

Development Kit Quick-Start Guide

Instructions for Using Micron's CMOS Image Sensor Development Kits

Introduction

Thank you for purchasing a Micron CMOS image sensor development kit. Micron's dev kits are USB-powered camera boards that enable easy testing and characterization of Micron® sensors.

Follow the instructions below to assemble the kit and download and install Micron's DevSuite software.

Dev Kit Contents

Before you begin setting up the camera, please verify that all of the following components are included in the demonstration system kit:

- Micron Imaging development kit baseboard
- Micron Imaging sensor headboard with lens
- USB 2.0 cable
- Dev Kit Quick-Start Guide (this document)
- Camera tripod

Dev Kit Assembly

1. Connect the headboard and baseboard via the 26-pin female connector located on the back of the baseboard and the 26-pin male header on the back of the sensor headboard.
2. Screw the mini-tripod into the tripod mounting block.

Caution Do not connect the kit to your computer yet.

Software Installation and Setup

Note: Be sure to verify that your system meets the specifications outlined in "Requirements" on page 4.

Download Micron DevWare

Using your Web browser, navigate to the URL below and follow the instructions to gain access and download the appropriate DevSuite software for your kit.

www.micron.com/devsuite

Once you have gained access to the site, select the appropriate file to download. The ZIP file download contains the executable files necessary for installation. In some instances, two executable files are included: setup.exe is the DevSuite installation file. The other file

is for sensor-specific data and is named MTxxxxx_setup.exe, where xxxxx corresponds to the sensor headboard part number. For some sensors, these files are included with the DevSuite download, so separate installation is not necessary.

Install DevSuite

Double-click the setup.exe file and follow the instructions on your screen. If you have an earlier version of DevWare on your computer, you will be required to uninstall it before proceeding with the new install.

If your headboard included a separate sensor-specific data file, install the sensor-specific files now by double-clicking on the MTxxxxx_setup.exe file. Follow the instructions on your screen. If you have older installations, you will need to remove them before proceeding with the new install.

Software Startup

1. Plug the kit into your computer using the USB cable provided. After a few seconds, your computer should detect new hardware and start the “Found New Hardware Wizard” to prompt you for the location of an appropriate USB driver. You will need to manually input the location of the USB driver, so select “No, not at this time” and click “Next.”
2. Select “Install from a list or specific location (Advanced)” and click “Next.”
3. Select “Search for the best driver in these locations,” then type the location of your DevWare installation directory. (By default this is “C:\Program Files\Micron Imaging.”) Then click “Next.”
4. Your driver should now install. Select “Finish” to close the final dialog box and complete the installation.

Launching the DevSuite Application

1. Go to the start menu, select “Programs” then “Micron Imaging” then “DevWare.” The popup window shown in Figure 1 will display as DevWare probes for attached devices.

Figure 1: DevWare Popup – Searching for Attached Devices



2. After the software has found an attached device, the main DevWare window will appear with the dialog box shown in Figure 2; select the settings shown. (Color/monochrome sensors like the MT9V032 will also need to have the color or monochrome box checked, as appropriate.) Click “Finish.”

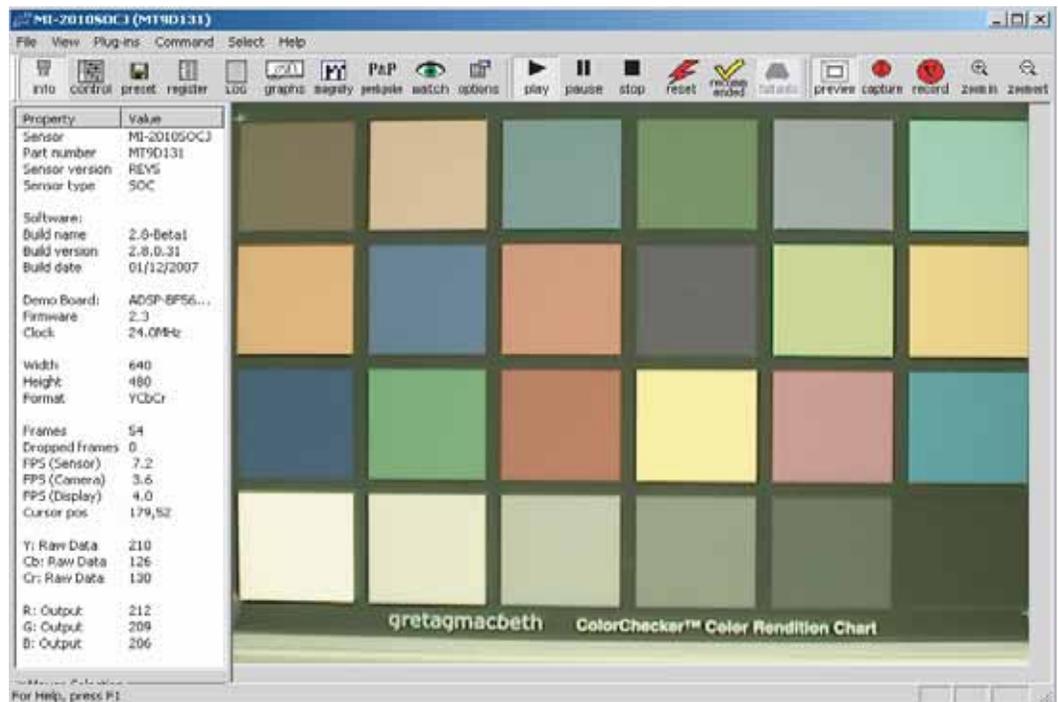
Figure 2: Startup Dialog (MT9V032)



NOTE: This is the startup dialog for the MT9V032 sensor headboard. The startup for other headboards will be slightly different.

3. You should be able to see live video data from the image sensor, as shown in Figure 3.

Figure 3: DevWare Main Screen



The installation is complete. For assistance using DevWare, see the help files within the application. Users will also notice that tooltip popups are available for many controls; simply pause the cursor over the control to read the tooltip.

Appendix A

Requirements

Hardware and software requirements for Micron's development kit are detailed below.

Hardware Requirements

- Pentium III 450 MHz or higher (a faster processor will improve the displayed frame rate on the PC)
- 128MB RAM
- USB 2.0 host controller (an available USB 2.0 port)

Software Requirements

- Windows 2000 with a minimum of Service Pack 2 or Windows XP with a minimum of Service Pack 1
- The latest drivers for the USB 2.0 host controller

Note: We do not recommend Windows 2000 with built-in USB2 controllers.



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