which the last program that will run is September 2002)

Note 3: The experience of some users indicate that it is important to "live update" which means connection to the web (this does not mean the same as email: you access the Microsoft Update site which will automatically scan you system to see if there are "critical" patches that will help system operation and also others that may be more associated with accessories. Microsoft operating systems are not perfect. QX continually updates their Windows XP pro and so should you. It is sensible to have Norton AntiVirus to do this.

Note 4: this will support programs only up to about Dec 2001. It is possible to upgrade the RAM on most computers.

Note 5: for Clasp software after June 2003 there is more screen information and this will not be visible on resolutions below 1280x1024. This applies to most Scio screens and the homeopathic screen.

Note 7: all new clasp releases will be on DVD. Only programs pre Sept 2003 will be on CD. If you are using an older computer with only CD reader this is relevant.

Computer Model

Two years ago it was smart to AVOID Toshiba, IBM, Acer. Users have reported success with Toshiba and the latest IBM's.

USER SUCCESS Sony, Dell, Packard Bell, HP (some have reported issues recently), Compaq. Some clones may work.

Printers

There is facility to connect a printer to the EPFX interface box and switch from function to print. However even when you are using the EPFX (switch to function) a modern connected printer can chatter and feedback. ***Thus it is strongly recommended that the printer is not connected to the EPFX box when using clasp for test and therapy.*** The best solution is to have a printer that can connect via the USB (small rectangular) port of the computer thus totally avoiding the need for EPFX box involvement. The alternative is to have an external switch box for the printer. To get one with the correct connections take the computer, cables, EPFX box into the computer shop. It is easy to get the male/female confused. The cable is a standard parallel port printer cable.