

EPD-023

Component Change Test Report

ARK-1123H A2+WISE-3240+EPD-023B/R

Initiated by	Shane GH	Approved by	Luke Chang
---------------------	----------	--------------------	------------

Revision History :

Date	Revision	Description	Creator
2021/08/04	V1.0	iDesign Request ID: 2442-084	Shane GH
2021/08/09	V1.1	Update EPD-023B fw to V1009	Shane GH
2021/08/16	V1.2	Update page 6 OS to EPD_ARK1123HA2_U1804_1503	Shane GH

Test Results Definition :

Criteria	Definition
PASS	Test result pass and function work perfectly.
Fail	Test fail or can not meet the spec requirement.
Limitation	There are no plans to fix this erratum.
N/A	Spec not support or driver not ready.
Check Next Version	HW modified circuit and solution verified, and check the function result has pass. Need to check next version.

Test Results Summary :

Num.	Test Item	Result	Remark
1.	ePaper Manager Function		
1.01	EPaper Manager function test	PASS	
2.	EPD Tags		
2.01	EPD-023	PASS	
3.	Stability		
3.01	Stability stress Test	PASS	

Table of Contents

Revision History : 2

Test Results Definition : 3

Test Results Summary : 4

Table of Contents..... 5

Test Equipment : 7

1. ePaper Manager Function 8

1.01 EPaper Manager function test..... 8

 1.01.01 EPD Controller..... 8

2. EPD Tags..... 9

2.01 EPD-023..... 9




3. Stability..... 10

3.01 Stability stress Test..... 10

System Configuration :

Item.	Version	File Name	Description.
OS	Ubuntu 18.04	EPD_ARK1123HA2_U1804_1503	
ePaper Manager	v1503	Image build-in	
EPD Portal	1.7.3	ePaper Manager build-in	
EPD Hub	v1.1.1	ePaper Manager build-in	
WISE-3240	3240S00OIV0112	3240S00OIV0112.bin	
WISE-1840	1840S00TMX1004	1840-v1.0.4.0-6ee3c5a90baf8cb0cfe9d6c566bfe359.zip	
EPD-023B/R3	MV1009/ MV1005	EPD023B-v1.0.9.0-1e31101eca8e2bd1dcbe257b60ed84bf.zip/ EPD023R-v1.0.5.0-2bc061c99508cddd81cb4f53fa8e01fd.zip	

Test Equipment :

Item.	Description.
<p>ARK-1123H A2</p>	
<p>WISE-3240</p>	
<p>EPD-023B/R</p>	

1. ePaper Manager Function

1.01 EPaper Manager function test

1.01.01 EPD Controller

1.01.01.01 Test Purpose :

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3240 as EPD Router
3. EPD-023B/R as EPD device

1.01.01.03 Testing Configuration:

1. Test environment: Room temperature

1.01.01.04 Test Procedure:

1. Set up one WISE-3240 in area A and set up one WISE-3240 in area B
2. Roam tags by exchanging 25 tags from area A to area B and 25 tags from area B to area A.
3. After roaming, connect tags and transmit the template once a day and continue to five days.

1.01.01.05 Test Result:

Item	Sub Item	Functions	Result	Remark
EPD Controller	Group	Roaming Function 50 TAGs roam once a day for 5 days *One Server with two routers	PASS	
	Transmit	Transmit template after roam.	PASS	

2. EPD Tags

2.01 EPD-023

2.01.01.01 Test Purpose :

To verify the button function is working correctly.

2.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3240 as EPD Router
3. EPD-023R as EPD device

2.01.01.03 Testing Configuration:

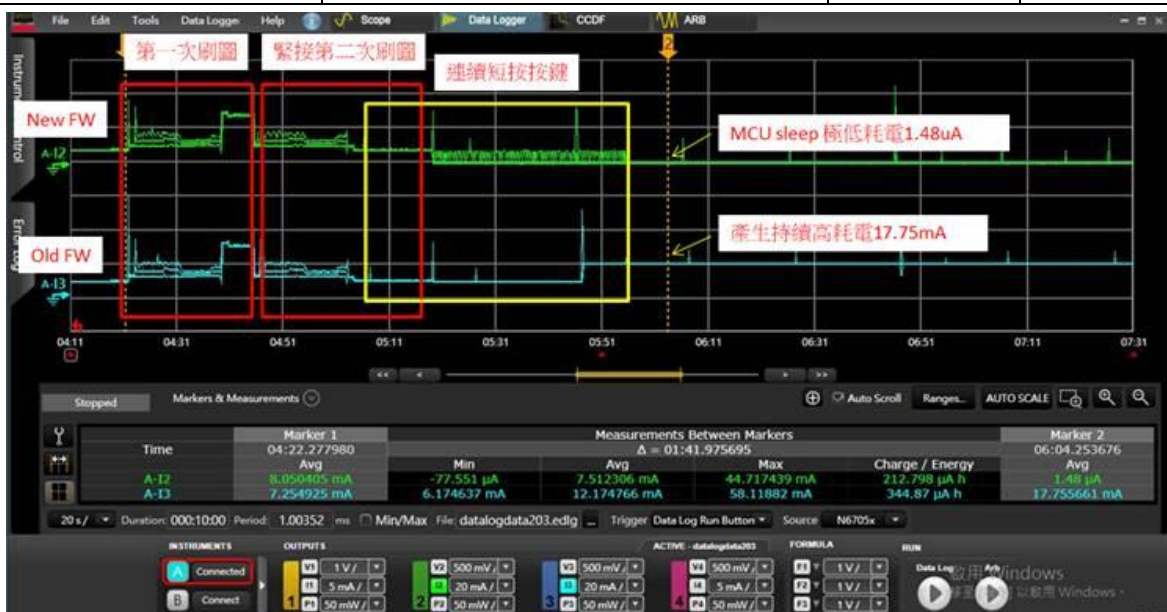
1. Test environment: Room temperature

2.01.01.04 Test Procedure:

1. Use “Generate archive” to create setting backup file
2. Connect Web UI and upgrade firmware
3. Reset to default
4. Restore settings

2.01.01.05 Test Result:

Item	Criteria	Result	Remark
Button SW1/SW2/SW3	Press button several times during image reflash, will not cause high leak current	PASS	



3. Stability

3.01 Stability stress Test

3.01.01.01 Test Purpose :

To verify the button function is working correctly.

3.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3240 as EPD Router
3. EPD-023B/R as EPD device

3.01.01.03 Testing Configuration:

1. Test environment: Room temperature

3.01.01.04 Test Procedure:

1. Connect tags to ePaper Manager
2. Group schedule to transmit templates to tag. Repeat 24 times.

3.01.01.05 Test Result:

Item	Criteria	Result	Remark
EPD-023	Connect to 400 tags, transmit template to all each hour. Run for 5 days. Fail rate < 0.1%	PASS	50 pcs 023R + 350 pcs 023B