

## **882EA Release 2.26.0 - vxWorks: 20.1887800**

**Release 2.26.0 is approved by DCP for HDCP Compliance Testing to CTS 1.2.**

**Note: The external EST (Encryption Status Tester) must also be used for certain tests. The approved version for the EST is version 12. You can see your current EST version near the top of the HDCP Compliance Test HTML reports. If your EST needs to be upgraded to version 12, please contact Quantum Data or your local distributor for assistance.**

14 May 2014: Existing release updated with new Java applications in Library/WebFiles/RemoteUI directory. These new Java files are needed to run with the tighter security restrictions in the latest versions of Java Runtime Environment.

The following features have been added in the Release 2.26.0.

- Implemented partial parsing for VESA EDID Video Timing Block Extension (VTB-EXT.)
- Added some CEC changes for HDMI 1.4b.
- Changed max number of simultaneous telnet clients to 20.
- Added support for the YQ (YCbCr Quantization) Full Range flag in non-base YCbCr color spaces.
- Implemented cosmetic EDID changes per HDMI CTS 1.4b.
- Added X3DM? query to report current 3D mode.

The following anomalies have been corrected in the Release 2.26.0.

- Fixed an EDID parsing issue.
- Fixed a missing delay in CEC CT 11.2.9-2.
- Fixed I2C clock stretching issue.
- Fixes to CEC CT 11.1.11-1.
- Various HDCP Compliance Test fixes.
- Fixed the issue where encryption stayed on when leaving AUX Test image.
- Fixed the issue where EdidHdmi test image did not show Test ID 8-20 results.
- Fixed error in display code for CEC CT 11.1.2-5.

**HDCP Compliance Test notes (only applicable to 882EA with HDCP Compliance Test option)**

### **Applicable to all tests**

- try running the tests in batch mode by using the front panel interface
- if there is a problem, try running the tests one by one via the command line (see the repeater AB test procedure below as an example and refer to the [user guide](#))

- the test reports will be saved in /card0/library/reports if there is a PCMCIA card inserted in the 882EA (/tffs0/library/reports/ if no PCMCIA is inserted)
- Optionally use CPTX:DRPT 1 command to enable I2C logging in reports  
use CPTX:DRPT 0 command to disable I2C logging  
use CPTX:DRPT? query to check setting of I2C logging state

### **Applicable to the sink tests**

- you can monitor the transactions on Tx port 1 using the ACA

### **Applicable to the source tests**

- you can monitor the transactions if you have another 882C/882CA/882E/882EA and a TPA-MP-4R or TPA-ACA-3R
- connect the output of the source device to TPA's port 1, the input 1 of 882EA (test equipment) to TPA's port 2, and output 1 of a different 882C/882CA/882E/882EA (ACA monitoring device) to TPA's port 3
- use the ACA on the 882C/882CA/882E/882EA that is not the test equipment to monitor the transactions on Tx port 1

### **Applicable to the repeater AB tests**

- use a separate source device and connect it to the upstream port of the repeater
- use the 882EA's Rx 1 port as the sink device and connect it to the downstream port of the repeater via the EST
- you can monitor either downstream or upstream transactions (not both at the same time) if you have another 882C/882CA/882E/882EA and a TPA-MP-4R or TPA-ACA-3R
- in order to monitor the downstream transactions, connect the downstream of the repeater device to TPA's port 1, the input 1 of 882EA (test equipment) to TPA's port 2, and output 1 of a different 882C/882CA/882E/882EA (ACA monitoring device) to TPA's port 3
- in order to monitor the upstream transactions, connect the output of the source device to TPA's port 1, the upstream of the repeater device to TPA's port 2, and output 1 of a different 882C/882CA/882E/882EA (ACA monitoring device) to TPA's port 3
- use the ACA on the 882C/882CA/882E/882EA that is not the test equipment to monitor the transactions on Tx port 1

### **Applicable to the repeater C tests**

- connect the 882EA's Tx 1 port to the upstream port of the repeater via the EST

- connect the 882EA's Rx 1 port to the downstream port of the repeater via the EST
- make sure HdcpProd image is not selected on the 882EA before running the tests
- you can monitor the downstream transactions on Rx port 1 using the ACA
- you can monitor the upstream transactions on Tx port 1 using the ACA

### **Sink test procedure via the command line interface**

```
CPTX:DUTT 0 // set up for sink test
CPTX:CPTR 16 // configure 2C-1 test
CPTX:CPTU // start the test
// save the test report to the PC and rename it

// repeat above steps for test numbers 17 and 18

CPTX:CPTR 19 // configure 2C-4 test
CPTX:CPTU // start the test
// save the test report to the PC and rename it
```

### **Source test procedure via the command line interface**

```
CPTX:DUTT 1 // set up for source test
CPTX:CPTR 1 // configure 1A-01 test
CPTX:CPTU // start the test
// save the test report to the PC and rename it

// repeat above steps for test numbers 2 to 14

CPTX:CPTR 15 // configure 1B_06 test
CPTX:CPTU // start the test
// save the test report to the PC and rename it
```

### **Repeater AB test procedure via the command line interface**

```
CPTX:DUTT 3 // set up for repeater AB test
CPTX:CPTR 20 // configure 3A-01 test
CPTX:CPTU // start the test
// save the test report to the PC and rename it
```

// repeat above steps for test numbers 21 to 28

CPTX:CPTR 29 // configure 3B-05 test

CPTX:CPTU // start the test

// save the test report to the PC and rename it

### **Repeater C test procedure via the command line interface**

CPTX:DUTT 2 // set up for repeater C test

CPTX:CPTR 30 // configure 3C1-01 test

CPTX:CPTU // start the test

// save the test report to the PC and rename it

// repeat above steps for test numbers 31 to 44

CPTX:CPTR 45 // configure 3C2-09 test

CPTX:CPTU // start the test

// save the test report to the PC and rename it

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

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## Software Table

The Release 2.26.0 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	20.1887800	new with 2.26.0
Gateway 1	405C,17,2152010	no change
Gateway 2	450A,3,12312008	no change
Gateway 3	450B,13,4202010	no change
Java JRE required	1.5.06	no change

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## Auto Upgrade Instructions

You can use Quantum Data's AutoUpdate utility to upgrade your 881/882 firmware and gateway. The AutoUpdate utility automates the process of upgrading to the current release. It guides the user through the update 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 2.10.0, 2.10.2, 2.10.5, 2.11.0, 2.12.0, 2.13.1, 2.15.0, 2.16.3, 2.16.4, 2.17.6, 2.18.1, 2.19.0, 2.19.2, 2.20.0, 2.21.0, 2.22.0, 2.23.0, 2.24.1, or 2.25.0, or 2.25.2. To verify that your current generator is operating with one of these releases, enter the following command:

verf?

Release 2.10.0 should return the following information:  
20.1884600, 01.04.11

Release 2.10.2 should return the following information:  
20.1884602, 01.04.11

Release 2.10.5 should return the following information:  
20.1884605, 01.04.11

Release 2.11.0 should return the following information:  
20.1884800, 01.04.11

Release 2.12.0 should return the following information:  
20.1885000, 01.04.11

Release 2.13.1 should return the following information:  
20.1885201, 01.04.11

Release 2.15.0 should return the following information:  
20.1885600, 01.04.11

Release 2.16.3 should return the following information:  
20.1885803, 01.04.11

Release 2.16.4 should return the following information:  
20.1885803, 01.04.11

Release 2.17.6 should return the following information:  
20.1886006, 01.04.11

Release 2.18.1 should return the following information:  
20.1886201, 01.04.11

Release 2.19.0 should return the following information:  
20.1886400, 01.04.11

Release 2.19.2 should return the following information:  
20.1886402, 01.04.11

Release 2.20.0 should return the following information:  
20.1886600, 01.04.11

Release 2.21.0 should return the following information:  
20.1886800, 01.04.11

Release 2.22.0 should return the following information:  
20.1887000, 01.04.11

Release 2.23.0 should return the following information:  
20.1887200, 01.04.11

Release 2.24.1 should return the following information:  
20.1887401, 01.04.11

Release 2.25.0 should return the following information:  
20.1887600, 01.04.11

Release 2.25.2 should return the following information:  
20.1887602, 01.04.11

After verifying that the generator is operating with Release 2.10.0, 2.10.2, 2.10.5, 2.11.0, 2.12.0, 2.13.1, 2.15.0, 2.16.3, 2.16.4, 2.17.6, 2.18.1, 2.19.0, 2.19.2, 2.20.0, 2.21.0, 2.22.0, 2.23.0, 2.24.1, 2.25.0 or 2.25.2, upgrade your generator using the procedures below:

1. Download the 2.26.0 Zip file to your PC and unzip the file. There will be a System and a Library directory.
2. [Upgrade the generator using "Manually upgrading without using PC Card" procedure at this link.](#)
3. After power cycling the generator, verify that the generator is running the current 2.26.0 version of the vxWorks file by entering the following command:

verf?  
20.1887800, 01.04.11

4. Verify that the vxWorks file is: 20.1887800.
5. Verify that the BootRom version is: 01.04.11.
6. Verify that the generator is running the current 2.26.0 version of the gateway files by entering the following command:

```
verg?  
405C,17,2152010:450A,3,12312008:450B,13,4202010
```

7. The first listing is the Lattice FPGA gateway. The next two listings are the transmitter gateway files for the DVI and the HDMI output. The gatewares are separated by colons. Verify that the transmitter gateway files are: 450A,3,12312008:450B,13,4202010.

Important note on installing Dolby/DTS compressed audio samples:

The Dolby Digital, Dolby Digital Plus, Dolby True HD, and DTS audio formats use audio samples that must be downloaded and installed separately to the Library/audio directory of the Compact Flash 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 882EA 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
  - o 1khz2ch-20dB\_ec3.pcm
  - o 1khz51ch-20dB\_ec3.pcm
  - o 1khz71ch-1frame\_ec3.pcm
  - o 1khz71ch-20dB\_mlp.pcm
  - o 2khz2ch-0db\_ac3.pcm
  - o audio.lst
  - o DTES-ES-48kHz-1509kbps-61ch.wav.pcm
  - o dts-48kHz-1509kbps-51ch.wav.pcm
  - o dtshdhra-48kHz-3840kbps-51ch.wav.pcm
  - o dtshdhra-48kHz-5376kbps-71ch.wav.pcm
  - o dtshdhra-96kHz-5760kbps-71ch.wav.pcm
  - o dtshdma-48kHz-VBR-51ch-HDMI\_HBR.ba.pcm
  - o dtshdma-48kHz-VBR-71ch-HDMI\_HBR.ba.pcm
  - o nxt2ch2s.mlp.pcm
7. Power cycle the unit.
8. 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**

