

TechNote TN-081202-06 (Rev A)
Date: January 7, 2004
Applies to: VCS Async, Async Plus, Viewer, and Pro versions
Subject: Quatech Serial Hardware and Drivers for VCS

Using VCS on a Laptop Can be Difficult...

Most laptop computers come with one serial port. Some come with none. In either case, if you want to see both sides of a full-duplex communications session using sysFire's ViewComm Async series products, you will need at least a single port PCMCIA (or PC Card) card. Many users acquire VCS having already installed various serial port hardware—and when we find that the hardware is not capable of working with VCS – well, I know how I'd feel if I were on the receiving end of this.

In the case where someone has an incompatible single port add-in, they may choose to fall back to viewing only one side of the conversation (except in the singular case of Viewer which spies on both sides) using only the onboard serial port...unless the laptop has zero built-in ports.

New Deal

After much thought and a lot of work, we came to have a set of cards for laptops and PCs from a single vendor who cooperated in building VCS compatible drivers and testing them. This means that whether you use a laptop or a desktop for VCS, there is a simple, easy to understand solution that reduces the furball of reboots and TechNotes to read in order to get VCS on the air.

This hardware and driver combination works on Windows 2000 and Windows XP.

Quatech has a long history of providing reliable, full-featured serial hardware, so the hardware is from Quatech, the drivers have gone through extensive testing both by Quatech and our developers, and the driver installation procedures are simpler, much simpler.

The table below shows the hardware options. sysFire also sells the cards at a discount to VCS Async customers.

Incidentally, if you experience difficulty using the internal serial ports on a Dell machine with VCS, consider using one of these cards.

The drivers are available from this website (see the VCS site MAP) free. The set of drivers must be installed a certain way, so there is an illustrated paper to help with that; the set contains both standard and VCS enabled versions of the drivers. This means it's easy to swap the VCS enabled driver with the standard Quatech driver. No more reboots.

See TechNote TN-010104-01 for more information.

<i>VCS Async Compatible Hardware from Quatech</i>					
<i>Model</i>	<i>No. Ports</i>	<i>Spec</i>	<i>Bus</i>	<i>Max Baud</i>	<i>Cable</i>
<i>SSP-100</i>	1	EIA-232	PCMCIA	921.6	Detached
<i>SSPR-100</i>	1	EIA-232	PCMCIA	921.6	Attached
<i>SSP-200/300</i>	1	EIA-422/485	PCMCIA	921.6	Detached
<i>DSP-100</i>	2	EIA-232	PCMCIA	921.6	Detached
<i>DSPR-100</i>	2	EIA-232	PCMCIA	921.6	Attached
<i>DSP-200/300</i>	2	EIA-422/485	PCMCIA	921.6	Detached
<i>QSP-100</i>	4	EIA-232	PCMCIA	115.2	Detached
<i>DSC-100</i>	2	EIA-232	PCI	921.6	Board edge
<i>DSC-200/300</i>	2	EIA-422/485	PCI	921.6	Board edge

About the Boards

All of the boards listed above use 16750 UARTs which work up to 921.6 Kbaud and have 64 byte FIFOs except for the QSP-100 four-port PCMCIA which works up to 115.2 Kbaud and has 16550 compatible UARTs with 16-deep FIFOs.

Some PCMCIA models are available with attached cables—if you're like me, you will eventually break the tiny plug and have to buy a replacement cable.

Are These Real 16550s and 16750s?

Probably no computer or add-in made in the past 5 to 10 years has an actual 16550 or any other UART IC. Instead, the logic is implemented by various UART makers in miniaturized versions, dual and quad units, and since the manufacturer is the same, functionality is assured. So, yes, they're "Real."