I've seen this come up a number of times as to how to extend the BW of these scopes. Here is some

information that I will share, although I have only tested several models and it did work on the two

non lettered versions that I have.

I particular, I was able to update a TDS3034 to TDS3054 (non-lettered) and a TDS1001 to TDS1012

I will leave it up to the group to try this out on the 'B' and 'C' models to see if it works.

In regards to the TDS3000 models, the non-lettered and B models only will accommodate fw ver

3.41. V3.41 does not work. I had to downgrade to 3.39, perform the change and upgrade back to

3.41. This worked. The TDS3000 C models have not be tried.

If any of this information has already been posted, I am unaware. Please use at your own risk.

You will need to setup your TekVisa OpenChoice tools and run the Talk/Listener tool in order to force

SCPI commands to your unit, either through USB or GPIB.

Use \*IDN? to check communications

For the TDS3000 series (downgraded to 3.39, then re-updated to 3.41)

Send the following:

PASSWORD PITBULL

MCONFIG TDS3054

You will not get any feedback from the unit. Reboot the unit and check to see if it worked. Again,

with V3.39 it worked great.

For the TDS1000/2000

PASSWORD PITBULL

MODEL TDS20xx (with xx = model #)

I have not tested with 'B' and 'C' models so report back what you find out.

"B" series has the same firmware as non lettered series. I've downgraded the firmware to 3.39, did

the hack via RS232 and upgraded back to 3.41 (it's so hard to find 3.5" floppy disks and working FDD

these days). Don't forget to do calibration after the whole procedure!

For TDS3032 I used "MCONFIG TDS3052" and for TDS3034B "MCONFIG TDS3054B". Upgrading the

bandwidth to 500 MHz also upgrades sampling rate to 5 GSPS. This is really impressive and gives

Thanks for the great tips about upgrading the TDS3000B series!

I just tried it on a fw 3.27 TDS3014B and it now happily runs up to 500MHz. Didn't even need to use

TekVISA, you can enter the commands via ethernet using the scope's own webpage (B series have

built in ethernet).

I have just realised that there was a 600MHz version too - does anyone know if TDS3064B is an

option as well? I can't try it myself until monday.

I forgot to mention that this hack will also work for the TDS200 series units.

i.e. to upgrade a TDS 210 to TDS 220

PASSWORD PITBULL

MODEL TDS 220

I

I have tried to upgrade a Tek TDS2014 to a TDS 2024 and used this commands, posted by rfdes

For the TDS1000/2000

PASSWORD PITBULL

MODEL TDS20xx (with xx = model #)

But I had no luck, scope is still TDS 2014.

Connection via GPIB was established and I have tried different software to send the commands.

It seems that the scope could read it, but it does nothing. But when I made an intentional error like

PetBULL instead of PITBULL it gaves back an error.

Firmware is 4.12.

Is it not working with this firmware or did I overlooked something?

I forgot to mention that for the TDS1000/2000 and TDS200 instruments, the BW update will not be

saved unless a full calibration adjustment is performed before the unit is shutdown

sent: \*IDN?

received: TEKTRONIX,TDS210,0,CF:91CT FV:v.2.03 TDS2CM:v1.04

sent: PASSWORD PITBULL

sent: MODEL TDS 220

Checked menu utility/system status: TDS210, firmware etc. <unchanged>

sent: \*IDN?

received: TEKTRONIX,TDS210,0,CF:91CT FV:v.2.03 TDS2CM:v1.04 <unchanged>

-3dB bandwith before: 83MHz, after: unchanged.

What went wrong?

Report

I purchased a TDS3014B that came with 3.41. I downgraded the firmware to 3.39 and I now have a

TDS3064B with version 3.41.

The scope needs to be calibrated as it now has a big DC offset and triggering is pretty terrible also. I

have some instruments that can provide the low ripple DC and a 80MHz AC signal. Running through

the calibration test I can get almost to the end.

The pulse generator that is required is a little more difficult for me to find. How accurate does it need

to be? We have a 3ns rise time pulse generator but it certainly doesn't go to -2.2V. What is everyone

else using? Can I use an FPGA or similar to generate a high rise time? Or maybe a fast comparator?