Creating a USB drive for 2012 Classmate PC Image Restoration

Some USB restoration drives shipped with a corrupted boot sector, this results in the drive not being bootable. However, the necessary restoration data on the USB drive is intact. This document describes the procedure for creating a bootable USB drive to restore the 2012 image on an E09 or E11 model Classmate computer.

If you received a corrupted boot sector, lost your image key, damaged your key, or for any other reason need a new key, follow the steps outline below to create a new USB restoration drive. If for any reason you have questions, please post at forums.usfirst.org.

NOTE: FRC has received a limited number of activations of Windows 7. Please use this procedure sparingly.

Prerequisites

1. E09 or E11 Classmate computer

Figure 1: E09 Classmate

Figure 2: E11 Classmate

2. 8GB or larger USB drive
3. RMprepUSB software installed. Download here
    a. Scroll down the page and select the current version's download link. As of the writing of this document, the current version is 2.1.630
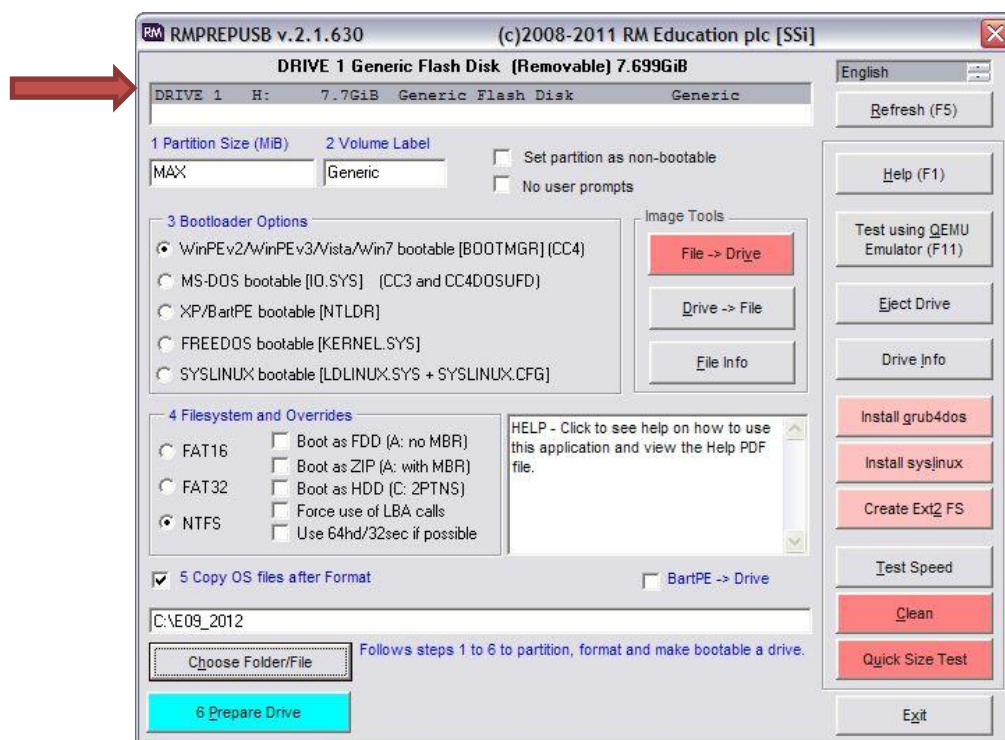

4. 7-zip software installed. Download here
5. The corresponding USB restoration drive for your Classmate PC which was given out to teams with the Kit of Parts at Kickoff, or the image file downloaded from the Intel Classmate Image Portal, link below.
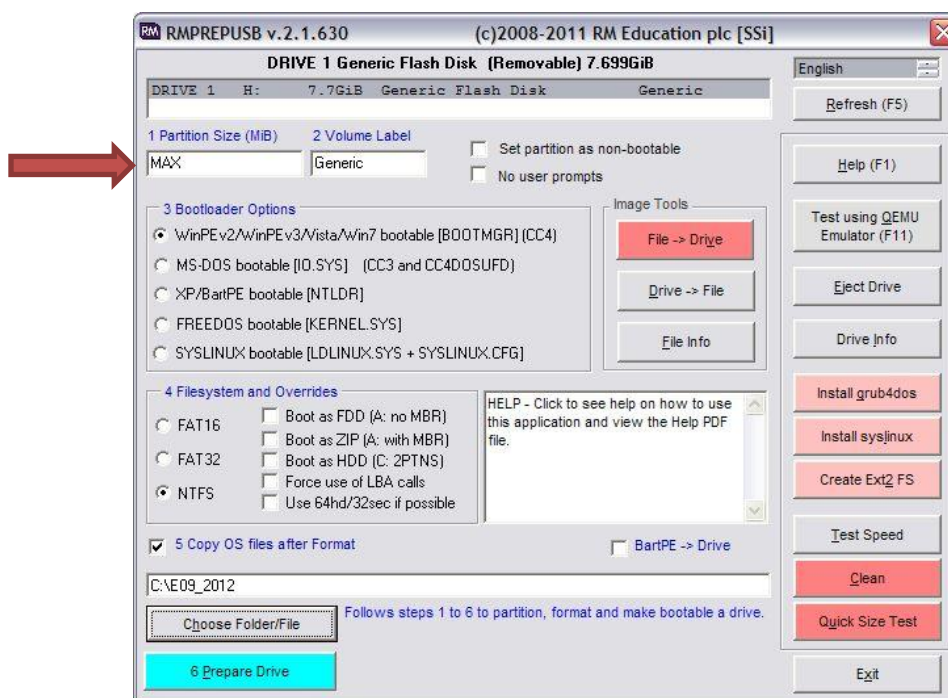
http://www.intel.com/content/www/us/en/intel-learning-series/first-frc-image-system-overview.html
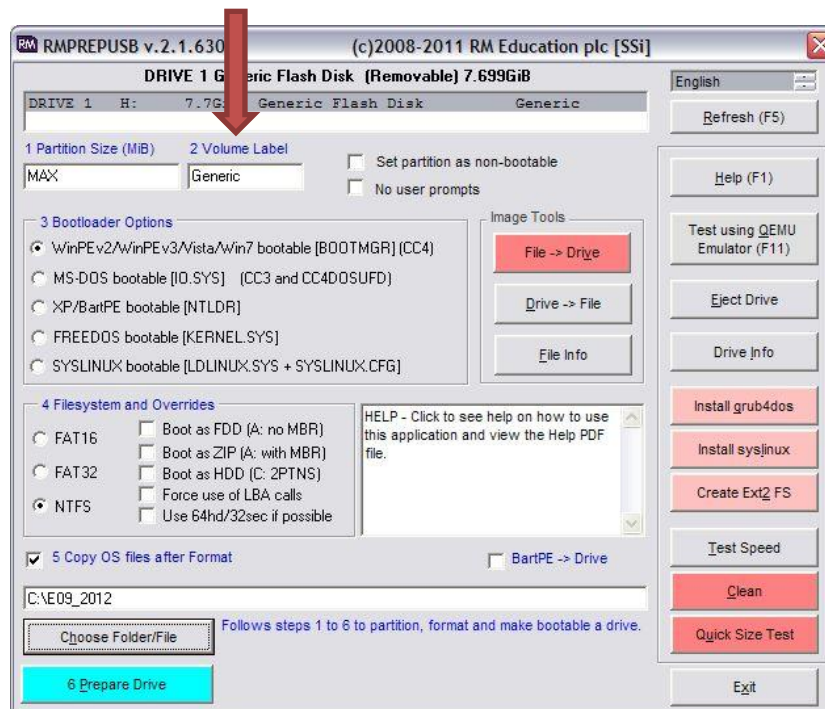
Procedure

1. Gather all necessary files using Option A or B:
   a. **Option A**: Extract the .7z file downloaded from the Intel Classmate Image Portal site to a folder on your root drive (e.g. C:\E09_2012 or C:\E11_2012).
   b. **Option B:** Copy all the files from the USB restoration drive received at Kickoff to a directory on the computer where RMprepUSB is installed. These steps assume the USB drive mounts as drive H: when you insert it. Replace the bolded 'H' below with the appropriate letter for the USB drive plugged into your machine.
      i. On a Windows XP/Vista/7 machine
         1. Open a Command Prompt (start->run->cmd.exe)
         2. Type the follow commands
            a. CD \
            b. MKDIR E09_2012
            c. XCOPY /S /E **H**:\ C:\E09_2012
2. Connect 8GB or larger USB drive to the PC to use as the new restoration drive
   a. **NOTE: While it is possible to use the same USB restoration drive from Step 1, a second drive is recommended**
   b. If you are using a separate USB drive, safely remove the KOP restoration drive from your PC now.
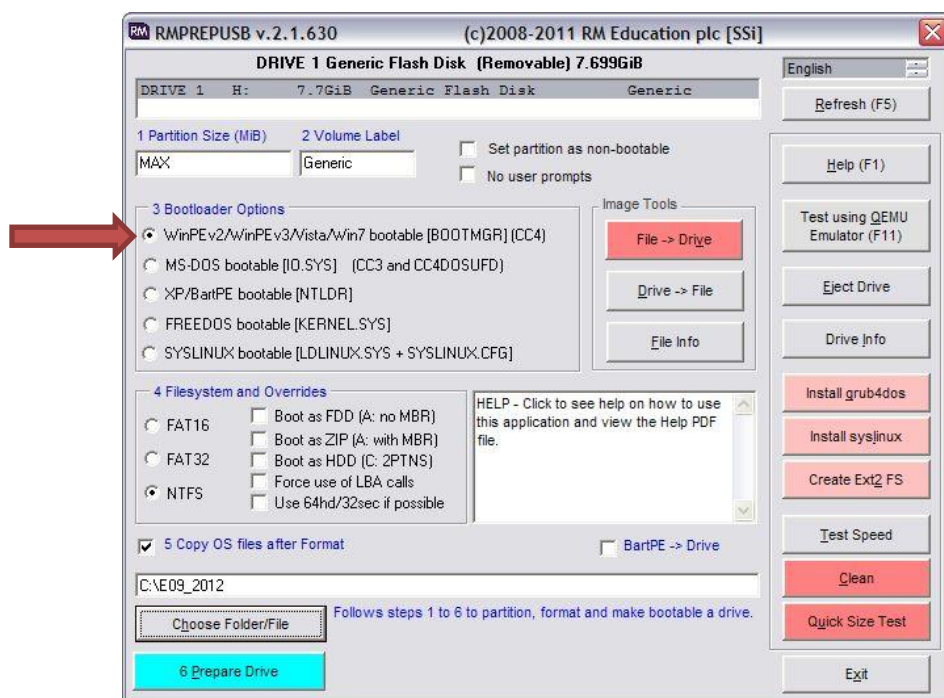3. Start/Run RMprepUSB
4. Configure RMprepUSB
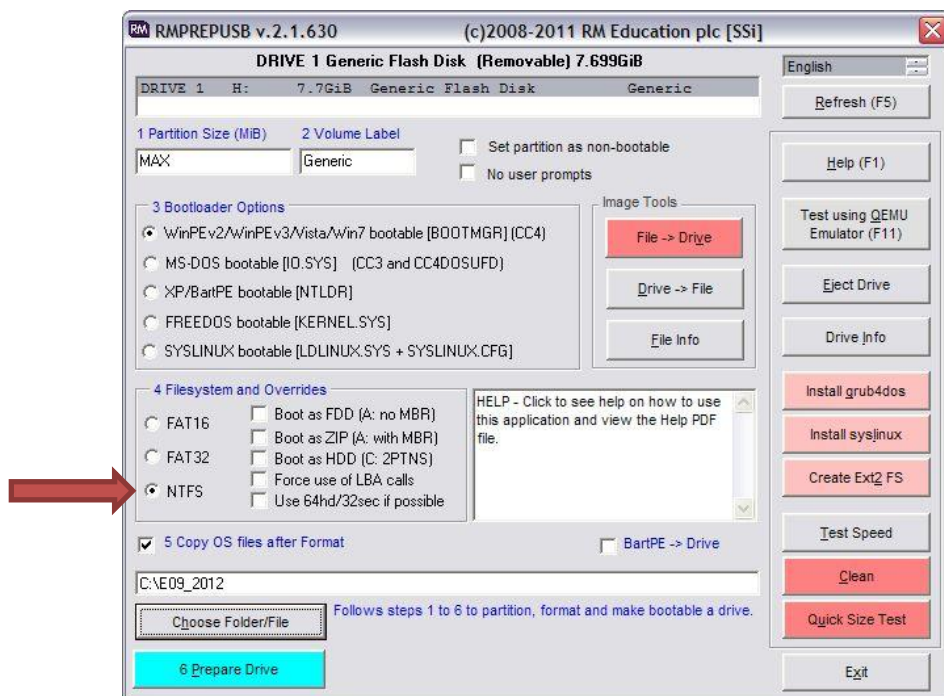   a. Select USB Drive

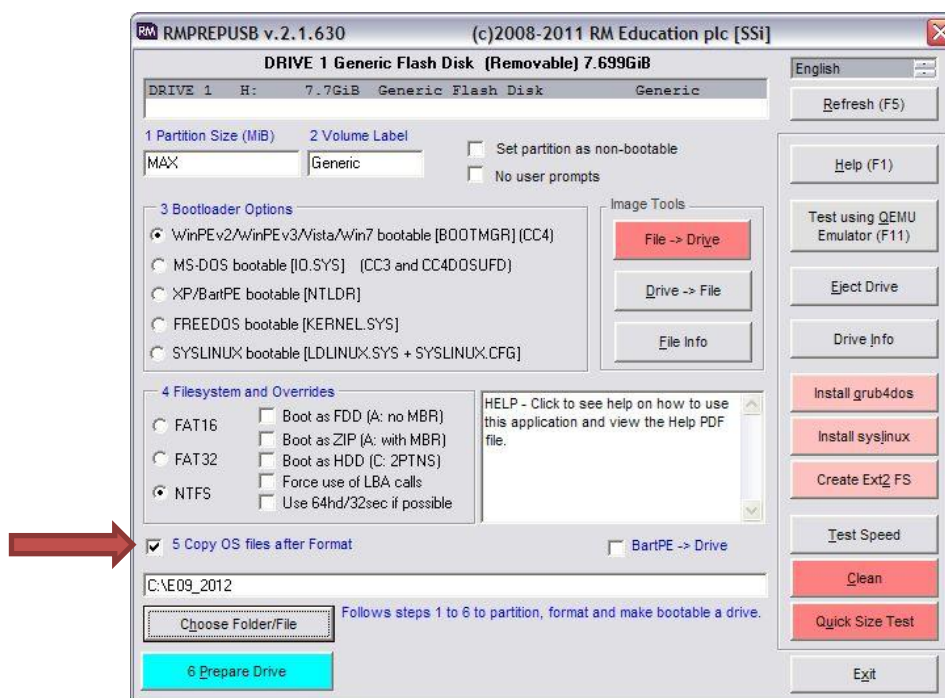b. Set Partition Size to MAX

c. Set Volume Label to Generic

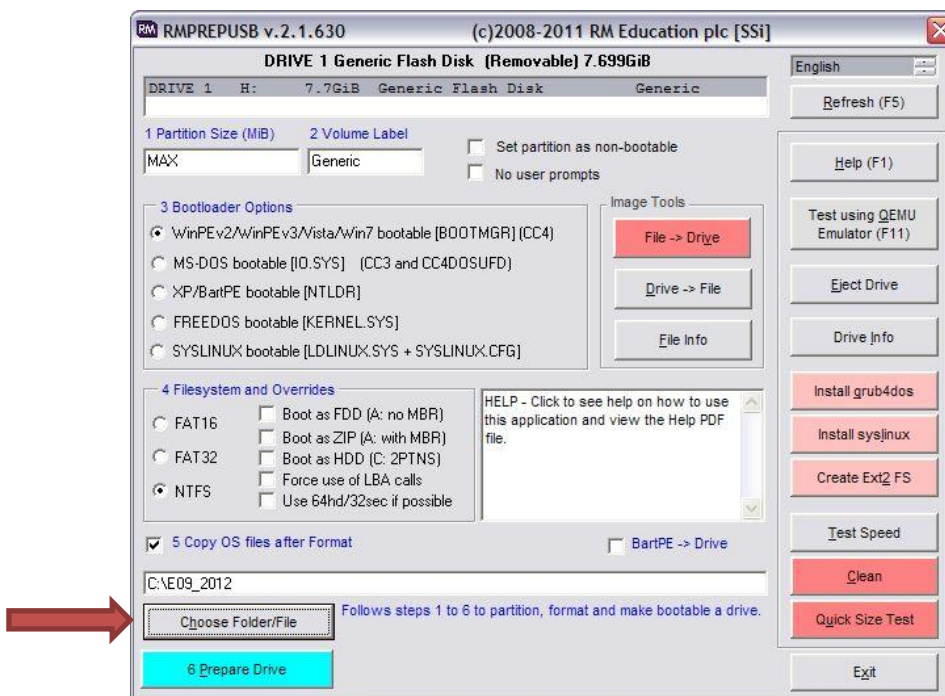d. Select Bootloader Option "WinPE v2/WinPE v3/Vista/Win7 bootable"

e. Select NTFS Filesystem

f. Ensure the "Copy OS files after Format" box is checked
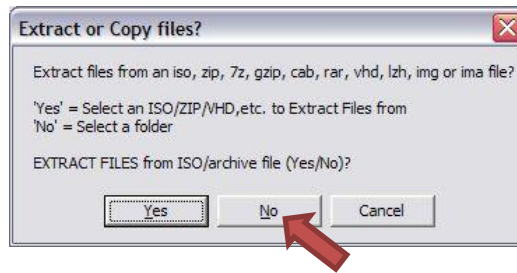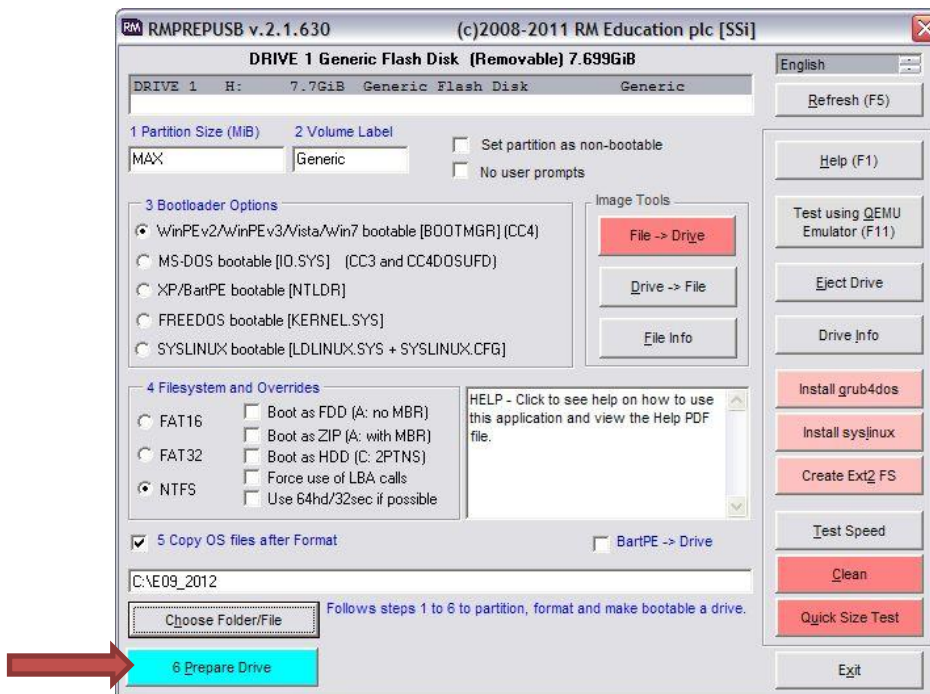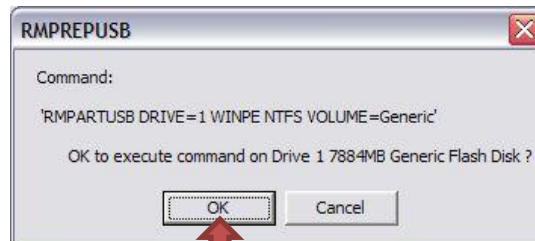

g. Select "Choose Folder/File"

h. Choose "No" and select the E09_2012 folder

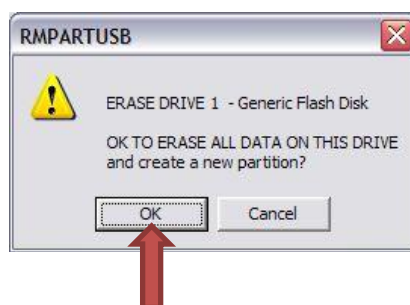5. All configuration settings are now complete. Select "Prepare Drive" to begin the process.

6. Click "OK" to execute the command to on the selected USB drive. A Command Prompt will open showing the progress.
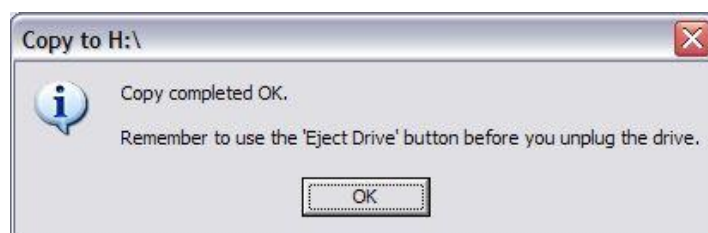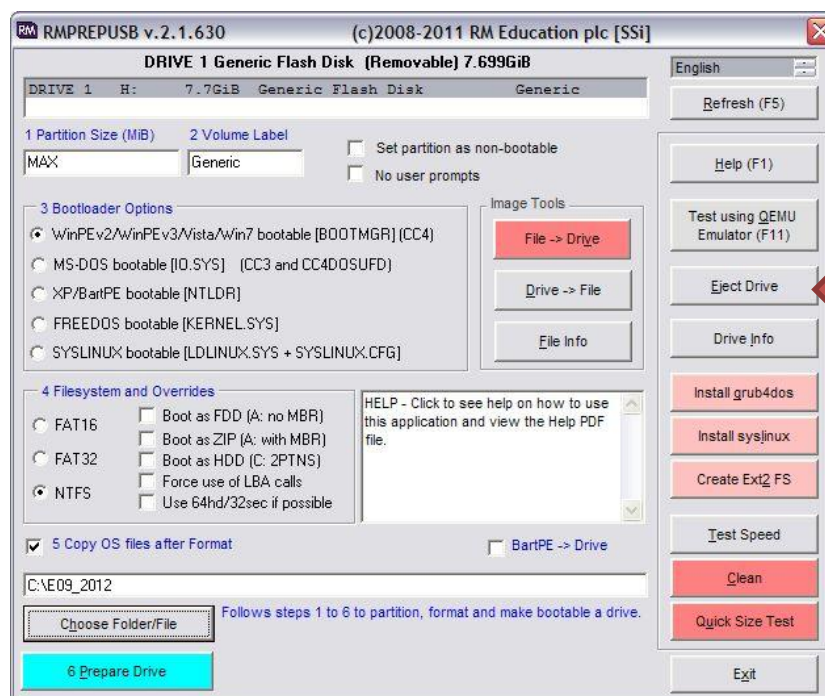
7. Click "OK" to format the USB drive. **NOTE: ALL DATA ON THE DRIVE WILL BE ERASED!**

8. Once formatting is complete, the restoration files will be copied to the USB drive. This process should take ~10-15 minutes when connected to a USB 2.0 port.

9. When all files have been copied, this message will appear

10. Press the "Eject Drive" button to safely remove the USB drive. The USB drive is now ready to be used to restore the image onto the Classmate PC.

11. Refer to the Getting Started with the Control System document for instructions on reimaging the Classmate PC and installing the Driver Station software.