

EPD-230_232_332 2min issue FW Update Function Test Report

Initiated by	Shane GH	Approved by	Luke Chang
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Revision History :

Date	Revision	Description	Creator
2021/09/22	V1.0	EPD-230, EPD-232, EPD-332 2min issue FW update test	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	System Function Test		
1.01	Tag Power Consumption (Sleep Mode)	PASS	

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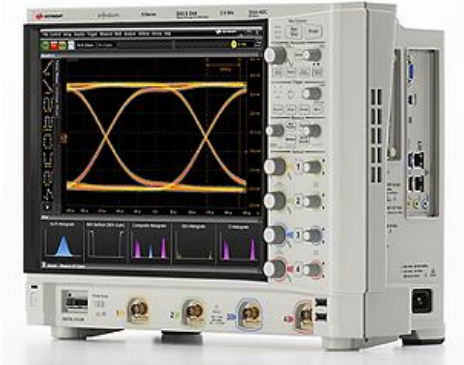
1. System Function Test 8

1.01 Tag Power Consumption (Sleep Mode) 8

System Configuration :

Item.	Version	File Name	Description.
ARK-1123	ARK-1123H-U0A2E	ARK-1123H-U0A2E	
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	
EPD-230	V1010	EPD023B-v1.0.10.0-07dd51da80194309905b53d440c4fa48.zip	
EPD-232	V1006	EPD023R-v1.0.6.0-abe5bdd438f94da98207a8c2d1b366ef.zip	
EPD-332	V1007	EPD053R-v1.0.7.0-22d819933dde8f05b77a1f3d792f30ab.zip	

Test Equipment :

Item.	Description.
<p>ARK-1123H A2</p>	
<p>WISE-3240</p>	
<p>EPD-230/EPD-232</p>	
<p>EPD-332</p>	
<p>Keysight_DSOS254A</p>	

1. System Function Test

1.01 Tag Power Consumption (Sleep Mode)

1.01.01.01 Test Purpose:

Make sure that rebooting every two minutes after the tag enters sleep mode will not cause high power consumption

1.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3240 as EPD Gateway
3. EPD-230/232 and EPD-332 as EPD device
4. Keysight_DSOS254A 2.5GHz Oscilloscope

1.01.01.03 Testing Configuration:

1. Test environment: Room temperature

1.01.01.04 Test Procedure:

1. Disconnect the tag from the router and enter sleep mode after 5 days
2. Measure the current value of tag.
3. After connecting the tag and router, refresh the picture, flash the light and press the tag button.
4. Update tag FW and repeat above step 1 to 3

1.01.01.05 Test Result:

Item	Descriptions	Result	Remark
EPD-230	<ol style="list-style-type: none"> 1. After enter sleep mode measure current value 2. Wake up the tag, when the tag is connected to the router, refresh the image and flash the light 	PASS	
EPD-232	<ol style="list-style-type: none"> 1. After enter sleep mode measure current value 2. Wake up the tag, when the tag is connected to the router, refresh the image and flash the light 	PASS	
EPD-332	<ol style="list-style-type: none"> 1. After enter sleep mode measure current value 2. Wake up the tag, when the tag is connected to the router, refresh the image and flash the light 	PASS	

Item	Sleep mode power consumption (Old FW)	Sleep mode power consumption (New FW)
EPD-332	140.714uA	5.72uA
EPD-230		5.505uA
EPD-232		5.59uA