

Hardware Unit Test Report

Power consumption Test of Android TV version

Hardware version	FW version	Sample No.	eMMC Flash P/N
V015	r47b BFX-AT100 EEE disable	S/N: 2154001662-01S1	KLM8G1GETF-B041

1. Test Setup

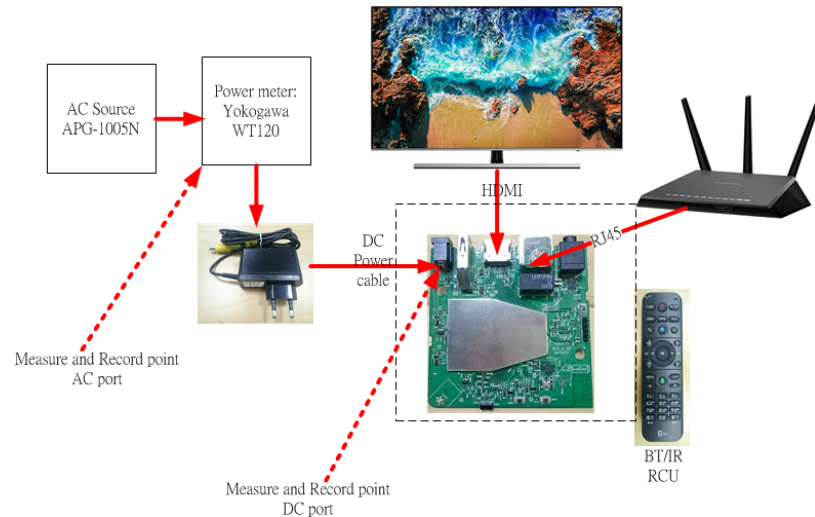
Equipment:

1. Eagle DVT board V015.
2. AC POWER: APG-1005N: 220Vac @60Hz
3. AC Adapter: Editech TYPE2541 5V/2A
4. 4K TV: ENVISION P2271WHL
5. Power meter with accumulator: Yokogawa WT210
6. Current probe: TCPA300
7. NETGEAR R7000 1Gbps

Test Environment:

1. Test place: FXN CNSBG Building 1F office
2. Test DUT name: Eagle DVT V015 borad
3. Test environment condition: temperature: 25 deg-C, humidity: 65
4. Test date: 2019/9/19
5. Test result: See section 3 for test results.
6. Test setup picture (block diagram and real test environment picture)

Block Diagram:



Test setup picture:



2. Test Items and Condition

1. Operation mode

1. DUT power on

2. Switch to TV mode and enter YouTube to play 4Kp60 video.

4kp60 video content: <https://youtu.be/pyCy3xnvJ5c>, playing time: 0:00:00

YouTube updates to latest version and STOP all APP update.



Gorgeous Waterfalls in 4K 60fps (2160p) - Soothing Nature Video for...

4K Relaxation Channel 觀看次數：22萬次

Gorgeous waterfalls from Oahu Island, Hawaii in exceptional 4K Ultra HD 60 frames quality for your 4K TV, lobby, waiting room,

3. Accumulating for 2 hours and record the power consumption result.

2. Active standby mode

1. DUT power on
2. Press power key of RCU to enter standby state from normal state.
3. Accumulating for 1 hour and record the power consumption result.

3. Test Result

DVT build power consumption:

3.1 Operation mode [Adaptor: Editech TYPE2541 5V/2A]

Test Results of power consumption: EEE disable F/W version: r47b BFX-AT100 version(LAN: 1000M bps)			
Item No.	AC port Eagle Board V015	DC port Eagle Board V015	Remark
#1 DUT	220Vac/33.50mA@60Hz, 2.9069W*	5.10Vdc/450mA, 2.2950W	
#2 DUT	220Vac/33.69mA@60Hz, 2.8414W*	5.10Vdc/450mA, 2.2950W	

Note:

*: DUT1 accumulation for 2 hours is 5.8139W, the reality power consumption is 2.9069W.

AC current: (36mA+31mA)/2=33.5; DC current: (500mA+400mA)/2=450mA

*: DUT2 accumulation for 2 hours is 5.6828W, the reality power consumption is 2.8414W.

AC current: (36mA+31mA)/2=33.5; DC current: (500mA+400mA)/2=450mA

3.2 Active standby mode [Adaptor: Editech TYPE2541 5V/2A]

Test Results of power consumption: EEE disable F/W version: r47b BFX-AT100 version(LAN: 1000M bps)			
Item No.	AC port Eagle Board V015	DC port Eagle Board V015	Remark
#1 DUT	220Vac/19.76mA@60Hz, 1.5605W*	5.15Vdc/220mA, 1.1330W	
#2 DUT	220Vac/19.39mA@60Hz, 1.5269W*	5.15Vdc/220mA, 1.1330W	

Note:

*: DUT1 accumulation for 2 hours is 3.1210W, the reality power consumption is 1.5605W.

AC current: 19.76mA (keeps a value on Accumulator); DC current: 220mA (keeps a value on DMM)

*: DUT2 accumulation for 2 hours is 3.0537W, the reality power consumption is 1.5269W.

AC current: 19.39mA (keeps a value on Accumulator); DC current: 220mA (keeps a value on DMM)