

## CMUcam3 Windows Quick Start Guide

This is for advanced users. For more detailed instructions see [Documentation](#).

- Download and install cygwin
  - <http://www.cygwin.com>
  - Make sure to install "Make", "CVS", "openssh"
- go to <http://www.gnuarm.com>
  - Go to "Files" and download latest binary GCC tool chain for windows
  - [http://www.gnuarm.com/bu-2.15\\_gcc-4.0.0-c-c++\\_nl-1.13.0\\_gi-6.1.exe](http://www.gnuarm.com/bu-2.15_gcc-4.0.0-c-c++_nl-1.13.0_gi-6.1.exe)
  - Install
- Go to <http://www.lpc2100.com>
  - Download and Install LPC ISP
  - [http://www.semiconductors.philips.com/files/products/standard/microcontrollers/utilities/lpc2000\\_flash\\_utility.zip](http://www.semiconductors.philips.com/files/products/standard/microcontrollers/utilities/lpc2000_flash_utility.zip)
- Download cc3 source
  - Get a zip of the latest stable snapshot from our [Downloads](#) page
  - **or** checkout a fresh copy from svn by typing:

```
svn co https://cc3.svn.sourceforge.net/svnroot/cc3/trunk cc3
```

- Open up Cygwin Shell
  - Go to cc3
  - Type Make
- Startup in programming mode
  - Hold in push button while turning on power to startup in programming mode
- Open LPC ISP and load compiled hex file
  - Browse to cc3/projects/cmucam2/cmucam2\_lpc2106-cmucam3.hex
  - Flash board
  - Close ISP program
- Open up a terminal program
  - Power Cycle Board
  - A Green Power LED should turn on
  - If the code is running correctly, the red LED will turn off and the blue and yellow LEDs will dimly illuminate
  - Make sure it prints a startup message
- Use a Graphical User Interface to View Images and Focus Camera
  - Option 1: CMUcam3 Frame Grab Utility
    - **Download** the CMUcam3 Frame Grab Utility and Install .NET (both on [Downloads](#) page)
    - Double Click on "CMUcam3 Frame Grabber.exe"
    - Select Correct COM port and Press "Connect"
    - Click "Send" button to check for an "ACK" message to see if the port is connected
    - Click "Grab Frame" to grab a sample image
  - Option 2: CMUcam2 GUI
    - See the CMUcam2 GUI documentation
    - Check if GUI detects camera and can send frame
    - GUI does not set serial port correctly, so a terminal program must be run in between downloading from the ISP and use of the CMUcam2 GUI