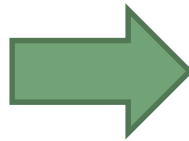
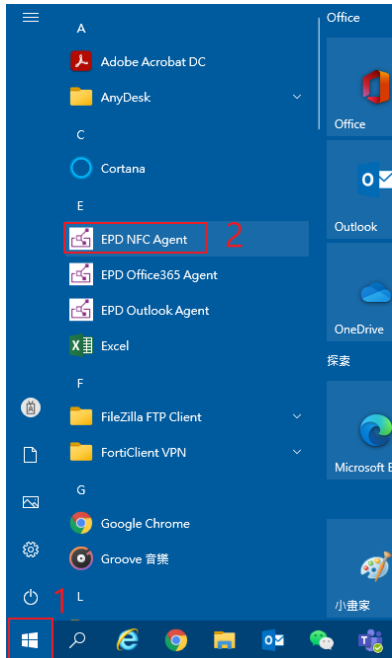


NFC Agent and Image generate



Open NFC agent and login to the server



A screenshot of the 'Sign In ePaper Manager' window. The window title is 'Sign In ePaper Manager'. The main heading is 'Sign In ePaper Manager'. There are three input fields: 'Server Url' with the value 'http://172.22.20.160:8080', 'Username' with the value 'root', and 'Password' with the value '*****'. A 'Sign In' button is located at the bottom center of the window.

Check the template in the NFC agent

EPD NFC Agent

ePaper Manager

USB Port COM3 Refresh

Queue Mode **Basic Mode** *Select Basic Mode*

Step 1. Select a template.

ChipDemo1 *Check all template which you can use*

- ChipDemo1
- ChipDemo2
- ChipDemo3
- EPD-023_Demo
- EPD210_Card_2
- epd-210-demo
- EPD-230B_White
- RMA-P2L-Off
- RMA-P2L-On
- Untitled Template-3
- Untitled Template-4
- 台灣自動化展-3
- 台灣自動化展-4
- 台灣自動化展-EPD-210
- 台灣自動化展-EPD-230
- 台灣自動化展-EPD-230-2

Step 3. Draw the image.

Draw

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No Stock Deliver

15

view the image.

	Desc	Mfr	Package	Series	Freq	Memory
	K148UAT0VLQT	MCU S32K148 144 LQFP	NXP Semiconductors	LQFP-144	S32K1xx	112 MHz 2 MB
	B500FGM48C	MCU ARM Cortex-M3	Silicon Labs	QFN-48	EFM32JG12	40 MHz 1024 kB
	ML11E14A-AUT	ARM Cortex-M23	Microchip Technology	TQFP-32	ATSAML11	32 MHz 10 kB
	K146HNT0VLLV	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
5	771-FS32K146HNT0VLLT	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
6	771-FS32K146HNT0VLLGG	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
7	772-FS32K146HNT0VLLGG	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
8	776-FS32K146HNT0VLLGG	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
9	773-FS32K146HNT0VLLGG	MCU S32K144 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz 1 MB
10	774-FS32K146HNT0VLLGG	MCU S32K144 32-bit	NXP Semiconductors	LOFP-100	S32K1xx	80 MHz 1 MB

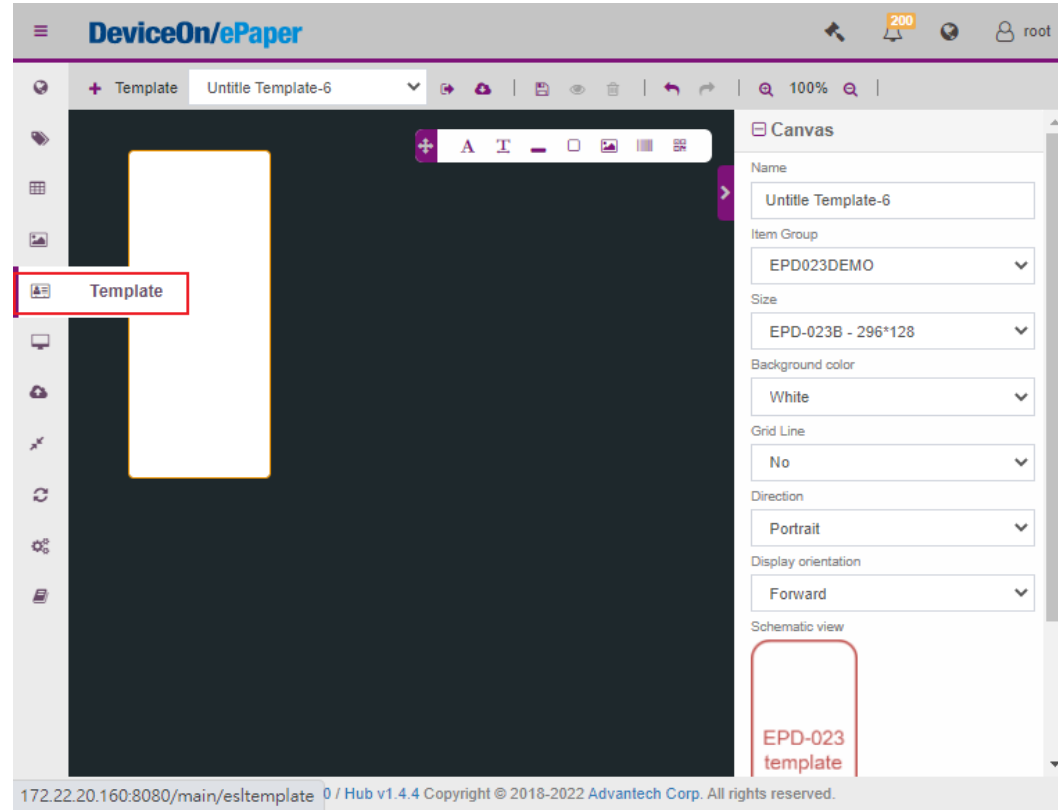
Login the ePaper Manager start to edit template

Account: root

Password: P@ssw0rd



The login page features the 'DeviceOn/ePaper' logo at the top. Below it, the text 'Sign in to EPD' is displayed. There are two input fields: the first contains the username 'root', and the second contains a masked password '.....'. A 'Remember me !' checkbox is located below the password field. A dark blue 'Sign In' button is positioned at the bottom right of the form.



The editor interface shows a central canvas with a white rectangular area. A red box highlights the 'Template' icon in the left sidebar. The right sidebar contains a 'Canvas' panel with the following settings:

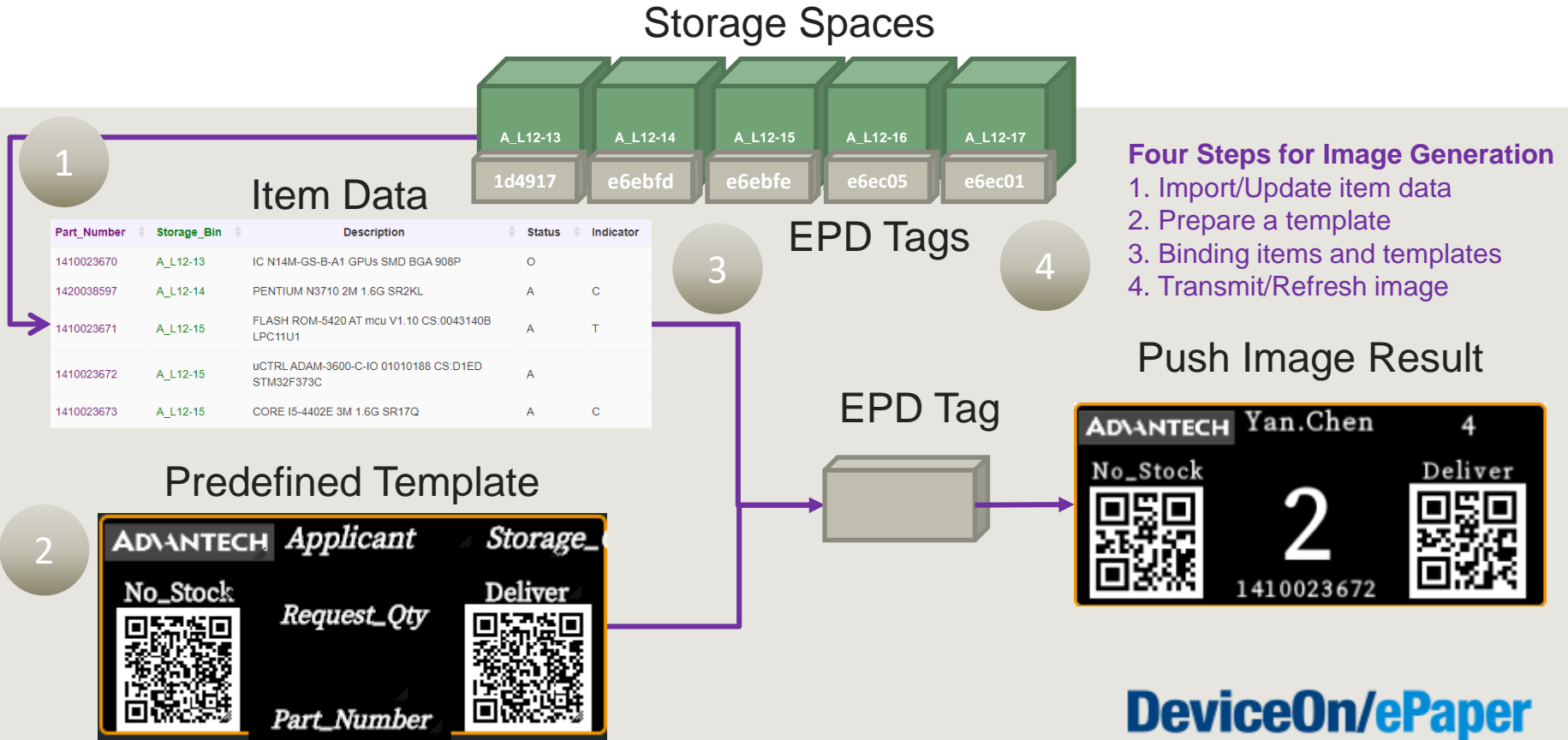
- Name: Untitle Template-6
- Item Group: EPD023DEMO
- Size: EPD-023B - 296*128
- Background color: White
- Grid Line: No
- Direction: Portrait
- Display orientation: Forward
- Schematic view: EPD-023 template

The bottom of the interface shows the URL: 172.22.20.160:8080/main/esltemplate 0 / Hub v1.4.4 Copyright © 2018-2022 Advantech Corp. All rights reserved.

Image Generator



Four Steps for Image Generation



Step 1. Prepare and import your item (storage) data

1. Open a Excel, and generate your item (storage) data you want to show on EPD device, and save as a CSV file.

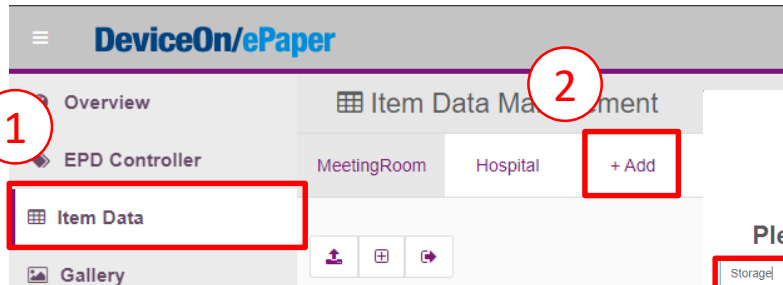
#	A	B	C	D	E	F	G	H	I	J	K
1	Part No	Storage Space	Mfr	Desc	Package	Series	Freq	Memory	Amount	Delivery Date	Owner
2	771-FS32K148UATOV1LQT	CSB3101	NXP Semiconductors	MCU S32K148 144 LQFP	LQFP-144	S32K11xx	112 MHz	2 MB	6	2018/8/18	Vicent.Cheng
3	634-IG12B500FM8C	CSB3101	Silicon Labs	MCU ARM Cortex-M3	QFN-48	FM32JG12	40 MHz	1024 kB	20	2018/2/25	Thomas.Chen
4	579-ATSAML11E14A-AUT	CSB3104	Microchip Technology	ARM Cortex-M3	TQFP-32	ATSAML11	32 MHz	16 kB	100	2018/5/4	Aaron.Gua
5	771-FS32K146HNTOV1LLT	CSB3105	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
6	771-FS32K146HNTOV1LLV	CSB3201	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
7	771-FS32K146HNTOV1LLG	CSB3202	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
8	772-FS32K146HNTOV1LLG	CSB3304	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
9	773-FS32K146HNTOV1LLG	CSB3305	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
10	774-FS32K146HNTOV1LLG	CSB401	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
11	775-FS32K146HNTOV1LLG	CSB402	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang
12	776-FS32K146HNTOV1LLG	CSB403	NXP Semiconductors	MCU S32K144 32-bit	LQFP-100	S32K11xx	80 MHz	1 MB	30	2018/4/16	Oscar.Huang

1st column must be an unique ID

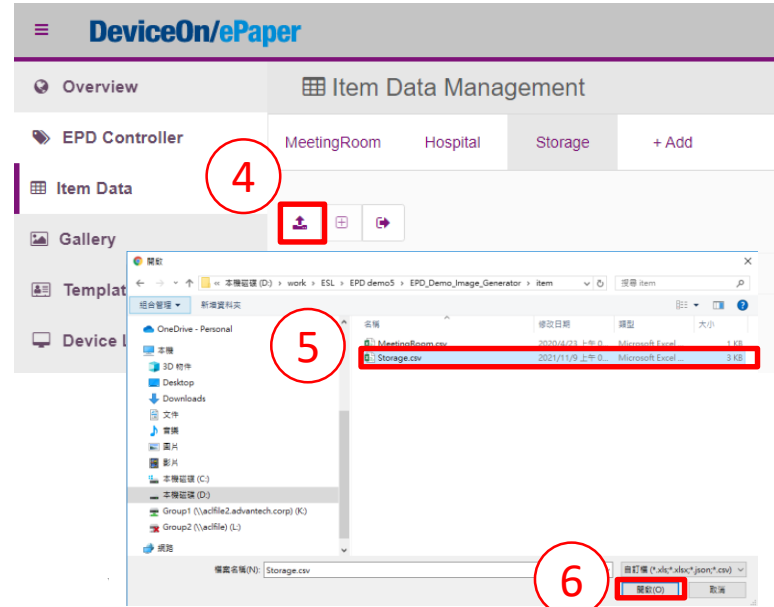
2rd column could be the information for storage space (easy for search)

Other column data are customized for users

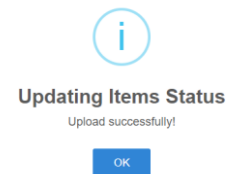
2. Go to **Item Data** page on DeviceOn/ePaper, and create a item group named as **Storage**.



3. Click the upload button and import the item (storage) data you just prepared.

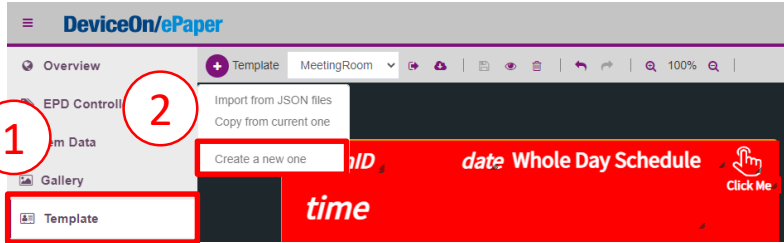


4. Upload successfully.



Step 2. Design a template in DeviceOn/ePaper - Canvas

1. Go to **Template** page, and click the **Create a new one** option.



2. In the Canvas setting, you can decide the following:

- EPD Model as **EPD-230 (2.9" BW)** according to which EPD device you have.
- Item Data Group as **Storage**, which is the item (storage) data you just upload as step 1
- Template Name as **Storage_t1**.
- Direction as **Landscape** and Display Orientation as **Reverse**, which you can double check by schematic view below.
- Background color

After setting these please save it by click the save icon.



Canvas

Name
Storage_t1

EPD Model
EPD-230 (2.9" BW)

Item Data Group
Storage

Direction
Landscape

Display orientation
Reverse

Background color
White

Grid Line
No

Size (Width x Height)
296 x 128

Schematic view

EPD-23x
template

Step 2. Design a template in DeviceOn/ePaper- Label

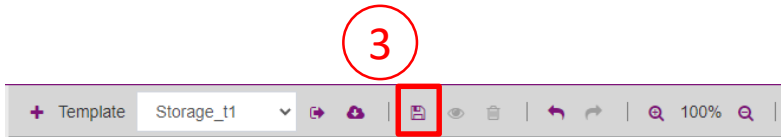
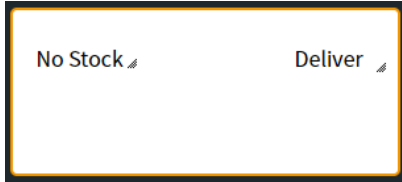
3. You can set up a **Static Label** by drag the first icon to a specific position.



4. In the Property setting, you can decide the following:

- Position and Size**
- Value**, which is the static text you want to show permanently
- Font family, Font size, Alignment, Font color**, and so on.

After setting these please save it by click the save icon.



Property

	X Axis	Y Axis
Position	190	25
	Width	Height
Size	98	27

UUID

a79713e7-dfe8-42b3-892c-44137ea17a:

Value

Deliver

Font family

Noto Sans

Font color

Black

Background color

White

Font Size

16px

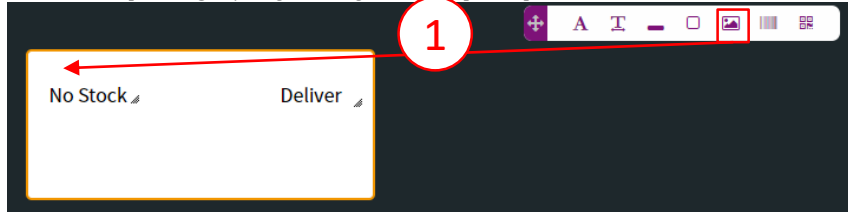
B I U

Show condition

True False Option

Step 2. Design a template in DeviceOn/ePaper- Image

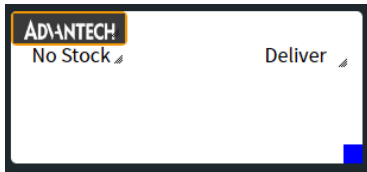
7. You can set up a **Image** by drag the Image icon to a specific position.



8. In the Property setting, you can decide the following:

- a. **Position and Size**
- b. **Value**, which have two kinds of situations.
 - a. When you choose **== User Defined ==**, you can upload a **Static Image** as Logo.
 - b. When you choose others, you assign the column of your item data as image file name (**Dynamic Image**).
- c. **Brightness Enhancement**
- d. **Dithering Enhancement**

After setting these please save it by click the save icon.



4



Property

	X Axis	Y Axis
Position	<input type="text" value="0"/>	<input type="text" value="0"/>
	Width	Height
Size	<input type="text" value="71"/>	<input type="text" value="32"/>

UUID

Value

File

Brightness Enhancement

OFF

Dithering Treatment

OFF

Image Ratio (Position Fixed)

Show condition

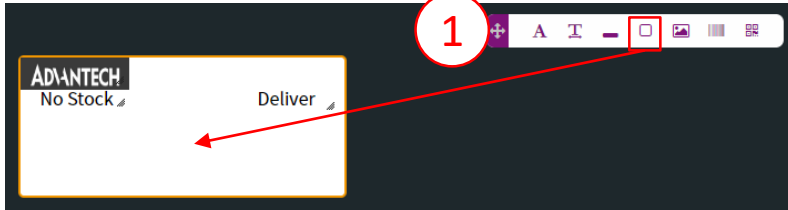
True False Option

2

3

Step 2. Design a template in DeviceOn/ePaper- Shape

9. You can set up a **Shape** by drag the Shape icon to a specific position.



10. In the Property setting, you can decide the following:

- Position and Size**
- Value**, which you can choose Rectangle, Triangle, and Circle
- Line Width**
- Line Color**
- Fill Color**
- Background Color**

After setting these please save it by click the save icon.



Property

	X Axis	Y Axis
Position	99.1719	45.4062
	Width	Height
Size	95	83

UUID

4219690b-5ffc-4866-aefc-6dedc8b155f9

Value

Rectangle

Line Width

1 px

Line color

Black

Filled color

Black

Background color

Black

Show condition

True False Option

Step 2. Design a template in DeviceOn/ePaper- Text

11. You can set up a **Text** by drag the Text icon to a specific position.



12. In the Property setting, you can decide the following:

- Position and Size**
- Value**, which you can choose the column of your item (storage) data
- Font family, Font size, Alignment, Font color**, and so on.

After setting these please save it by click the save icon.



Property

	X Axis	Y Axis
Position	108	53
	Width	Height
Size	78	23

UUID

52d30542-925f-4a35-8213-c177e6e183c

Value

Amount

Font family

Noto Sans

Font color

White

Background color

Transparent

Font Size

48px

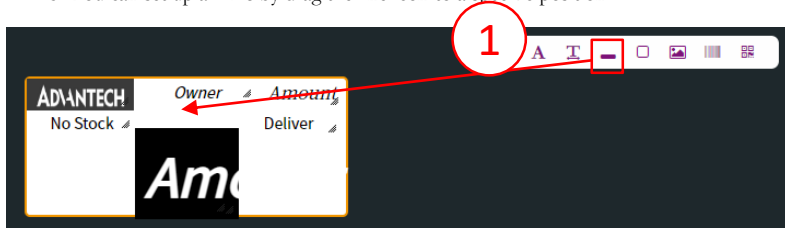
B **I** **U**

Show condition

True False Option

Step 2. Design a template in DeviceOn/ePaper- Line

5. You can set up a **Line** by drag the line icon to a specific position.



6. In the Property setting, you can decide the following:

- Position and Size**
- Direction**, which is Horizontal or Vertical
- Line color**
- Line Width**

After setting these please save it by click the save icon.



3



Property

	X Axis	Y Axis
Position	106.281	20.4062
	Width	Height
Size	97	10

UUID

dbe84115-3d5c-477e-824c-56d7239d0cl

Direction

Horizontal

Line color

Black

Line Width

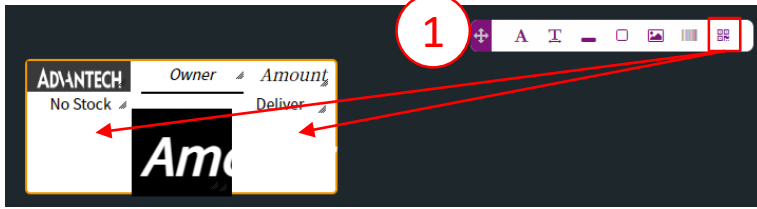
2 px

Show condition

True False Option

Step 2. Design a template in DeviceOn/ePaper- QR Code

13. You can set up a **QR Code** by drag the QR Code icon to a specific position.



14. In the Property setting, you can decide the following:

- a. **Position and Size**
- b. **Value**, which have two kinds of situations.
 - a. When you choose == **User Defined** ==, you can assign it as a **Static Data** by fill in the data in **Sample** field.
 - b. When you choose others, you assign the column of your item data as **Dynamic Data**.

After setting these please save it by click the save icon.



Property

	X Axis	Y Axis
Position	208	48
	Width	Height
Size	75	75

UUID

206d374d-a9eb-4217-9ec3-654e4ab71b

Value

Deliver

Sample

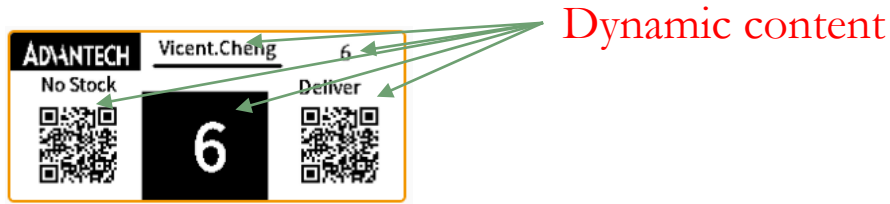
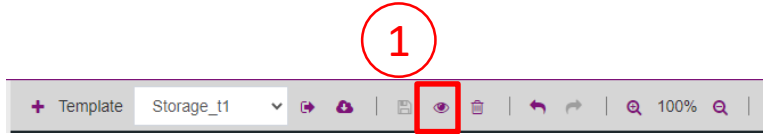
<https://www.mouser.tw/advantech/feature>

Show condition

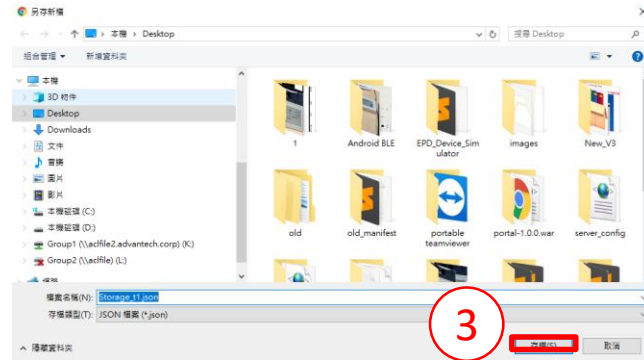
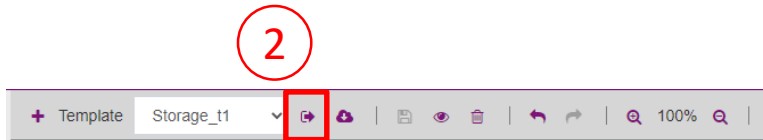
True False Option

Step 2. Design a template in DeviceOn/ePaper- Preview

15. You can click the preview icon to give the first view of your template. You can modified and save it if necessary.



16. You also can export as a JSON file as a copy in case next time you want to use it in another server.



Storage_11.json

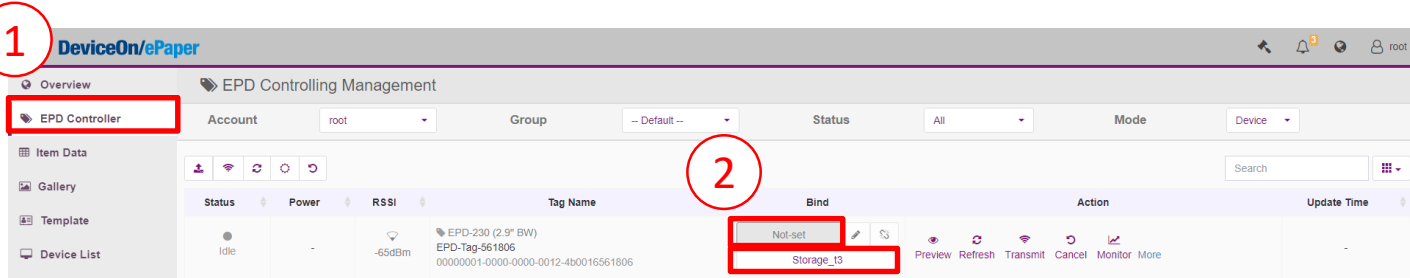
2022/2/7 上午 09... JSON 檔案

16 KB

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Step 3. Bind your item (storage) data and template to EPD device

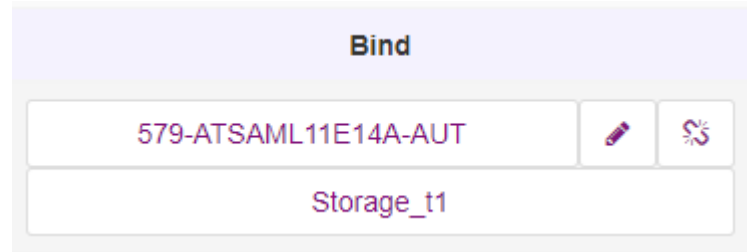
1. Go to the EPD Controller page, choose the EPD device you want to bind with. Click the Bind action as below.



2. Bind uploaded item and pre-designed template.



3. Bind template and data successfully.



Step 4. Trigger the transmit command on EPD device

1. Go to the **EPD Controller** page, choose the EPD device you want to transmit the image. Please click the **Transmit** Action as below.

The screenshot shows the 'DeviceOn/ePaper' interface for 'EPD Controlling Management'. The left sidebar has 'EPD Controller' highlighted with a red circle '1'. The main table lists devices with columns for Status, Power, RSSI, Tag Name, Bind, and Action. The 'Transmit' button in the Action column is highlighted with a red circle '2'.

Status	Power	RSSI	Tag Name	Bind	Action	Update Time
Idle	-	-65dBm	EPD-230 (2.9" BW) EPD-Tag-561806 00000001-0000-0000-0012-4b0016561806	579-ATSAML11E14A-AUT Storage_t1	Preview Refresh Transmit Cancel Monitor More	-

2. You can decide the following transmit parameters:

- Which page
- Refresh immediately after transmit
- Blink LED lights or not after transmit

The 'Transmit Image Options' dialog box shows settings for transmitting an image to an EPD tag. The 'Which page in EPD Tag:' is set to 1. 'Refresh After Transmit?' is turned ON. 'With Blinking LED?' is set to 'W/O LED'. 'Auto Retry Jobs' is set to a dropdown menu. The 'OK' button is highlighted with a red circle '3'.

3. Send command successfully.

The table shows the device status after a successful transmit command. The 'Status' column now shows '1 Job' with a refresh icon, indicating the command was executed.

Status	Power	RSSI	Tag Name
1 Job	-	-65dBm	EPD-230 (2.9" BW) EPD-Tag-561806 00000001-0000-0000-0012-4b0016561806

Select the new template in the NFC agent

ePaper Manager USB Port COM3 Refresh

Queue Mode Basic Mode

Step 1. Select a template.

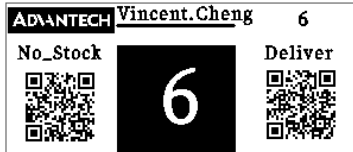
- Storage_t1
- ChipDemo1
- ChipDemo2
- ChipDemo3
- EPD210_Card_2
- epd-210-demo
- EPD-230B_White
- RMA-P2L-Off
- RMA-P2L-On
- Storage_t1
- Untitled Template-3
- Untitled Template-4
- 台灣自動化展-3
- 台灣自動化展-4
- 台灣自動化展-EPD-210
- 台灣自動化展-EPD-230
- 台灣自動化展-EPD-230-2

Step 2. Preview the image.

	Package	Series	Freq	Memory	Amount	Deliver	
chip Technology	TQFP-32	ATSAML11	32 MHz	10 kB	100	https://www.mouser.tw/advantech/fee	
emiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	99	https://www.mouser.tw/advantech/fee	
emiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	5	https://www.mouser.tw/advantech/fee	
emiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	12	https://www.mouser.tw/advantech/fee	
44 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	30	https://www.mouser.tw/advantech/fee
44 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	38	https://www.mouser.tw/advantech/fee
▶ 44 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	6	https://www.mouser.tw/advantech/fee
44 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	30	https://www.mouser.tw/advantech/fee
44 32-bit	NXP Semiconductors	LQFP-100	S32K1xx	80 MHz	1 MB	30	https://www.mouser.tw/advantech/fee

Step 3. Draw the image.

Draw



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No_Stock Deliver

Click “Draw” to flash image on the EPD-210

ePaper Manager USB Port COM3 Refresh


Queue Mode Basic Mode


Step 1. Select a template.
Storage_t1

Step 2. Click a row to preview the image.

	Package	Series	Freq	Memory	Amount	Deliver	Delivery Date
ors	LQFP-144	S32K1xx	112 MHz	2 MB	15	https://www.mouser.tw/advantech/featured-products/	2021/10/28
	QFN-48	EFM32JG12	40 MHz	1024 kB	20	https://www.mouser.tw/advantech/featured-products/	2021/10/28
logy	TQFP-32	ATSAML11	32 MHz	10 kB	100	https://www.mouser.tw/advantech/featured-products/	2021/10/28
▶ ors	LQFP-100	S32K1xx	80 MHz	1 MB	6	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	99	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	5	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	12	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	30	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	38	https://www.mouser.tw/advantech/featured-products/	2021/10/28
ors	LQFP-100	S32K1xx	80 MHz	1 MB	30	https://www.mouser.tw/advantech/featured-products/	2021/10/28

Step 3. Draw the image. SendData... 66%

Draw 



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No_Stock Deliver

