



MitySOM-5CSx Family Virtual Machine Setup Procedure



Revision Status

Revision	Revision Description	Author	Date
1A	Update to current version of Virtual Box. Document previously named P-10149.	A. Block	9/4/2014
1B	Update for 5CSx Family to support 5CSE and 5CSX module.	A. Block	11/13/2014



1. Purpose and Scope:

This document is intended to help you get the Critical Link MitySOM-5CSx Family development Virtual Machine started. It covers installing the proper version of VirtualBox, importing the Critical Link MitySOM-5CSx VM, and ensures that the settings are correct for the VM to function properly.

2. Items Required:

CL P/N 80-000618	MitySOM-5CSx Development Kit USB Flash drive
VirtualBox	Oracle VirtualBox software (version 4.3.x or higher is required) from www.virtualbox.org
VirtualBox 4.x Oracle VM VirtualBox Extension Pack	The VirtualBox Extension pack is required to provide access to the host USB 2.0 devices from within a Virtual Machine.

3. Assumptions:

This document assumes you have a PC with sufficient resources to run the VirtualBox software and can support a Virtual Machine that requires 4GB of physical RAM to run. The amount of memory utilized can be adjusted as documented below.

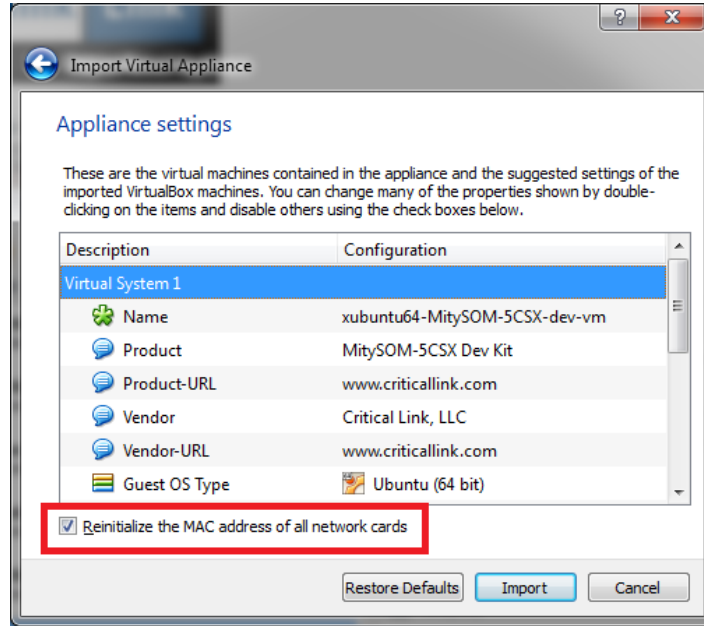
4. Procedure:

There are only a handful of steps needed to get the Critical Link MitySOM-5CSx development Virtual Machine running correctly.

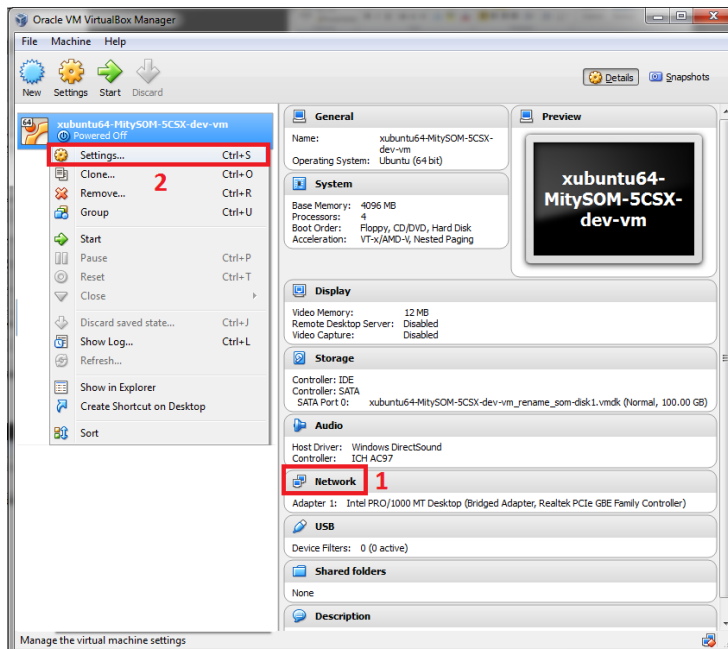
1. Download and install the VirtualBox software (version 4.3.x or higher is required) from the link in section 1.
2. Install the VirtualBox Extension Pack for your version of VirtualBox.
3. Double click on the file with the OVA file extension from the Development Kit USB Flash drive (or select **Import Appliance...** from the **File** menu in VirtualBox and select the **OVA** file).



- When the **Appliance Import Settings** dialog appears, make sure to check the “*Reinitialize the MAC address of all network cards*” checkbox (see figure).

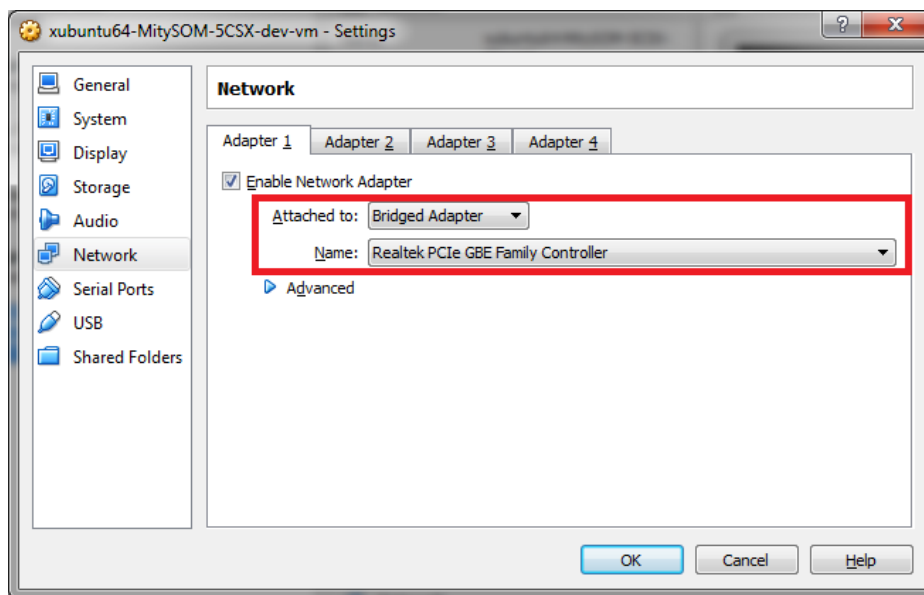


- Click the **Import** button.
- After the machine is imported, select it in the VirtualBox Manager dialog, and click on the *Network* settings menu (1). Alternatively you can right-click on the appliance on the left side of the screen and select the *Network* menu from the left (2).



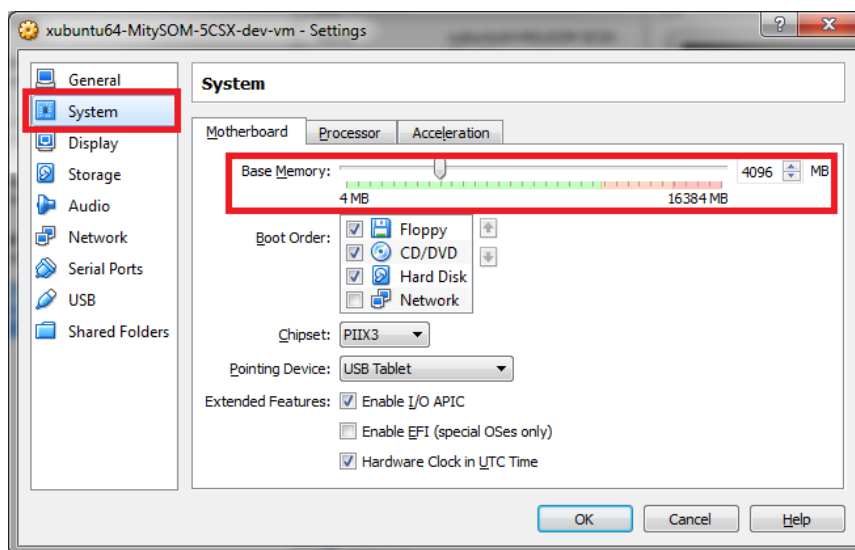


7. In the Network Settings dialog, select the Name combo box and make sure you are using the correct network adapter for your machine. You also want to ensure that the adapter is *Attached to: Bridged Adapter* to ensure proper network access.



*The Virtual Machine may not start until you do this step (depending if the network hardware on your machine is the same or different than the PC the VM was created on).

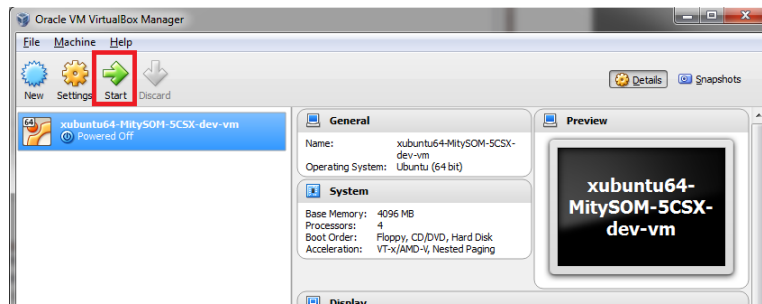
8. By default the MitySOM-5CSx Virtual Machine is setup to utilize 4GB of system memory. You can adjust how much memory is allocated to the Virtual Machine OS from the **System** menu of the settings dialog. We recommend a minimum of 4GB to meet Quartus requirements for building an image to support the FPGA DDR memory. Use the slider to adjust the amount of memory used.



9. Click OK to save the changes to the Network (and if any were made to the System) setup.



10. You can now start your Virtual Machine. Select the MitySOM-5CSx VM from the available *Appliances* on the left and then press the *Start* arrow. A new window will open and the Virtual Machine will begin booting. In about 15 to 30 seconds the Ubuntu desktop will be shown and a web browser will appear guiding you to the MitySOM-5CSx Family Development Kit Wiki (<https://support.criticalink.com/redmine/projects/5csxbase/wiki>).

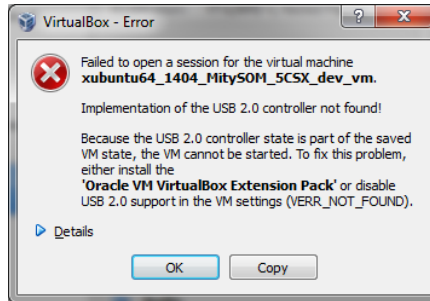


11. The login information for the Virtual Machine, if needed, is:
- Login/username is "user"
 - Password is "user"

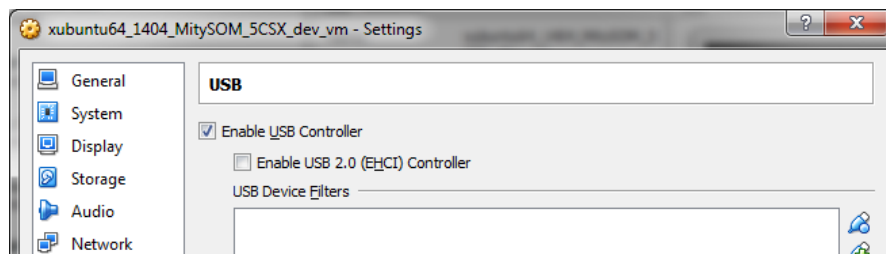


Potential errors during VM startup:

A) Error window appears stating that the “Oracle VM VirtualBox Extension Pack” needs to be installed. This may mean that you need to either update your Extension Pack or install it for VirtualBox. Please visit virtualbox.org for download details.



If you do not need to use USB 2.0 devices in the VM you can disable USB 2.0 support by going into the *Settings* menu of the MitySOM-5CSx VM appliance and then *USB* from the left and deselect the *Enable USB 2.0 (EHCI) Controller* option. This should allow the VM to start.



B) If your version of VirtualBox is newer than the version that the VM was created on (a likely scenario), you may be prompted to update the VirtualBox Guest Additions. Please follow the prompts to complete the VirtualBox Guest Addition update.

C) Failed to import appliance due to “Internal error (VERR_TAR_CHKSUM_MISMATCH)”. If this error occurs it is likely because the version of Virtual Box you are using is older than the version of Virtual Box that the VM was created with. Please update Virtual Box accordingly.

