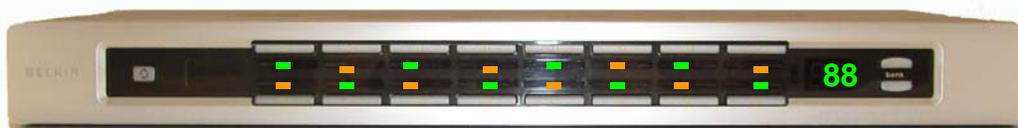


Recovering a QuadBus (Enterprise) KVM with Code 88 Error |

Users often experience a 'frozen' KVM switch depicting 'Code 88' on the LED display and with flashing lights on each port after performing a flash upgrade mainly. The 'Code 88' is not a Boot Loader code per se, moreover all LED segments filled at once. This is not normal behavior and indicates a serious error with the firmware.



The only way around this issue is to erase the data on the KVM EEPROM and re-flash it with the latest firmware. This process requires the use of the 'Serial Debugger' cable in Technical Support.



The 'Serial Debugger' cable is **not** to be sent to customers as it is the only one available to Technical Support Europe. In addition to the cable **WINISP Flash Programming Software** is also required.

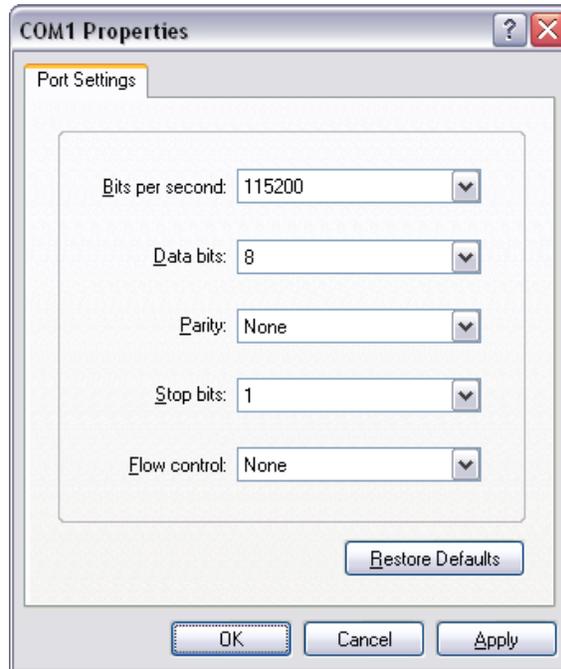
Customers should be persuaded as much as possible to **return their unit** for a speedy recovery so that unnecessary RMA's can be avoided. Should the recovery process fail for any reason customers will automatically receive a new replacement unit.

The Process for recovering QuadBus (Enterprise) KVMs is described in detail on the following pages.

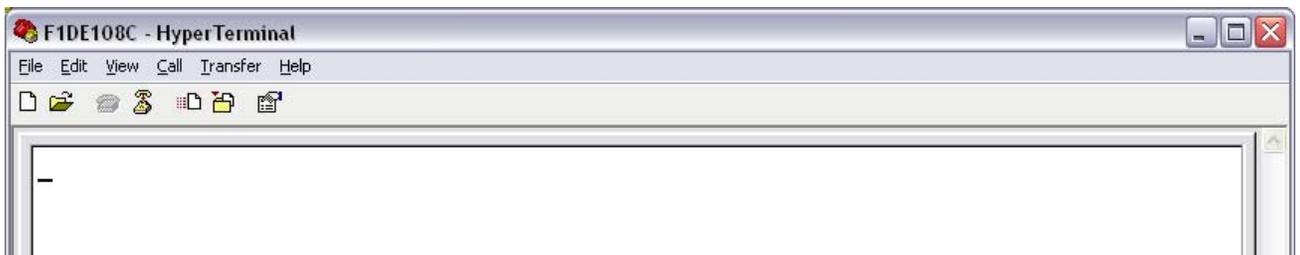
Instructions |

The first step is to reset the KVM's **Boot Loader Protection Security Control** to its unprotected state by re-programming the **Boot Loader Code** in the **XAG-49**.

To do this open up a **Hyper Terminal** session and set up a new connection, configuring it as shown below for your chosen Com Port..



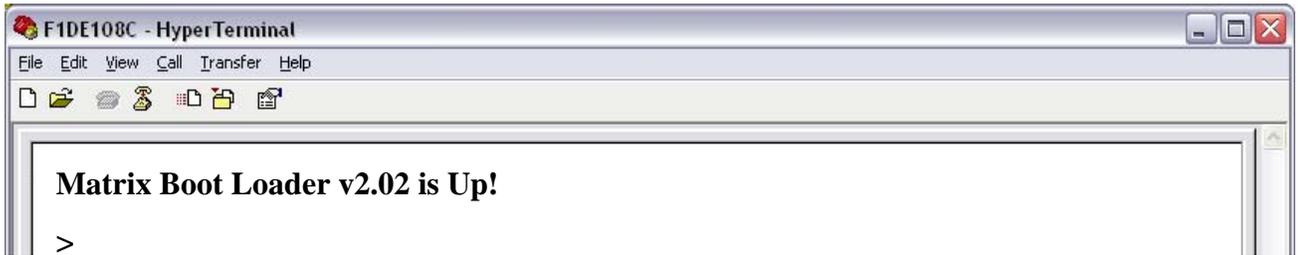
The following screen should then appear with a flashing cursor;



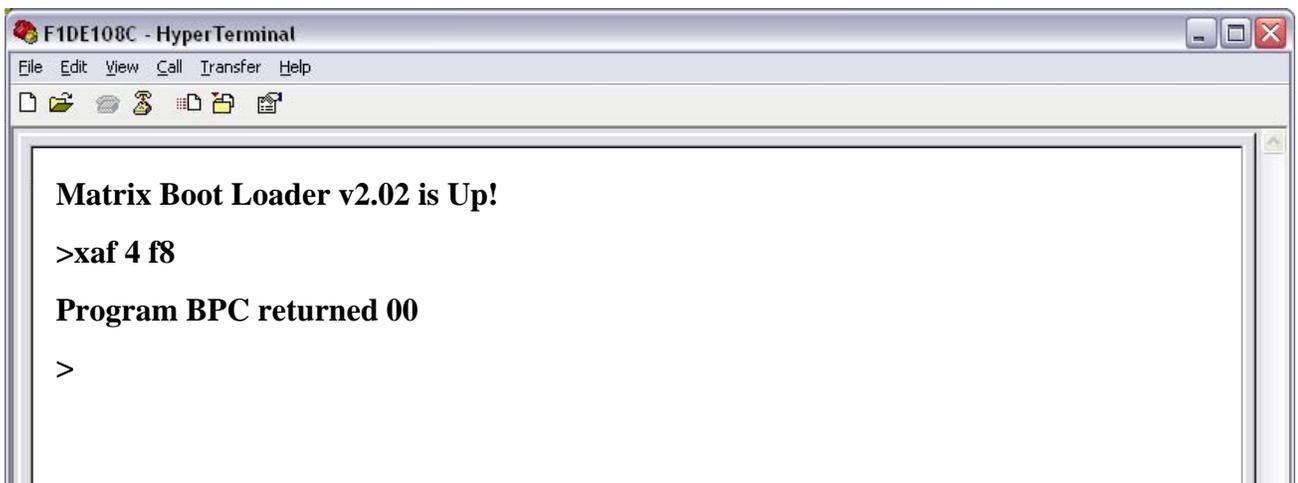
At this stage check the KVM is powered off then attach one end of the Serial Debugger Cable to the **Computers' RS232 (Serial) port** and the other end to the **QuadBus KVM's Daisy Chain 'IN' connector**.

Once the cable is connected correctly, press and hold down the ESC key on the computer running Hyper terminal and then power the KVM on.

You will then see an entry in the Hyper Terminal window similar to the following;

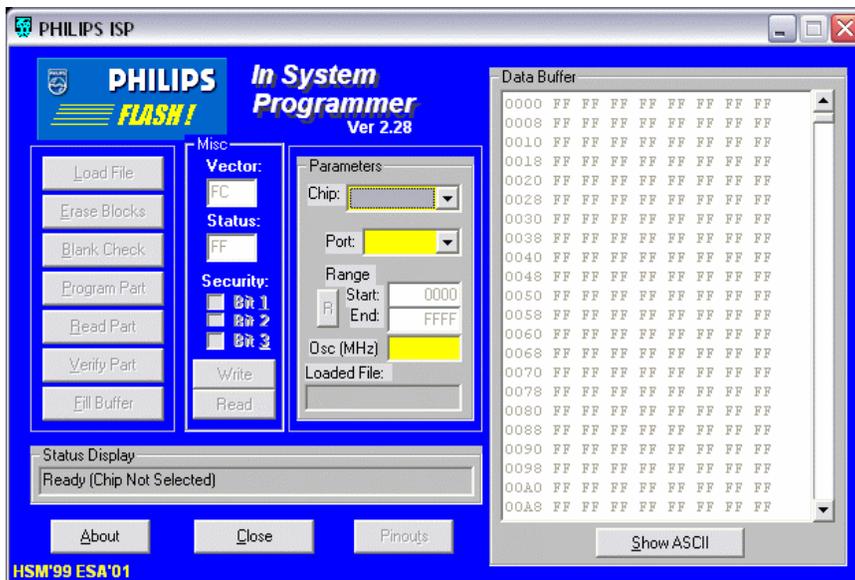


At the prompt, type **xaf 4 f8** followed by **ENTER**. The screen should then show as follows;



Sometimes this command needs to be entered a couple of times before you will get the response “**Program BPC returned 00**”

At this point the boot loader is **unlocked** and can be **re-programmed**. Close Hyper Terminal so that the Com Port is freed again and then launch the installed WinISP program.



Power down the KVM. **Hold down** the button on the top of Serial Debugger Cable. **Power up** the KVM and **after 2 seconds release** the button.

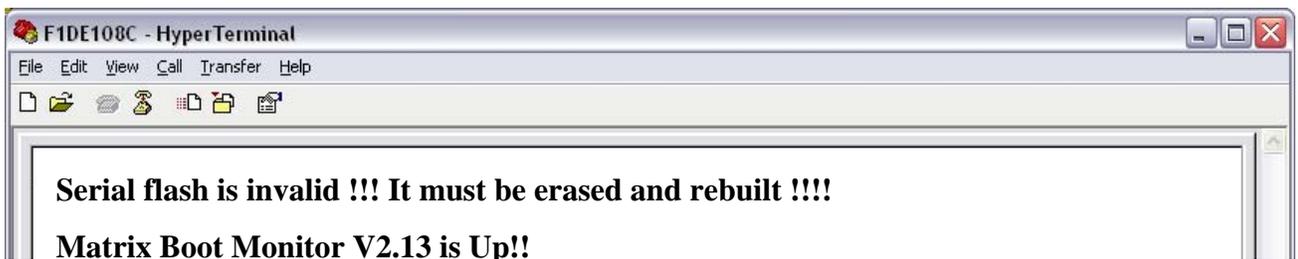
WinISP can then be set up with the **parameters** as follows:

Chip: PXAG49
Port: Com1 (or the Com Port used by Hyper Terminal)
Osc(MHZ): 30

After this select **Load File** and browse to this folder and choose **XAbboot.1.0.1.hex** Then select **Erase Block** and click the **Full Chip Erase** button.

After the erase has completed select **Program Part**. This will take a minute or so, after which the boot loader has been programmed.

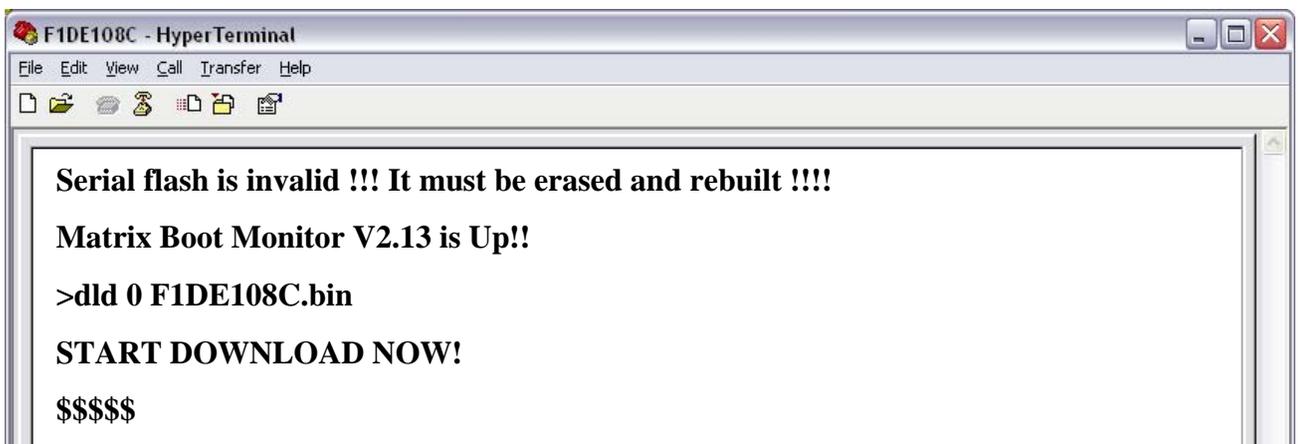
Once complete, **power down** the KVM and **close WinISP**. Next, open Hyper Terminal again. Once opened and with the cursor flashing, **hold down Esc** key and **power up** the KVM. You should see the message:



At this point you can re-program the KVM with new (2.3.8) firmware. To do this please type the following command into the open Hyper Terminal Window;

➤ **dld 0 F1DE108C.bin**

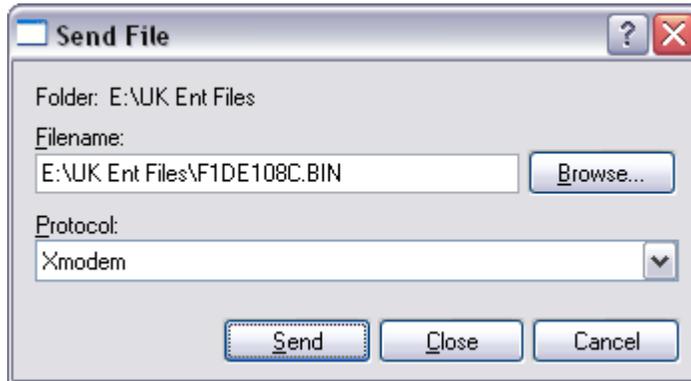
The value in red should be changed to reflect the correct filename appropriate to the model of the KVM. This should result in the following message;



At this point the firmware needs to be transferred to the unit otherwise you will get the message

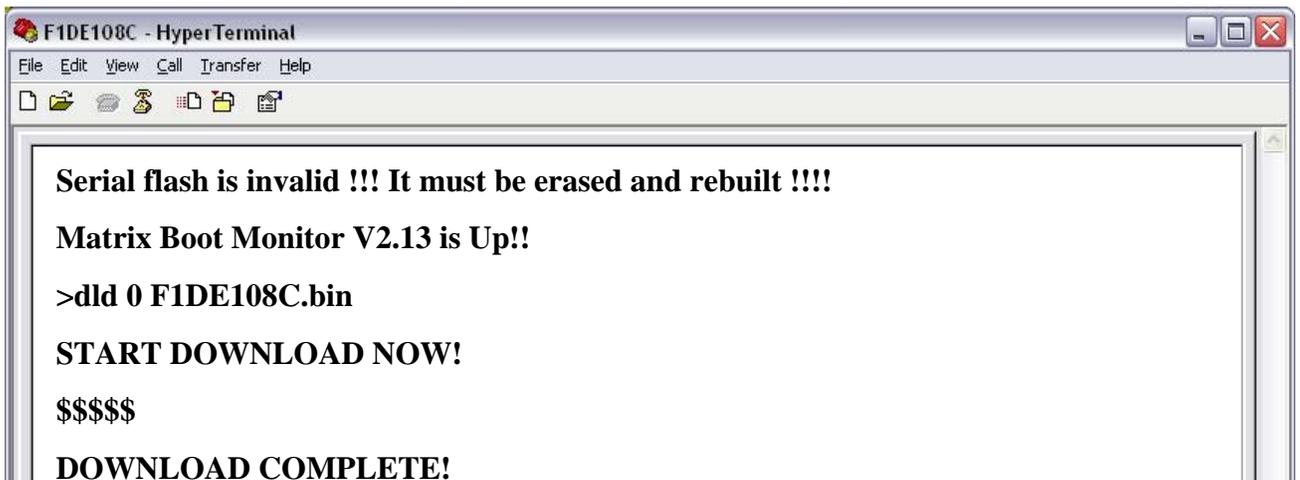
NO SOH/EOT RECEIVED!

Click on **Transfer** from the **Hyper Terminal** menu bar and select **send File**. Browse to the file location and select the right **firmware filename** for the device being flashed.



Choose the Protocol **XModem** and then select **Send**.

After about **5 minutes** the Hyper Terminal transfer box will disappear and the message will appear as follows;



Once you see this **power down** the KVM and THEN **power** it as normal. The unit will apply the new firmware at this stage. This process takes **a minute or two** and can the progress can be seen by looking at the front LED display which will cycle through B1, B2, B3 etc until finally it loads '00' with the audible tone as standard.

