Application Note

DMD Discovery™ 1100 Visual Basic 6.0

ABSTRACT

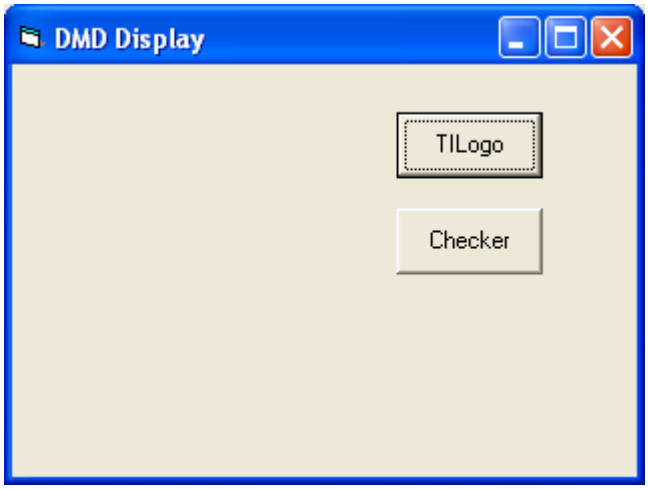
Programming sample for control of the DMD Discovery 1100 (D1100) is provided written in Microsoft Visual Basic 6.0. The sample demonstrates the use of the Discovery ActiveX control in performing common control functions.

1.0 Visual Basic

Visual Basic program development for the D1100 requires installation of Microsoft Visual Basic 6.0 and the Discovery 1100 software. Create a Visual Basic project and select the DDC1100Ctrl ActiveX Control Module using the Project/Components menu. The D1100 control is now available on the toolbox. Click on the control in the toolbox then add to your form to create an instance of the control. Multiple instances may be added to support multiple D1100 boards. Control methods and properties may be viewed using the View/Object Browser menu. Additional documentation for the control is available in the GUI User's and Programmers Guide.

1.1 DMD Display – Visual Basic ActiveX Sample Code

This sample is written in Microsoft Visual Basic 6.0 and provides a simple demonstration of image file to DMD load and display using the Discovery ActiveX control. Source code is available in the "VB ActiveX Sample Code" folder in the D1100Sample.zip file. The sample opens communication to the DMD board and displays images as selected by two control buttons:



Refer to Form1.bas function init_USB() for an example of initializing the D1100 USB. The GetDevice call attaches the device and the EnableParallel call configures the device for USB control.

```
Private Sub Init_USB()

    DDC1100Ctrl1.GetDevice   'Attach device.
    DDC1100Ctrl1.EnableParallel 0 'Select USB mode

End Sub
```

When a control button is clicked the image is displayed by the button event handling subroutine. Subroutine Show_Image is called to display the selected image.

```
Private Sub CommandTI_Click()   'event handler for TI Logo click
    Dim buffer(SIZE_OF_IMAGE) As Byte
    Dim varbuffer As Variant
    Dim filename As String
    Dim path As String

    path = App.path 'set path to point to image file path (same as application path)
    filename = "TILOGO.bmp" 'set filename to TI logo image file
    varbuffer = buffer 'init image storage
    Show_Image path, filename, varbuffer  'load and display image

End Sub
```

The Show_Image function loads and displays the specified image on the DMD.

```
Private Sub Show_Image(path As String, filename As String, varbuffer As Variant)

    DDC1100Ctrl1.AppPath = path 'set control AppPath attribute to image path
    DDC1100Ctrl1.LoadImageFileToBuffer filename, varbuffer, 0   'convert image file to
varbuffer
```

```
    DDC1100Ctrl1.LoadFrameBuffer varbuffer 'load varbuffer image to ActiveX control
buffer
    DDC1100Ctrl1.LoadResetFrame 'load image to DMD and reset DMD

End Sub
```