/ Topics (https://groups.io/g/TekScopes/topics?p=,,,0,0,0,0) / TDS3000 Screen Shots VIA VB VISA Code?

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 ¬ч Mute This Topic (https://groups.io/g/TekScopes/ft/93126943?csrf=5513314409256117711&mute=1&p=Created%2C%2C%2C20%2C1%2C0%2C0)

TDS3000 Screen Shots VIA VB VISA Code?

Date ♠ (https://groups.io/g/TekScopes/topic/93126943?p=Created%2C%2C%2C20%2C2%2C0%2C0)

https://groups.io/g/TekScopes/topic/93126943#195611



Does anyone here have experience download PNG or BMP screenshots, using VISA-COM (globmgr.dll) in VB6 from their TDS series scope (or other tek scopes i.e, MSO4104)?

I know how to setup the screen shot and trigger the hard copy.

I have not been able to successfully read the data stream with the read functions available with globmgr.

Example so far:

"Open" scope

Function tdsOpenScope()

Dim Test As Long

Set ioMgr = New VisaComLib.ResourceManager

Set Scope = New VisaComLib.FormattedIO488

Set Scope.IO = ioMgr.Open(Trim(TDSAdr))

**Exit Function** 

**End Function** 

Then call by some button click:

Sub tdsSnapShot()

Scope.IO.timeout = 5000

Scope.WriteString ("HARDCOPY:port gpib")

Scope.WriteString ("HARDCOPY:layout portrait")

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Scope.WriteString ("WAV:STR OFF")

Scope.WriteString ("HARDCOPY START")

After this point I am stuck.

There needs to be a data read and write to file loop.

You have:

scope.readstring

Scope.readnumber

and

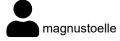
Scope.ReadIEEEBlock(BinaryType\_UI1) and this one crashes no matter all the options I try.

Anyone that has done this, please advise.

Dave

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Hi Dave,

I have no experience with programming the TDS3000 series, but for the TDS5000 series, I had to use a) some basic synchronisation with the \*OPC command andb) after the HARDCOPY command was completed, I transferred the file from the local directory via GPIB using the FILESYSTEM:READFILE command.

The following Python code might be helpful: https://www.eevblog.com/forum/testgear/python-script-hardcopies-from-a-tektronix-tds50xx-oscilloscope-over-gpib/ (https://www.eevblog.com/forum/testgear/python-script-hardcopies-from-a-tektronix-tds50xx-oscilloscope-over-gpib/)

I am aware that this refers to a completely different instrument, uses another programming language and instrument DLL, but the principle might still apply to your system.

Good luck,

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### Dave



The TDS 5000 is windows based so probably much easier



I have a TDS5054-NV-AV too. And an MSO4101. Both programming manuals talk about saving it to a local drive (Not sure what that really would be on an MSO4104). Then transferring it to the PC.

With the TDS3000, you do not have that local drive on the TDS3000.

I think I kind of understand what is going on in Python (dang it seems to be becoming very popular. I thought it was only for the Arduino and Raspberry Pie??). I am using VB6 with the GLOBMGR.DLL visa library. What it comes down to, is that the VISA library I use does not have "Hardcopy" defined, nor does it have a read.raw command. Maybe, I need to find an API to interface to its more intricate abilities? I have been using it for many years and have been happy until I decided to do something similar to what I use Tek's OpenChoiceDesktop for.

On Sun, Aug 21, 2022 at 6:32 AM magnustoelle via groups.io <magnustoelle=yahoo.com@groups.io> wrote:

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On 24 Aug 2022, at 16:08, David Kuhn < Daveyk021@... > wrote:

... I think I kind of understand what is going on in Python (dang it seems to be becoming very popular. I thought it was only for the Arduino and Raspberry Pie?? ...

Python long pre-dates Arduinos (certain boards can use a special version of Python called MicroPython) and Raspberry Pis. It was first released in 1991, but over the last decade has seen a surge in popularity as a language ideal for folks who aren't professional programmers but want/need to write some code — kind of like classic BASIC in the 70's - 90's. It's also popular among professional software developers as a good general purpose scripting language, and an alternative to (mainly Web)| application development languages like PHP and Perl that are declining, or have declined, in popularity.

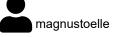
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Python has also become very popular for machine learning and artificial intelligence applications. The Python-based frameworks PyTorch and Tensorflow are quite popular for ML and Al developers.

## Steve H.

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Good Day Dave,

just checking if you have seen this yet:

TDSScreenCap - An RS232/GPIB screen capture program for the Tektronix TDS3000 series - Matts Tech Pages

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Cheers, Magnus

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David Kuhn

TDSScreenCap – An RS232/GPIB screen capture program for the Tektronix

TDS3000 series

Yes, I saw that and messaged him to ask about what VISA.COM API he's using or for general assistance and never heard back.

Thanks,

Dave

On Wed, Aug 24, 2022 at 4:27 PM magnustoelle via groups.io <magnustoelle=yahoo.com@groups.io> wrote:

Good Day Dave,
just checking if you have seen this yet:  TDSScreenCap – An RS232/GPIB screen capture program for the Tektronix  TDS3000 series – Matts Tech Pages
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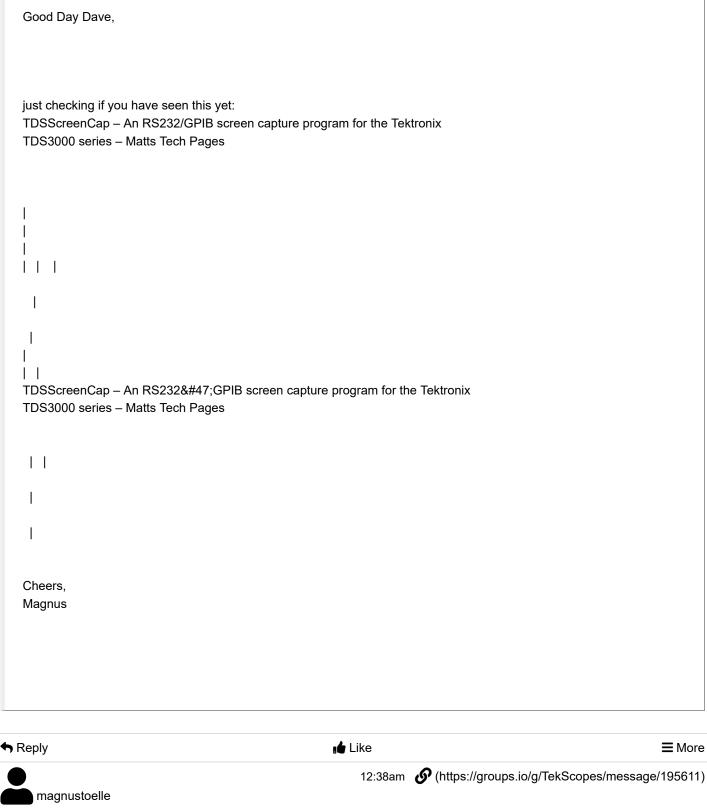
Aug 31 6 (https://groups.io/g/TekScopes/message/195610)

#### Success!!!!!

```
Sub tdsSnapShot()
Dim SrnImage As Image
Dim pngFilePart As Byte
Dim strTest As String
Dim FF As Integer
Dim binData As Byte
Dim binData1 As Variant
Dim EndPNG As String * 4
Dim EndPNGLoop As Integer
Dim PNGEnd As String * 4
Dim txtTemp As String
Dim EndCounter As Integer
PNGEnd = "IEND"
Set ioMgr = New VisaComLib.ResourceManager
Set Scope = New VisaComLib.FormattedIO488
' Address
Set Scope.IO = ioMgr.Open(Trim(TDSAdr))
If Dir("C:\temp\test.png") = "test.png" Then
  Kill "C:\temp\test.png"
End If
FF = FreeFile
Open "C:\temp\test.png" For Output As #FF
looptimes = 0: EndPNG = "": EndPNGLoop = 0: EndCounter = 0
On Error GoTo CloseFile
Scope.IO.timeout = 5000
Scope.WriteString ("HARDCOPY:port gpib")
Scope.WriteString ("HARDCOPY:layout portrait")
Scope.WriteString ("HARDCOPY:format PNG")
Scope.WriteString ("HARDCOPY:compression OFF")
Scope.WriteString ("HARDCOPY:inksaver ON")
Scope.WriteString ("HARDCOPY:pallet normal")
Scope.WriteString ("WAV:STR OFF")
Scope.WriteString ("HARDCOPY START")
Do
  binData1 = Scope.IO.Read(1)
  Print #FF, Chr$(binData1(0));
  'Print #FF, Chr$(binData);
  EndPNGLoop = EndPNGLoop + 1
  If EndPNGLoop = 5 Then
    txtTemp = Right(txtTemp, 3)
```

```
EndPNGLoop = 4
  End If
  txtTemp = txtTemp + Chr$(binData1(0))
  If InStr(txtTemp, PNGEnd) > 0 Or EndCounter > 0 Then
    EndCounter = EndCounter + 1
  End If
  looptimes = looptimes + 1
  If EndCounter = 4 Then
    Exit Do
  End If
Loop
CloseFile:
EndFile:
Close #FF
Scope.FlushRead
Scope.IO.Close
Set Scope.IO = Nothing
Set Scope = Nothing
On Error GoTo 0
Exit Sub
End Sub
```

On Wed, Aug 24, 2022 at 4:27 PM magnustoelle via groups.io <magnustoelle=yahoo.com@groups.io> wrote:



Nice work, Dave - congratulations! Thank you for the provision of your source code. I am sure other members will appreciate it.

Cheers,

Magnus

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- → (https://groups.io/g/TekScopes/topic/93337183?p=%2C%2C%2C20%2C0%2C0%2C0%3A%3A%2C%2C%2C0%2C0%2C0%2C0%2C3337183)