

Feature Enhancements for 882E-DP/881E-DP Release 2.20.2 - vxWorks: 20.1886602

**Notice: Make sure you update the DisplayPort Tx and Rx chips' OCM firmware by following the instructions shown at the bottom of the webpage. This is a separate procedure after you upgrade the 88xE-DP with release 2.20.2 files.**

The following feature has been added in the Release 2.20.2.

- Release 2.20.2 is approved by VESA for Link Layer Compliance Test reference source testing (testing sink DUTs) and reference sink testing (testing source DUTs) per Link Layer Compliance Test Specification 1.1a.

**Note:** The release files can only be applied to the 882E-DP/881E-DP DisplayPort generator/analyzer (not the 882CA/882C/881C, 882D/881D, 882E/881E HDMI generator or 882EA HDMI generator/analyzer).

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#### Software Table

The Release 2.20.2 is comprised of the following software components.

<b>Software Component</b>	<b>Version</b>	<b>Change Status</b>
Boot Rom	01.04.11	no change
vxWorks	20.1886602	new with 2.20.2
Gateway 1 (DP Tx card revision C or older)	451C,8,2202008	no change
Gateway 1 (DP Tx card revision D or later)	451C,4,11072009	new with 2.20.2
Gateway 2	451A,17,10092008	no change
Gateway 3	451B,4,2052009	no change
DP Tx OCM Firmware	2.22.7	new with 2.20.2
DP Rx OCM Firmware	2.22.7	new with 2.20.2
Java JRE required	1.5.06	no change

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## Auto Upgrade Instructions

Now you can use Quantum Data's new AutoUpdate utility to upgrade your generator firmware and gateway. The AutoUpdate utility automates the process of upgrading firmware. It guides the user through the upgrade process, checking the Quantum Data website for the latest version and installing all files in the correct location on the generator.

Read the [AutoUpdate Instructions](#).  
[Download AutoUpdate Version 1.1.4 for 880 series](#) (includes instructions)

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## Manual Upgrade Instructions

You can upgrade your generator using the procedures in the Users Guide. Please note that you will have to verify that your current generator is operating with Release 2.14.0, 2.15.0, 2.17.4, 2.18.1, 2.18.7, 2.18.10, 2.19.0, 2.19.1, 2.20.0, or 2.20.1. To verify that your current generator is operating with this release, enter the following command:

verf?

Release 2.14.0 should return the following information:

20.1885400,01.04.11,2.2.30,1.1...

Release 2.15.0 should return the following information:

20.1885600,01.04.11,2.2.30,1.1...

Release 2.17.4 should return the following information:

20.1886004,01.04.11,2.2.30,1.1...

Release 2.18.1 should return the following information:

20.1886201,01.04.11,2.3.32,2.18...

Release 2.18.7 should return the following information:

20.1886207,01.04.11,2.3.32,2.18...

Release 2.18.10 should return the following information:

20.1886210,01.04.11,2.3.32,2.18...

Release 2.19.0 should return the following information:

20.1886400,01.04.11,2.3.32,2.19...

Release 2.19.1 should return the following information:

20.1886401,01.04.11,2.3.32,2.19...

Release 2.20.0 should return the following information:

20.1886600,01.04.11,2.3.32,2.22...

Release 2.20.1 should return the following information:

20.1886601,01.04.11,2.3.32,2.22...

After verifying that the generator is operating with Release 2.14.0, 2.15.0, 2.17.4, 2.18.1, 2.18.7, 2.18.10, 2.19.0, 2.19.1, 2.20.0, or 2.20.1, upgrade your generator using the procedures below:

1. Download the 2.20.2 Zip file to your PC and unzip the file. There will be a System and a Library directory.
2. [Upgrade the generator using "Upgrading without using PC Card" procedure at this link.](#)
3. After power cycling the generator, verify that the generator is running the current 2.20.2 version of the vxWorks file by entering the following command:

```
verf?  
20.1886602,01.04.11,2.2.30,2...
```

```
or  
20.1886602,01.04.11,2.3.32,2...
```

4. Verify that the vxWorks file is: 20.1886602.
5. Verify that the BootRom version is: 01.04.11.
6. Verify that the generator is running the current 2.20.2 version of the gateway files by entering the following command:

```
verg?  
451C,8,2202008:451A,17,10092008:451B,4,2052009  
or  
451C,4,11072009:451A,17,10092008:451B,4,2052009
```

**Important Installation Note:**

Whether you use AutoUpdate or the manual upgrade method, you must update the OCM firmware in the DisplayPort transmitter and receiver chips:

**The following steps require use of the command prompt. DO NOT use the web-based command prompt for these steps. Use the Telnet or RS-232 command prompt. Also, it is important that the current test image is not an animated image. For a safe image, press the CONTENT key and select the image called Master.**

- Download DisplayPort OCM firmware ZIP file [DP\\_OCM\\_2\\_20\\_2b.zip](#)
- Unzip the file to your PC. You should see CG\_OCM and BE\_OCM directories.
- Boot the generator using release 2.20.2 files.
- Check the GenStats image or report and see which DP chip revision the generator has. You will see something like CG, BE, BD, or BC under daughter board IC Ver.
- If your generator's DP chip revision is CG, then use FTP Browser to copy files from the CG\_OCM directory to the generator's System directory (/tffs0/system/).
  - If your generator has a DisplayPort receive port, then copy all three files to the generator.
  - If it only has the transmit port, then copy only SafeLite\_ISP\_I2C\_CG\_Driver.hex and gm60028CG.hex to the generator.
- If your generator's DP chip revision is BE, BD, or BC, then use FTP Browser to copy files from the BE\_OCM directory to the generator's System directory.
  - If your generator has a DisplayPort receive port, then copy all three files to the generator.
  - If it only has the transmit port, then copy only SafeLite\_ISP\_I2C\_BD\_Driver.hex and gm60028BD.hex to the generator.
- At a command prompt issue the command DPTX:PROG. This may take about 3 minutes. Watch display and command prompt.
- When complete, issue verf? command.
  - If your generator's DP chip revision is CG, you should see 20.1886602,01.04.11,2.3.32,2.22.7.
  - If your generator's DP chip revision is BE, BD, or BC, you should see 20.1886602,01.04.11,2.2.30,2.22.7.
- Using FTP Browser, delete file gm60028CG.hex or gm60028BD.hex from the generator.
  - If your generator does not have a DisplayPort receive port, then you may delete SafeLite\_ISP\_I2C\_CG\_Driver.hex or SafeLite\_ISP\_I2C\_BD\_Driver.hex file to free up some internal flash memory space.
- If your generator has a DisplayPort receive port, continue with these steps:
  - At a command prompt issue the command DPRX:PROG. This may take about 3 minutes. Watch display and command prompt.
  - When complete, issue verf? command.
    - If your generator's DP chip revision is CG, you should see 20.1886602,01.04.11,2.3.32,2.22.7,2.3.32,2.22.7.
    - If your generator's DP chip revision is BE, BD, or BC, you should see 20.1886602,01.04.11,2.2.30,2.22.7,2.2.30,2.22.7.
  - Using FTP Browser, delete file gm68020CG.hex or gm68020BD.hex from the generator.
    - You may delete SafeLite\_ISP\_I2C\_CG\_Driver.hex or SafeLite\_ISP\_I2C\_BD\_Driver.hex file to free up some internal flash memory space.

Important note on installing Dolby/DTS compressed audio samples:

The new Dolby and DTS audio formats use audio samples that must be downloaded and installed separately to the Library/audio directory of the Compact Flash/PCMCIA card:

1. Download the file [AudioSamples\\_2.18.1.zip](#)
2. Unzip this file to a folder in your computer
3. Using FTP Browser, browse to the card0/Library folder of the 882E-DP/881E-DP generator
4. Click on **New** under Instrument Files, and create a new directory called **audio**
5. Under Host Files, browse to the folder on your PC where you unzipped the audio sample files
6. Copy all 14 files to the new audio directory
  - 1khz2ch-20dB\_ec3.pcm
  - 1khz51ch-20dB\_ec3.pcm
  - 1khz71ch-1frame\_ec3.pcm
  - 1khz71ch-20dB\_mlp.pcm
  - 2khz2ch-0db\_ac3.pcm
  - audio.lst
  - DTES-ES-48kHz-1509kbps-61ch.wav.pcm
  - dts-48kHz-1509kbps-51ch.wav.pcm
  - dtshdhra-48kHz-3840kbps-51ch.wav.pcm
  - dtshdhra-48kHz-5376kbps-71ch.wav.pcm
  - dtshdhra-96kHz-5760kbps-71ch.wav.pcm
  - dtshdma-48kHz-VBR-51ch-HDMI\_HBR.ba.pcm
  - dtshdma-48kHz-VBR-71ch-HDMI\_HBR.ba.pcm
  - nxt2ch2s.mlp.pcm
7. Now the Dolby audio formats are ready to use by selecting the image called **Dolby**, and the DTS audio formats are ready to use by selecting the image called **DTS**. Note that with release 2.20.2, only one Dolby audio clip and two DTS audio clips are supported.