

# Multicore MSC8156 MJPEG Demo for the MSC8156EVM

This document provides instructions for running the multicore MSC8156 MJPEG demo on the MSC8156EVM.

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## 1 What You Need to Run This Demo

Running the demo requires the following:

- Personal computer (PC) with a Gigabit Ethernet port (preferably operated under dual core XP Windows)
- SmartDSP OS v3.7.2 with marvell\_phy.c update loaded on the PC
- MSC8156EVM board
- Ethernet cross cable
- CodeWarrior for StarCore-Based DSP IDE for the MSC8156EVM board connected to the PC.

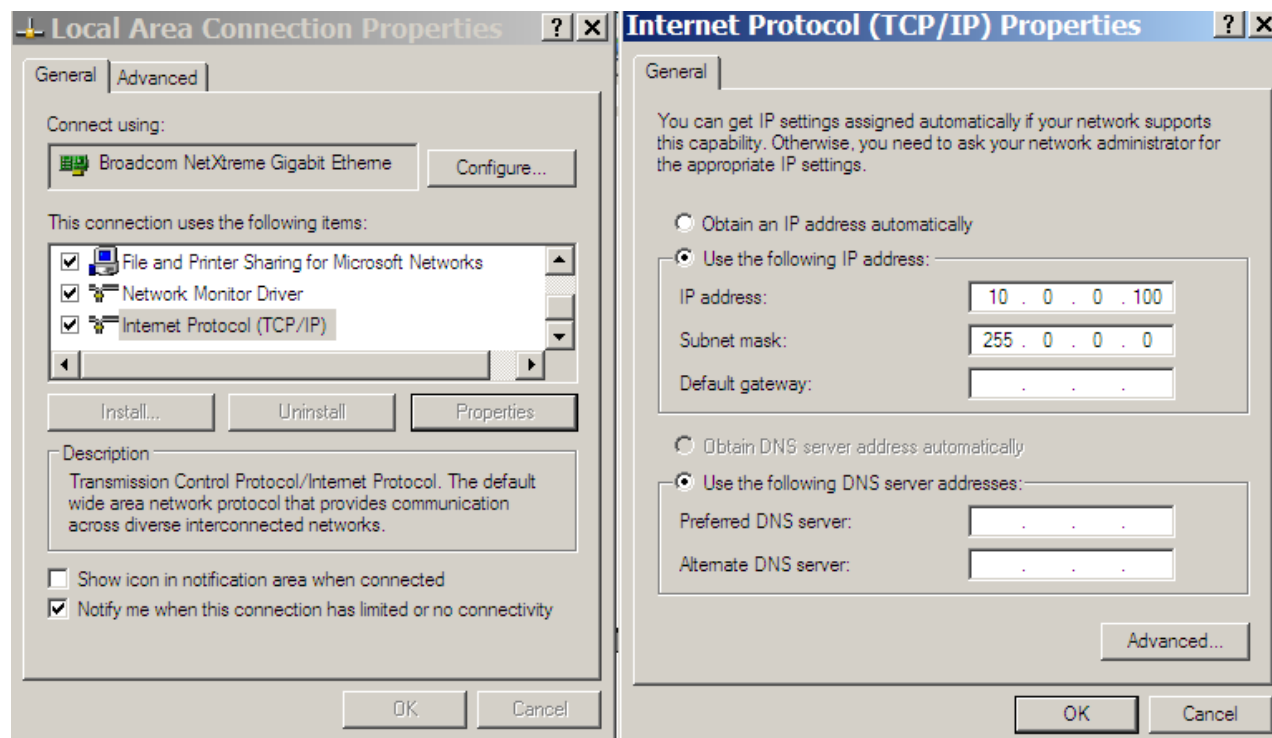
### NOTE

This demo is part of the SmartDSP OS demo suite.

## 2 Steps to Run a Demo

Use the following steps to prepare for and run the demo:

1. Configure the MSC8156EVM DIP switches as follows (note that 1 = OFF):
  - a) SW2: 1111\_1000
  - b) SW6: 0101
2. Connect your PC to the MSC8156EVM using a Cross Ethernet cable.
3. Change the IP of your PC to 10.0.0.100 as shown in [Figure 1](#).



**Figure 1. Setting the IP Value**

4. Start the CodeWarrior IDE and import the project:  
 “SmartDSP\demos\starcore\msc815x\mjpeg\_demo\mjpeg\_project\mjpeg\_demo\project”

**NOTE**

For more information about importing projects, Go to Help in the CodeWarrior IDE and search for “import a project.”

5. Set the **Active Target** to “Core 0 - EVM,” and build/download/run all 6 cores
6. Try to ping 10.0.0.1. It should work at this stage.
7. Run the provided graphical user interface (GUI) using  
 “SmartDSP\tools\MJPEG\_Player\MJPEG\_Player.exe” You should see all the utilization indicators go to 0%.

- Using the GUI, open the file “SmartDSP\tools\MJPEG\_Player\frames\SA00054001.bmp” (see Figure 2). The opening process takes several minutes. Wait until it completes.

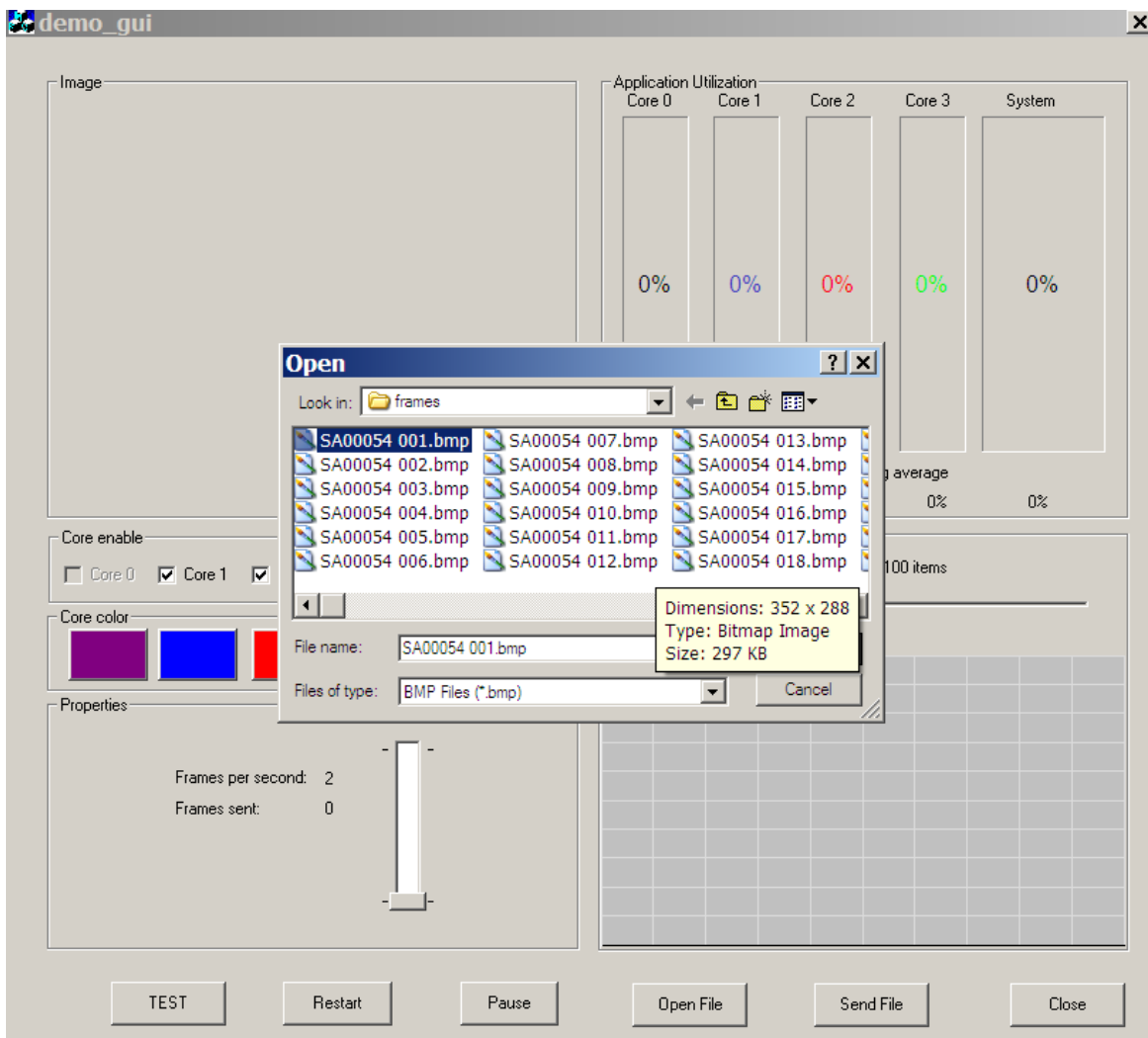


Figure 2. Graphical User Interface Display

- After the GUI returns, push Send File and adjust the frames per second rate.

**NOTE**

Test and Restart buttons are for internal debug only. Avoid using these buttons while running demos.

### 3 Revision History

Revision	Date	Change Description
0	Oct 2010	Initial public release
1	Nov 2010	<b>Section 2</b> ; Changed Step 1.b to correct switch setting. In Step 6, changed pin to ping.

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Document Number: EB738  
Rev. 1  
11/2010