User Guide Standards

Luvia Evaluation Kit for 25.3" Spectra™ 6 (ED2208-PEA) Display
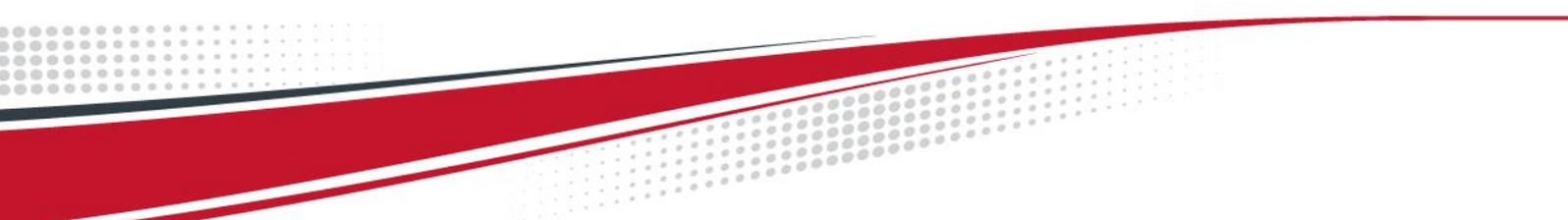
Table of Contents
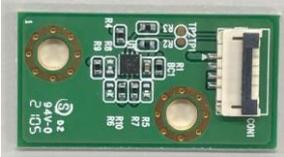
ePaper Display Update SOP

1 Introduction

Luvia evaluation kit support to highlight the features and benefits of the ePaper display driven by LVDS interface. This document will provide details on how to operate the Luvia evaluation kit with E Ink Spectra 6 LVDS interface panel. Please make sure if you already prepare following components on hand before starting to operate.

(1) Luvia evaluation kit
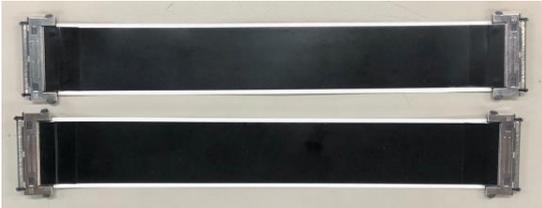
L-T1000 timing control board*1	FFC cable*2
Temperature sensor board*1	Cable for temperature sensor board
Power adaptor*1	

(2)   25.3 inch Spectra 6 ePaper display

25.3" Spectra 6 ePaper display

2   Hardware Setup Guide

This section describes the hardware setup procedures of the Luvia evaluation kit for 25.3" Spectra 6 ePaper display.

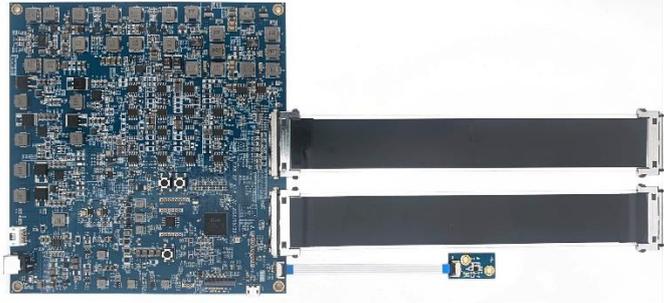### (1)   Hardware requirements for drive 25.3" Spectra 6 ePaper display

Luvia evaluation kit	Windows PC (Prepare by customer)
25.3" Spectra 6 ePaper display	

Table 1 Minimum PC Requirements (Prepare by customer)

CPU	Pentium III 800 MHz or higher
RAM	128MB or higher
Required Software	Windows 7 or higher version
Interface	USB port

(2) Connect method of Luvia kit with 25.3" Spectra 6 ePaper display

Connect the Luvia evaluation board with 25.3" Spectra 6 ePaper display is shown as following Figure 2.1.

Figure 2.1

3   How to Demo the Picture

Recommend picture format

The picture is needs to be converted by rendering tool and size needs to fit the resolution of 25.3" Spectra 6 ePaper display (3200*1800).

Make sure Luvia evaluation kit and 25.3" EPD as well as PC are connected

(1) Connect the 25.3-inch Spectra 6 ePaper display to the Luvia evaluation kit (refer to Figure 2.1)

(2) The PC is connected to the Luvia evaluation kit via a Micro-USB cable.

(3) Execute the "T1000_Windows_AP_x.x.x.xx.exe" software and click the "Connect" button to ensure that the software is successfully connected to the physical drive. (refer to Figure 3.1)
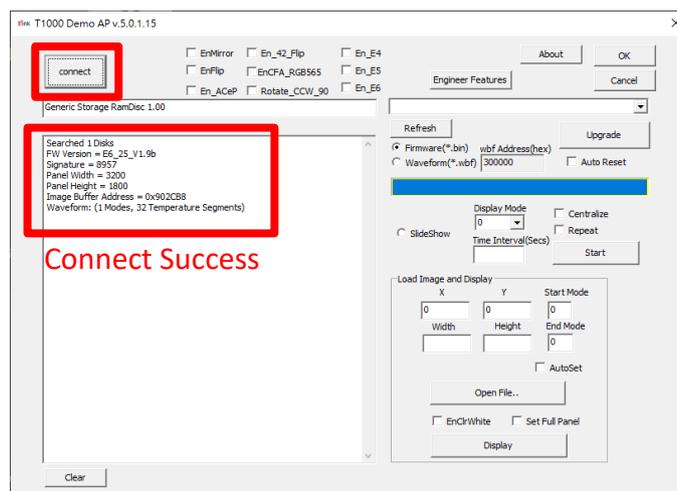

Figure 3.1

Update picture to ePaper display

Execute T1000 Demo AP (refer to Figure 3.2)

- ◆ Enable "En_E6" (step 1)
- ◆ Enable "AutoSet" and "Set full Panel" (step 2&3)
- ◆ Click "Open File.." to choose the picture   (step 4&5)
- ◆ Set "Start mode" and "End mode" to 0 (step 6)
- ◆ Click "Display" button to show selected picture on ePaper display (step 7)
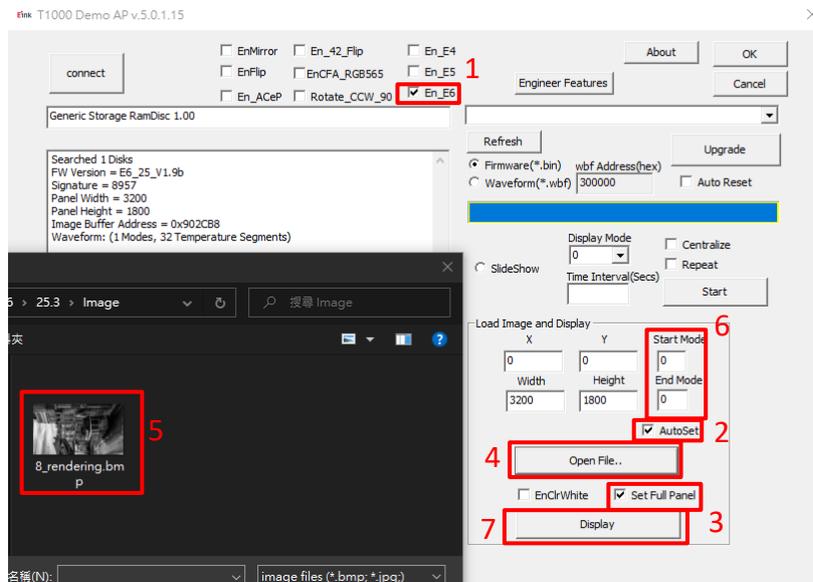
Figure 3.2 Update picture to 25.3" Spectra 6 ePaper display

4 Appendix

(1) How to minimize artifact

◆ Execute "T1000_Windows_AP_x.x.x.xx.exe" (refer to Fig 3.3)

◆ Select "EnClrWhite" option

◆ Set "Start mode" and "End mode" to 0,

◆ Click "Display" button. ePaper display will show white picture. Repeat above steps if necessary. Unselect "EnClrWhite" option after done with minimizing artifact.
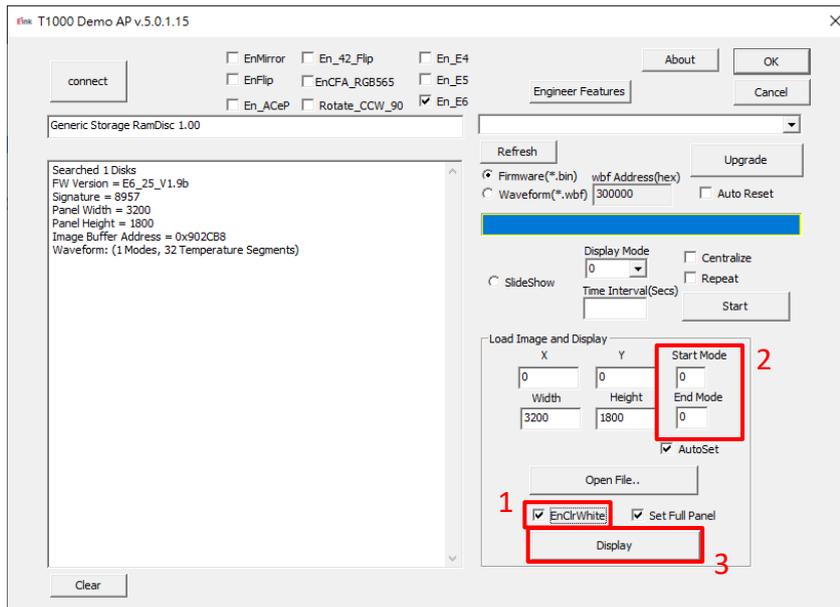
Figure 3.3

(2) How to upgrade firmware

◆ Execute "T1000_Windows_AP_x.x.x.xx.exe" (refer to Figure 3.4)

◆ Click the "connect" button (step 1)

◆ Choose "Firmware(*.bin) (step 2)

◆ Click "Refresh" and "choose the FW you want to use. (step 3&4)

◆ Click "Upgrade" (step 5)

◆ If update is success, please re-plug the power adapter and USB cable (reset)

Figure 3.4

(3) How to upgrade waveform

◆ Execute "T1000_Windows_AP_x.x.x.xx.exe" (refer to Figure 3.5)

◆ Click the "connect" button (step 1)

◆ Choose "Firmware(*.wbf) (step 2)

◆ Click "Refresh" and "choose the WF you want to use. (step 3&4)

◆ Click "Upgrade" (step 5)

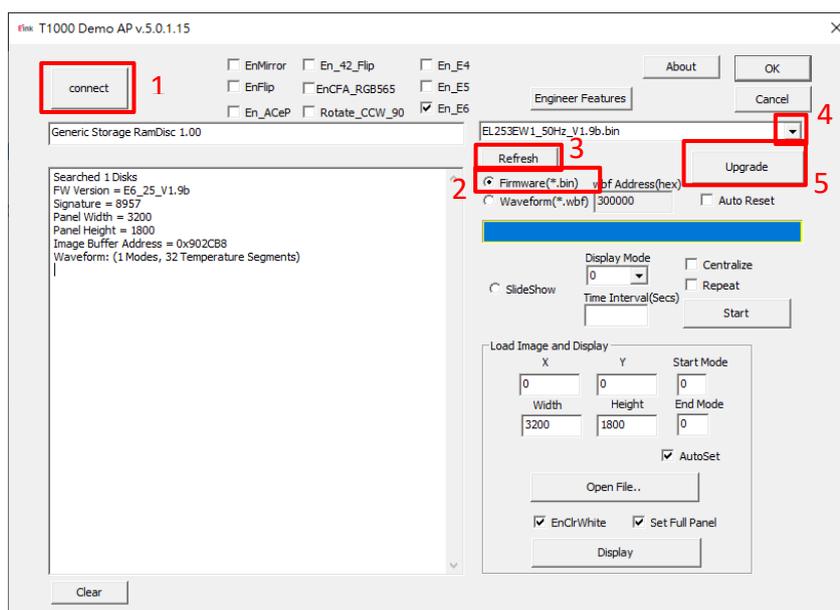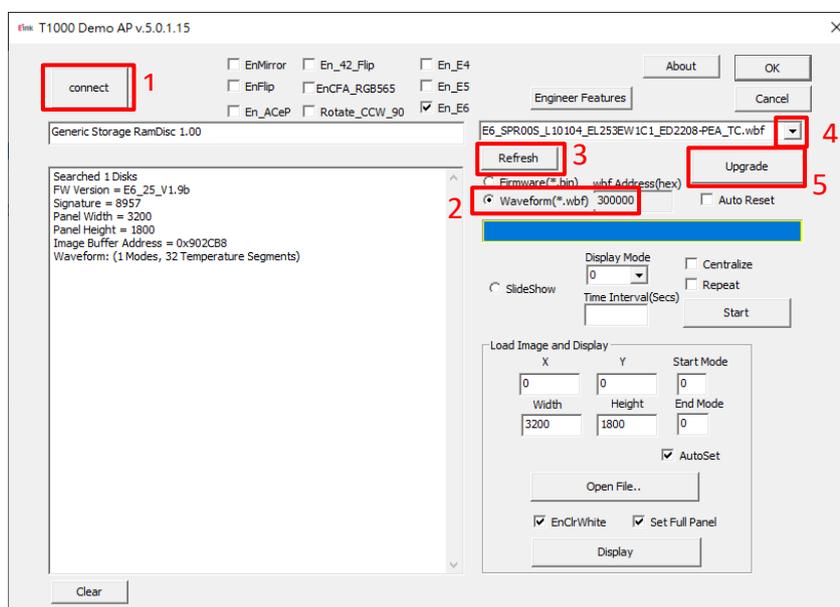◆ If update is success, please re-plug the power adapter and USB cable(reset)

Figure 3.5

(4) How to slideshow

◆ Execute "T1000_Windows_AP_x.x.x.xx.exe" (refer to Figure 3.6)

◆ Click the "connect" button.

◆ Upload all images under the folder name as "SlideShowImages"

◆ Set "Display Mode" and "Time Interval"

◆ Select "SlideShow" option and click "Start" button.

Note:

1. If the "T1000_Windows_AP_x.x.x.xx.exe" put in a Demo AP folder, the slideShowImages folder also needs under Demo AP folder.

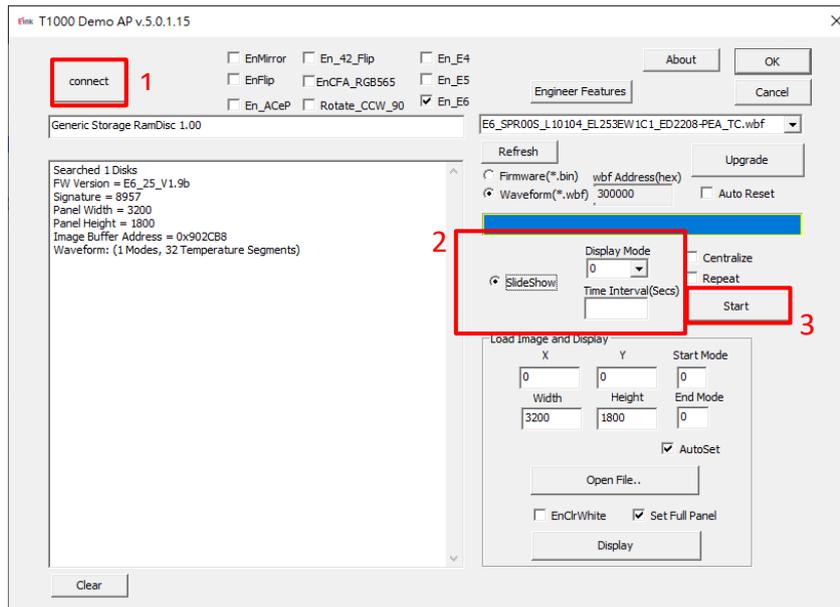2. Time interval requires more than one picture update time.

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Figure 3.6

(5) How to set VCOM & temperature

◆ Execute "T1000_Windows_AP_x.x.x.xx.exe" (refer to Figure 3.7)

    ◆ ***Set Vcom***

        ◆ Click "Engineer Features "button

        ◆ VCOM Set/Get

        ◆ Set/Get VCOM voltage value.

        ◆ Click "Execute" button to Set/Get VCOM.

        ◆ Click "OK" button

    ◆ ***Set temperature***

        ◆ Click "Engineer Features "button

        ◆ Temperature Set/Get

        ◆ Set/Get temperature value.

        ◆ Click "Execute" button to Set/Get temperature.
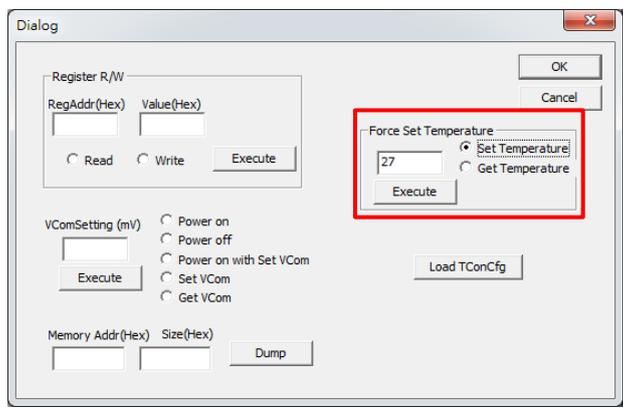
        ◆ Click "OK" button
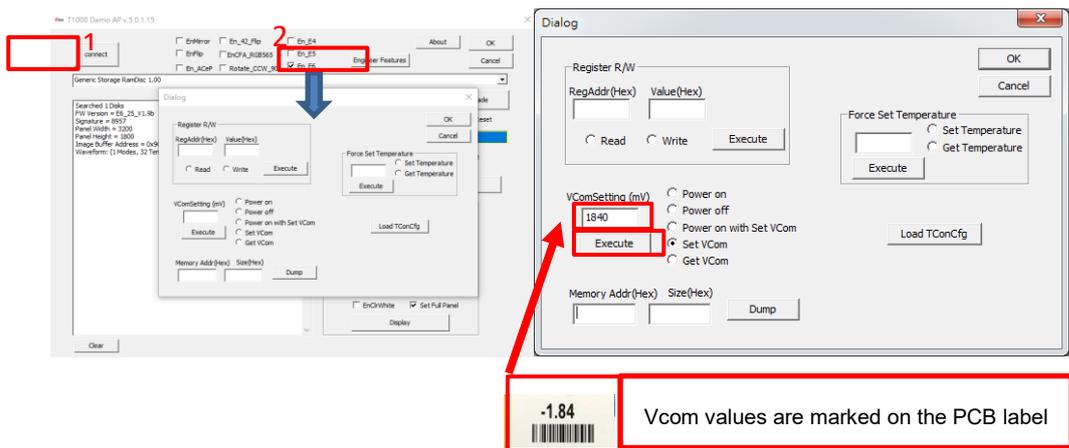
Figure 3.7

(6) How Other Features Description for T1000_Windows_AP_x.x.x.xx.exe

Each of the checkbox described above has to be selected before you load an **image using "Open File" button based on different firmware.**

- ◆ EnMirror：Mirror image (source line)

- ◆ EnFlip：Flip image (gate line)

- ◆ En_42_Flip：Only used in 42" EPD.

- ◆ EnCFA_RGB565：Only used in 31.2" CFA EPD.

- ◆ Rotate_CCW_90：Only used in 31.2 BW and 31.2 CFA.

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5　Troubleshooting

Below is a list of commonly asked questions and basic troubleshooting steps of L-T1000 evaluation board.

Table 4.1 Troubleshooting

No.	Issue	Possible Cause and Solution
1	L-T1000 device is not visible on PC	USB cable damage
		Replace USB cable.

6　Contact Information

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http://www.eink.com

For sales office addresses, please visit

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● Revision History

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0.1	2024/05/31		Initial	Ryan.C