

## Feature Enhancements for 882E-DP/881E-DP Release 2.26.1 - vxWorks: 20.1887801

**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 2.26.1 files.**

The following feature has been added in the Release 2.26.1.

- Updated Link Layer Compliance Test to align with Link Layer CTS 1.2 Core.
- Added GraysMHL test image.
- Added two methods to disable HDCP on DisplayPort Rx. DPRX:HDCP 1 disables HDCP on Rx. DPRX:HDCP 0 enables HDCP on Rx. DPRX:CPFM disables HDCP on Rx, and DPRX:RSET reset the Rx chip and enables HDCP.

The following anomaly has been corrected in the Release 2.26.1.

- Fixed Link Layer Compliance Test issue where 882 doesn't check for idle pattern from source DUT in 4.4.2 test.
- Fixed Link Layer Compliance Test issue where 882 skipped CRC checking at the end of 4.4.1.1 ~ 4.4.2 tests.
- Fixed Link Layer Compliance Test issue where 882 didn't use proper link rate and lane count in some cases of 5.4.4.6 test.
- Fixed the issue where the reference EDID doesn't get loaded properly in VESA E-EDID Verification Test.
- Improved XML file loading for better compatibility with 780, 980, and Java apps.

**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).

---

### Software Table

The Release 2.26.1 is comprised of the following software components.

Software Component	Version	Change Status
Boot Rom	01.04.11	no change
vxWorks	20.1887801	new with 2.26.1
Gateway 1 (DP Tx card revision C or older)	451C,8,2202008	no change

Gateway 1 (DP Tx card revision D or later)	451C,5,11182010	no change
Gateway 2	451A,17,10092008	no change
Gateway 3	451B,2,3162011	no change
DP Tx OCM Firmware	2.25.4	new with 2.26.1
DP Rx OCM Firmware	2.25.7	new with 2.26.1
Java JRE required	1.5.06	no change

---

### 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)

---

### 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, 2.20.1, 2.20.2, 2.22.0, 2.23.0, 2.23.1, or 2.25.0. 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...

Release 2.20.2 should return the following information:

20.1886602,01.04.11,2.3.32,2.22...

Release 2.22.0 should return the following information:

20.1887000,01.04.11,2.3.32,2.22...

Release 2.23.0 should return the following information:

20.1887200,01.04.11,2.3.32,2.22...

Release 2.23.1 should return the following information:

20.1887201,01.04.11,2.3.32,2.22...

Release 2.25.0 should return the following information:

20.1887600,01.04.11,2.3.32,2.25...

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, 2.20.1, 2.20.2, 2.22.0, 2.23.0, 2.23.1, or 2.25.0, upgrade your generator using the procedures below:

1. Download the 2.26.1 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 2.26.1 version of the vxWorks file by entering the following command:

```
verf?  
20.1887801,01.04.11,2.2.30,2...
```

```
or  
20.1887801,01.04.11,2.3.32,2...
```

4. Verify that the vxWorks file is: 20.1887801.
5. Verify that the BootRom version is: 01.04.11.
6. Verify that the generator is running the current 2.26.1 version of the gateway files by entering the following command:

```
verg?  
451C,8,2202008:451A,17,10092008:451B,2,3162011  
or  
451C,5,11182010:451A,17,10092008:451B,2,3162011
```

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\\_26\\_1.zip](#)
- Unzip the file to your PC. You should see CG\_OCM directory.
- Boot the generator using release 2.26.1 files.
- 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.
- 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.
  - You should see 20.1887801,01.04.11,2.3.32,2.25.4.
- 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.
    - You should see 20.1887801,01.04.11,2.3.32,2.25.4,2.3.32,2.25.7.
  - 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.