

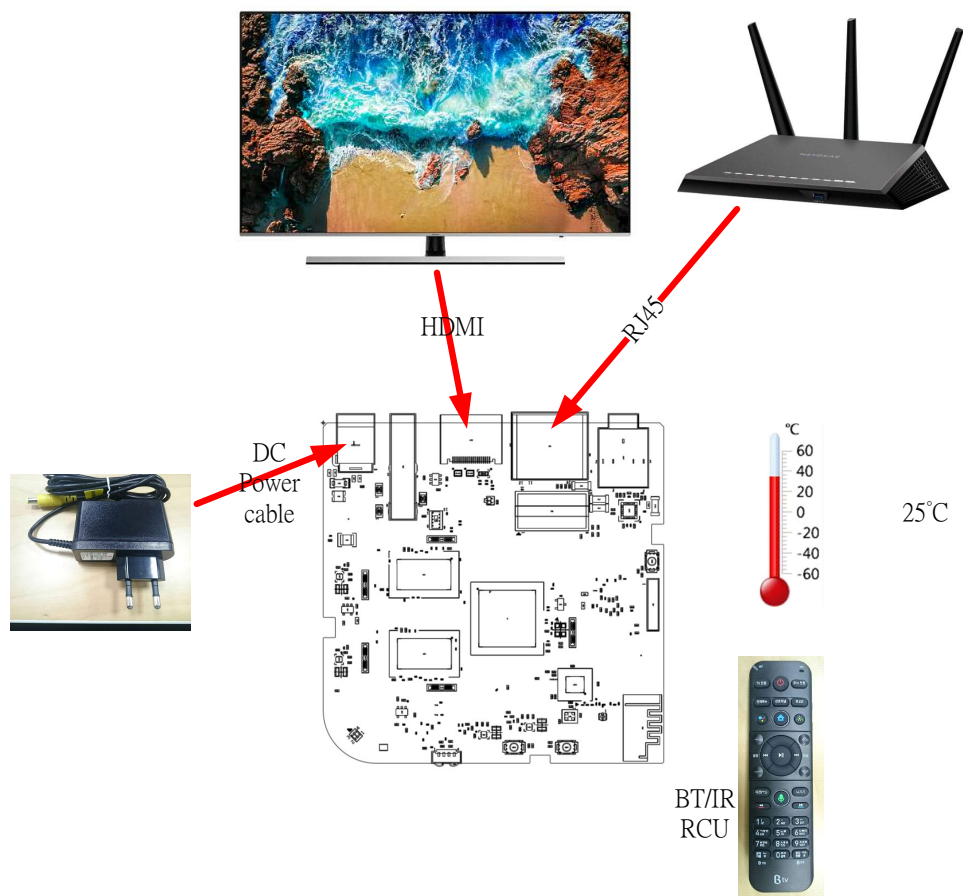
BFX-AT100

Hardware Unit Test Report

Power Accuracy Test

Hardware version	FW version	Sample No.
V015	4.9.113 #29 Fri May 10 19:27:56 CST 2019 Build BFX_AT100-eng 9 PI 20190510 release-keys	S/N:

1. Power Test Setup (1)



1.1 Test Condition

BOX play 4K video via Ethernet by using YouTube. HDMI output port connects to TV through HDMI cable. The temperature is about 25 degrees.

1.2 Result and Picture

Power Rail	Specification (V) (+5%)			Test Result (V)	Figure	Pass/Fail
	Min.	Typ.	Max.			
PP_PWR_IN (5V)	4.75	5	5.25	5.03	Figure 1	Pass
HDMI_PW (5V)	4.75	5	5.25	5.043	Figure 2	Pass
USB_5V (5V)	4.75	5	5.25	5.045	Figure 3	Pass
VDD_EE(0.8V)	0.77	0.8	0.9	0.8346	Figure 4	Pass
VDDCPU *	0.68	1	1.03	1.007	Figure 5	Pass
P3V3 (3.3V)	3.15	3.3	3.45	3.328	Figure 6	Pass
P2V5 (2.5V)	2.375	2.5	2.625	2.499	Figure 7	Pass
P1V8 (1.8V)	1.71	1.8	1.89	1.809	Figure 8	Pass
EMMC_VDDQ (1.8V)	1.71	1.8	1.89	1.829	Figure 9	Pass
P1V2 (1.2V)	1.14	1.2	1.26	1.199	Figure 10	Pass

Note * VDDCPU power rail is using voltage identification and control by PWM. This report is fix in 1V.

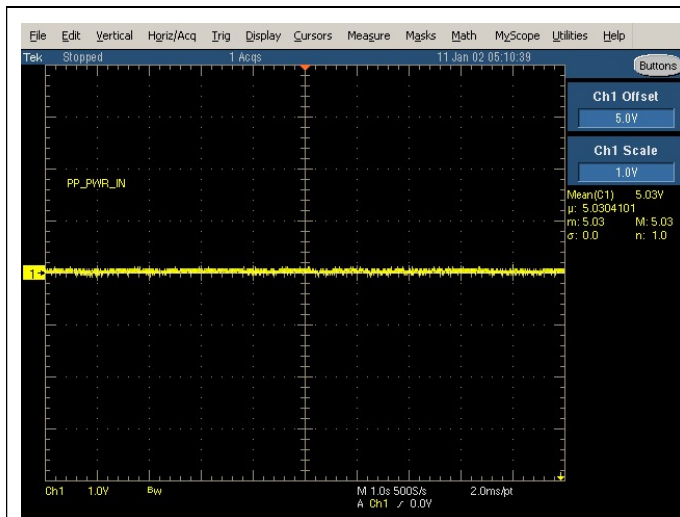


Fig. 1: PP_PWR_IN

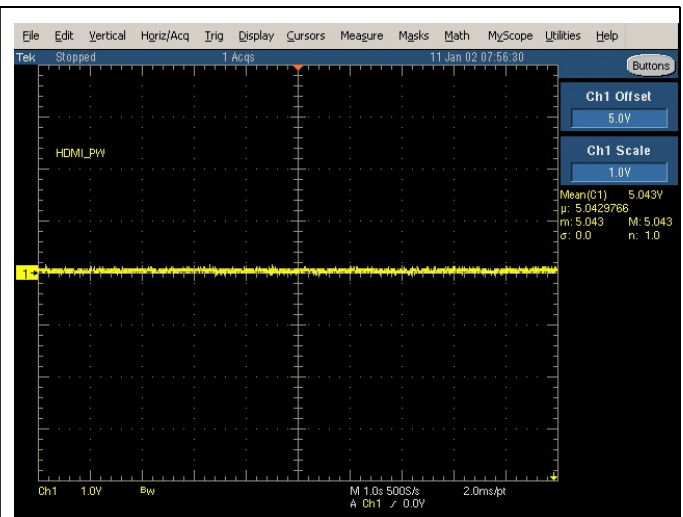


Fig. 2: HDMI_PW

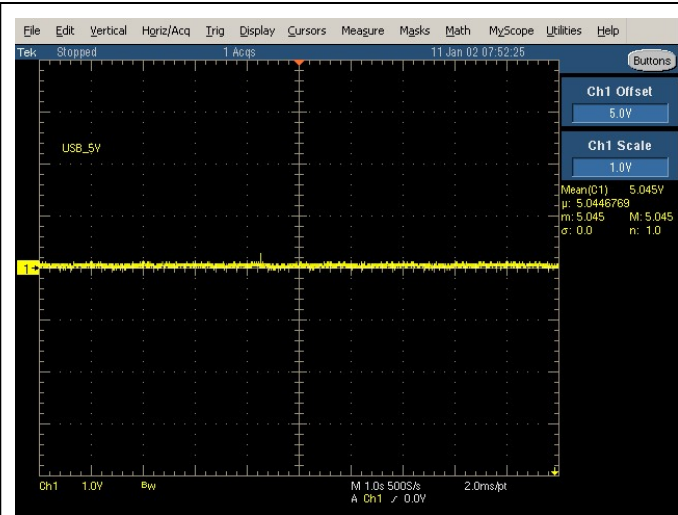


Fig. 3: USB_5V

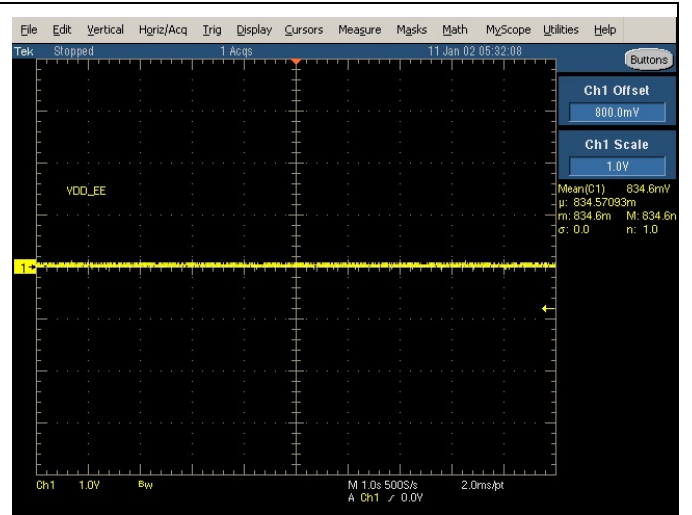


Fig. 4: VDD_EE

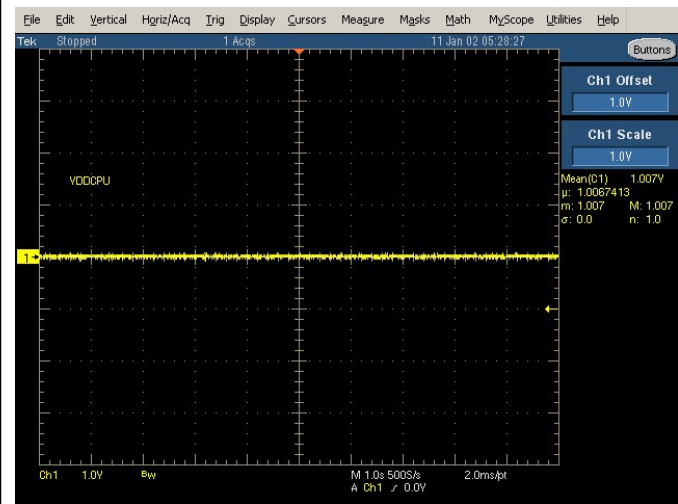


Fig. 5: VDDCPU

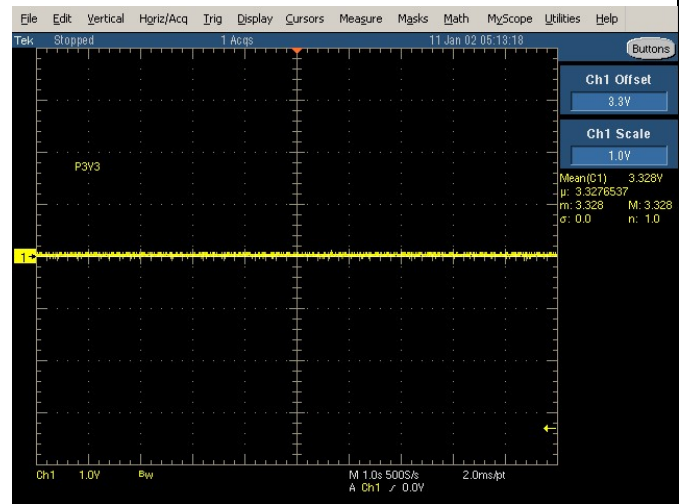


Fig. 6: P3V3

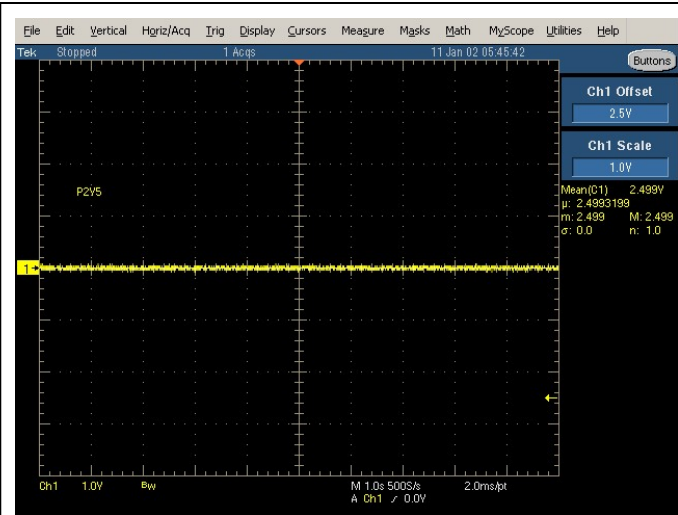


Fig. 7: P2V5

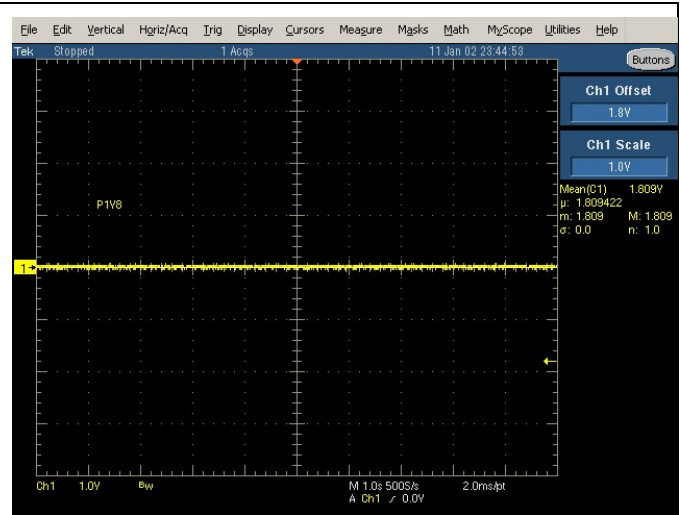


Fig. 8: P1V8

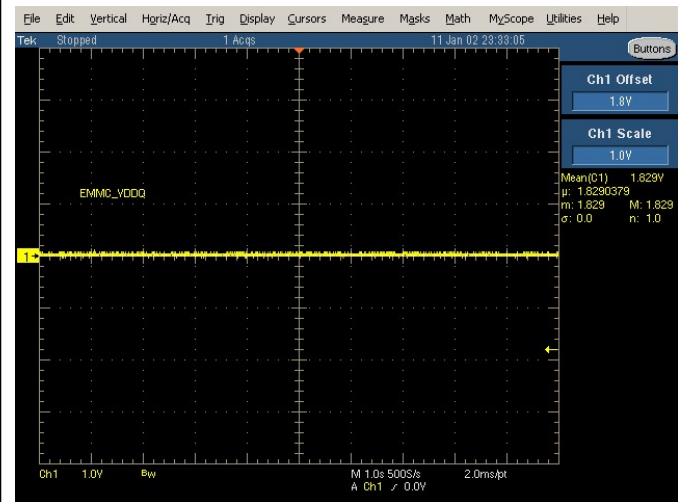


Fig. 9: EMMC_VDDQ

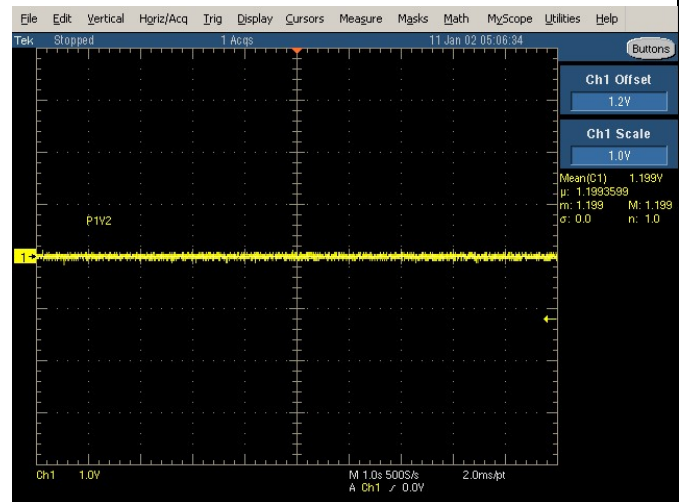
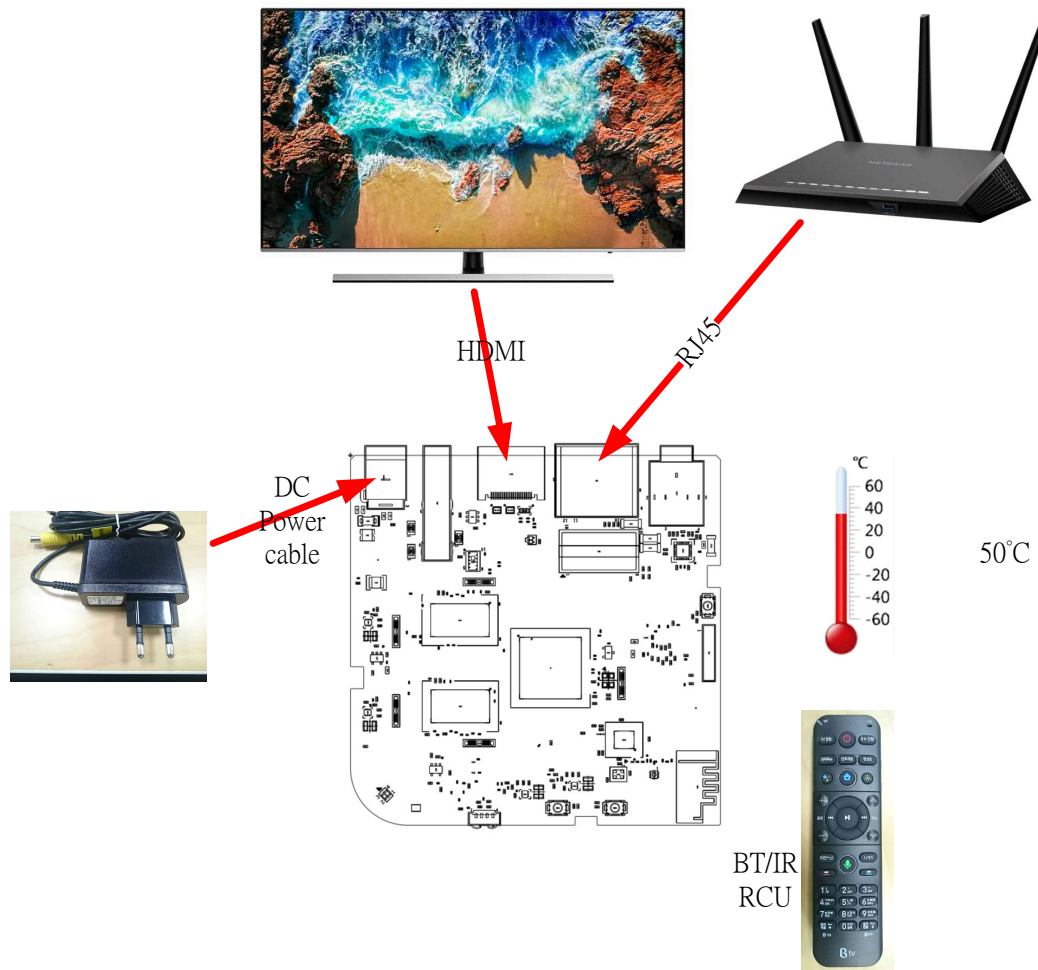


Fig. 10: P1V2

2. Power Test Setup (2)



2.1 Test Condition

BOX play 4K video via Ethernet by using YouTube. HDMI output port connects to TV through HDMI cable. The temperature is about 50 degrees.

2.2 Result and Picture

Power Rail	Specification (V) (+5%)			Test Result (V)	Figure	Pass/Fail
	Min.	Typ.	Max.			
PP_PWR_IN (5V)	4.75	5	5.25	4.925	Figure 12	Pass
HDMI_PW (5V)	4.75	5	5.25	5.002	Figure 13	Pass
USB_5V (5V)	4.75	5	5.25	5.012	Figure 14	Pass
VDD_EE(0.8V)	0.77	0.8	0.9	0.8445	Figure 15	Pass
VDDCPU *	0.68	1	1.03	1.016	Figure 16	Pass
P3V3 (3.3V)	3.15	3.3	3.45	3.34	Figure 17	Pass
P2V5 (2.5V)	2.375	2.5	2.625	2.507	Figure 18	Pass
P1V8 (1.8V)	1.71	1.8	1.89	1.803	Figure 19	Pass
EMMC_VDDQ (1.8V)	1.71	1.8	1.89	1.805	Figure 20	Pass
P1V2 (1.2V)	1.14	1.2	1.26	1.207	Figure 21	Pass

Note * VDDCPU power rail is using voltage identification and control by PWM. This report is fix in 1V.

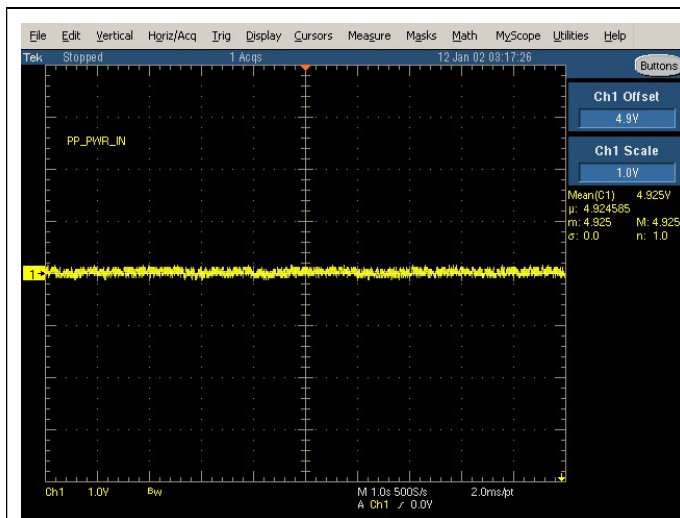


Fig. 12: PP_PWR_IN

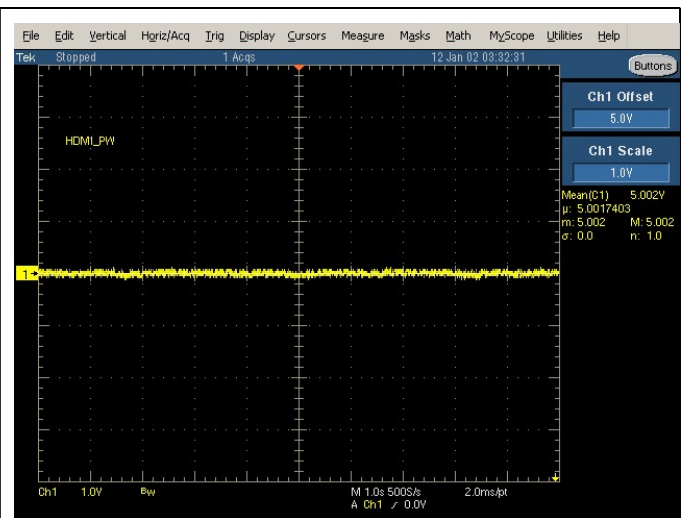


Fig. 13: HDMI_PW

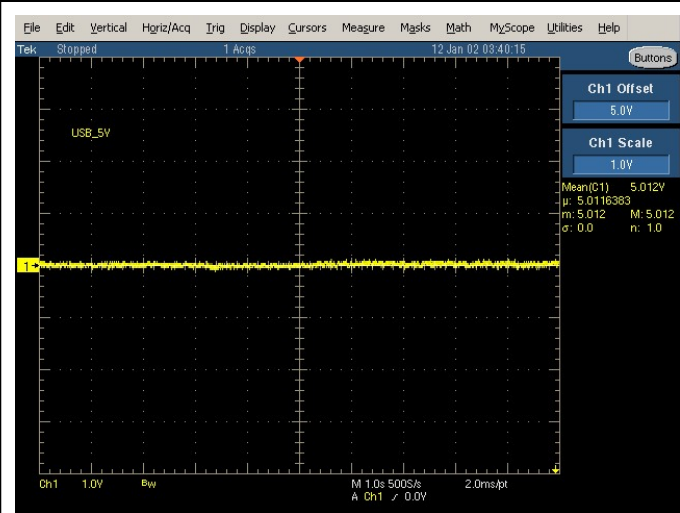


Fig. 14: USB_5V

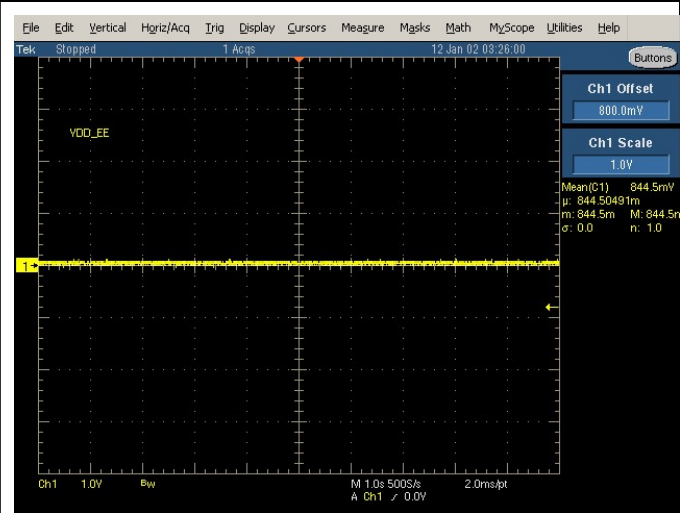


Fig. 15: VDD_EE

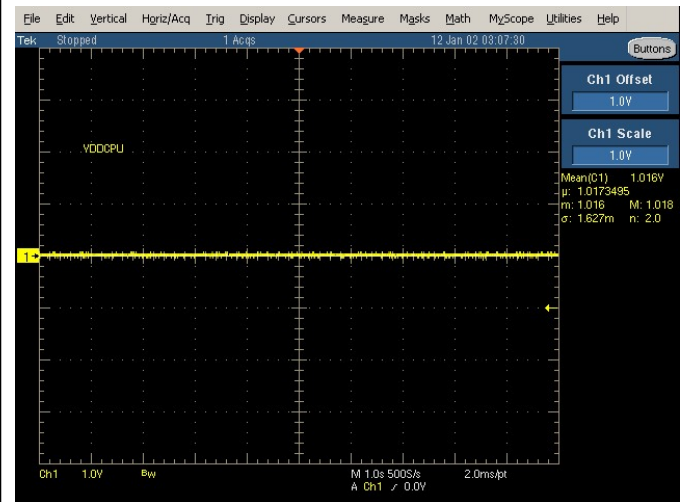


Fig. 16: VDDCPU

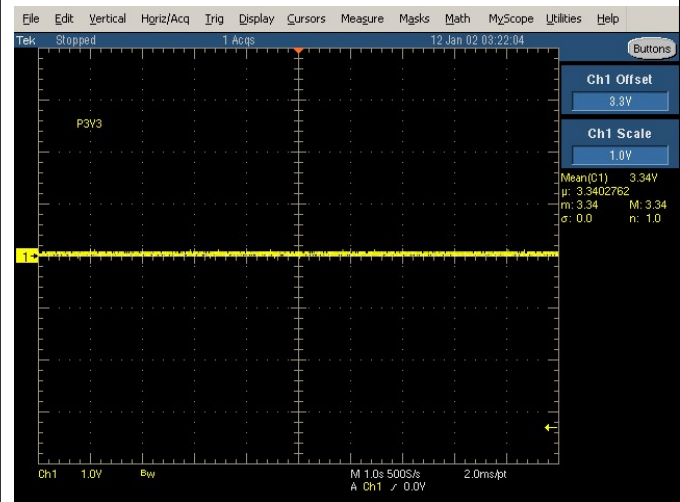


Fig. 17: P3V3

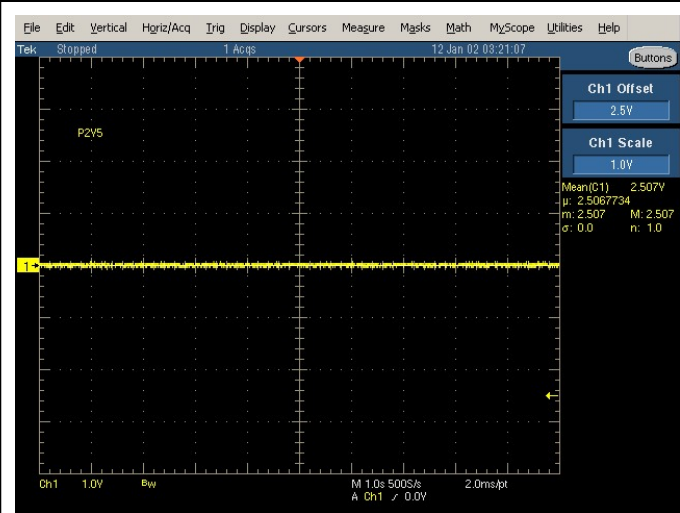


Fig. 18: P2V5

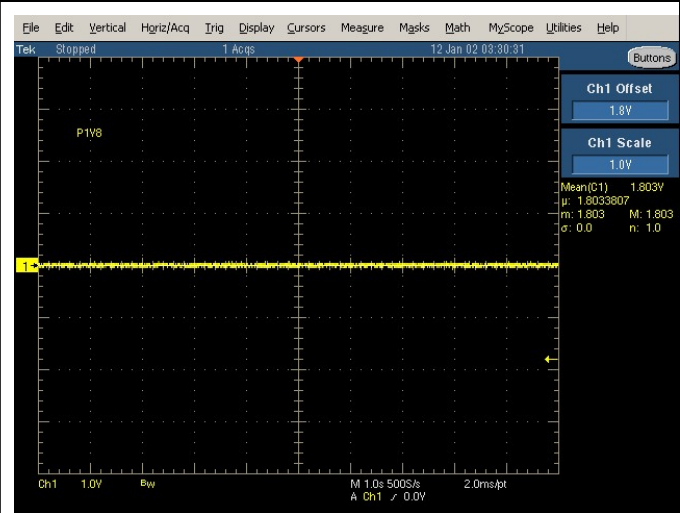


Fig. 19: P1V8

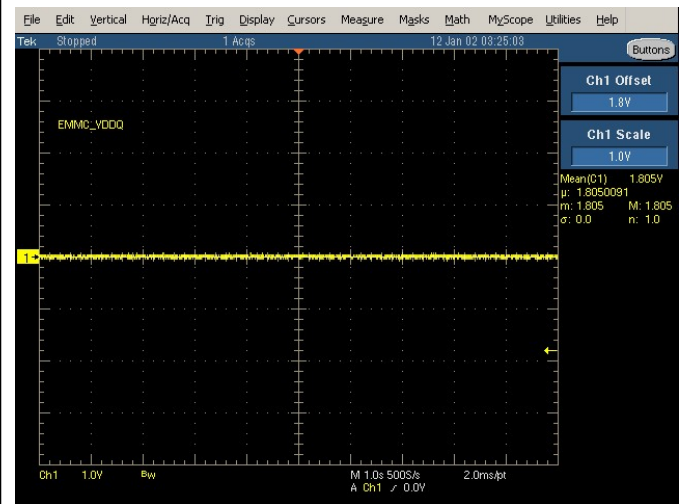


Fig. 20: EMMC_VDDQ

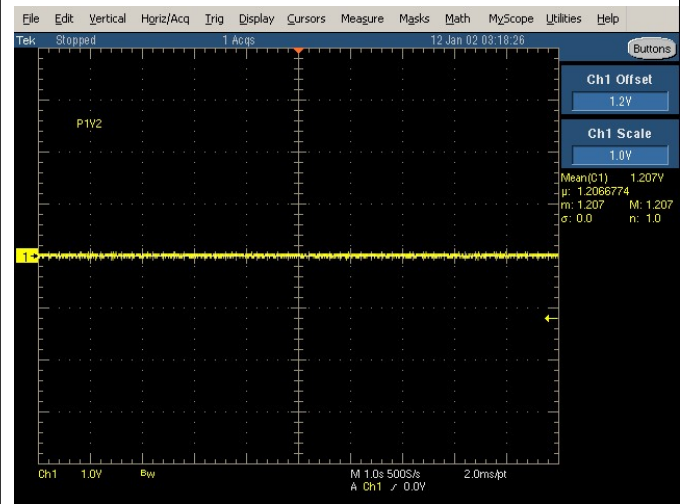
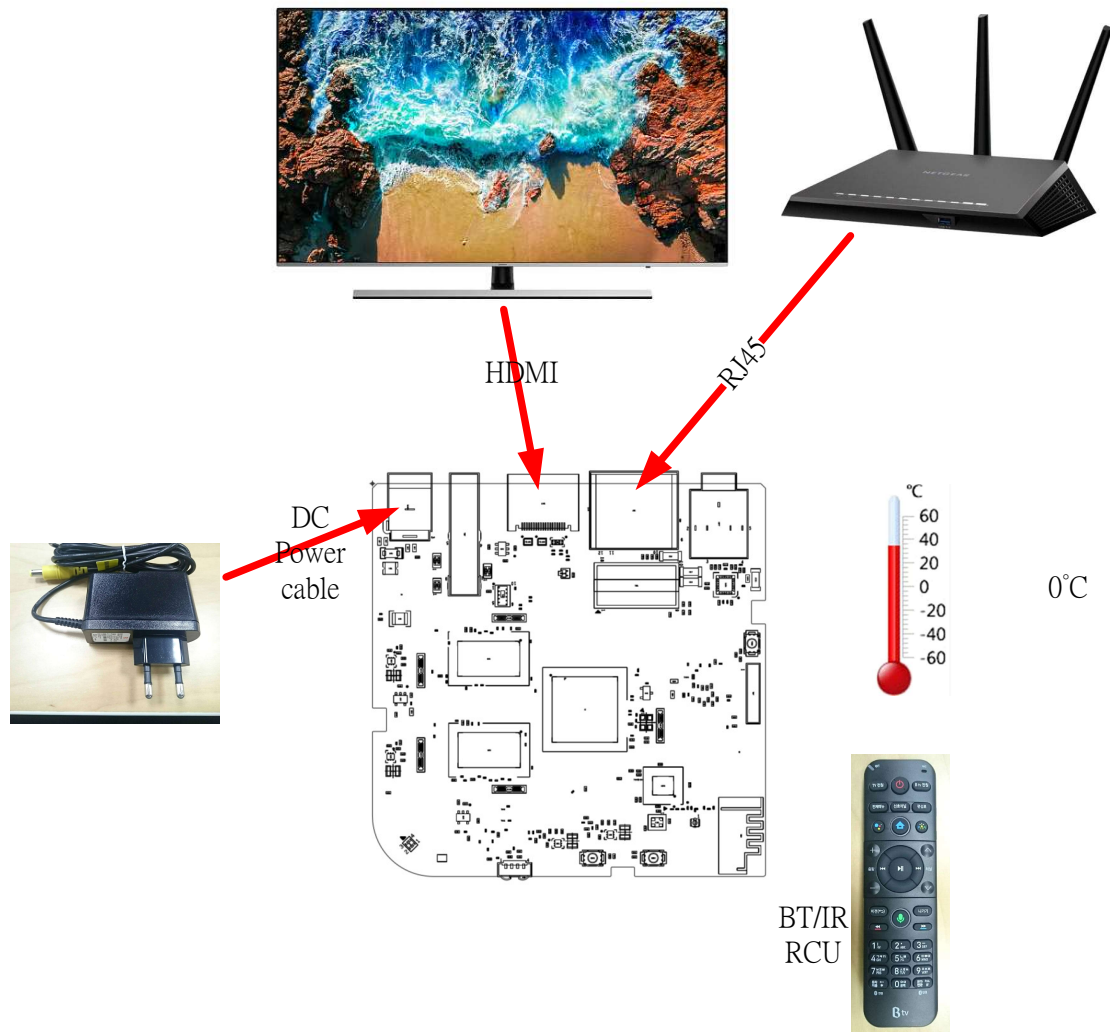


Fig. 21: P1V2

3. Power Test Setup (3)



3.1 Test Condition

BOX play 4K video via Ethernet by using YouTube. HDMI output port connects to TV through HDMI cable. The temperature is about 0 degrees.

3.2 Result and Picture

Power Rail	Specification (V) (+5%)			Test Result (V)	Figure	Pass/Fail
	Min.	Typ.	Max.			
PP_PWR_IN (5V)	4.75	5	5.25	4.988	Figure 22	Pass
HDMI_PW (5V)	4.75	5	5.25	5.052	Figure 23	Pass
USB_5V (5V)	4.75	5	5.25	5.08	Figure 24	Pass
VDD_EE(0.8V)	0.77	0.8	0.9	0.8468	Figure 25	Pass
VDDCPU	0.68	1	1.03	1.018	Figure 26	Pass
P3V3 (3.3V)	3.15	3.3	3.45	3.343	Figure 27	Pass
P2V5 (2.5V)	2.375	2.5	2.625	2.509	Figure 28	Pass
P1V8 (1.8V)	1.71	1.8	1.89	1.809	Figure 29	Pass
EMMC_VDDQ (1.8V)	1.71	1.8	1.89	1.807	Figure 30	Pass
P1V2 (1.2V)	1.14	1.2	1.26	1.207	Figure 31	Pass

Note * VDDCPU power rail is using voltage identification and control by PWM. This report is fix in 1V.

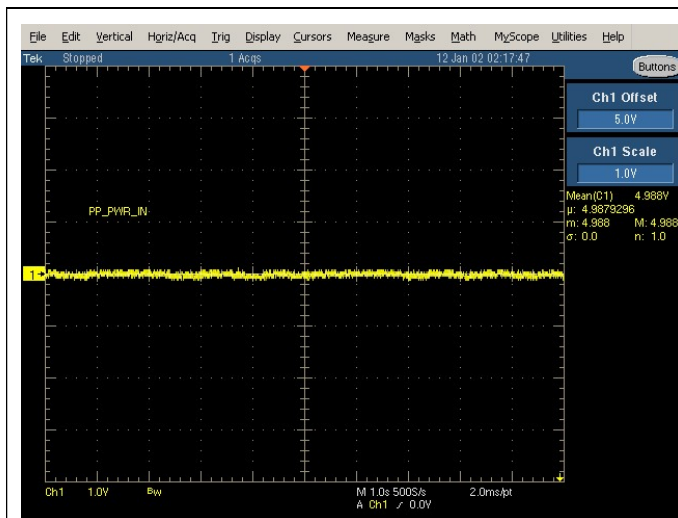


Fig. 22: PP_PWR_IN

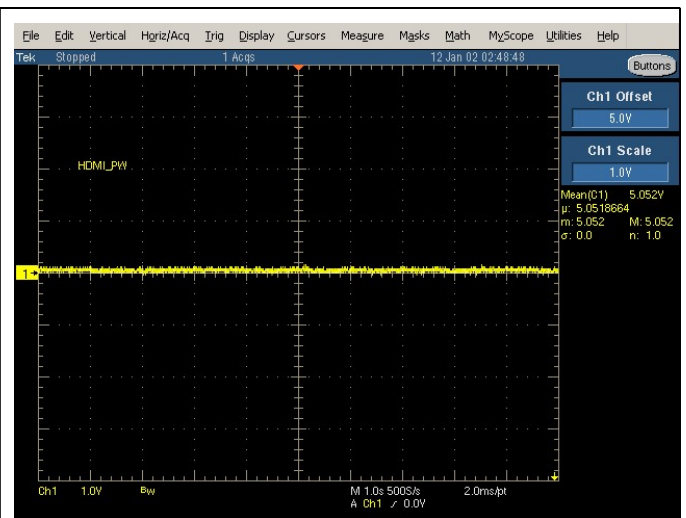


Fig. 23: HDMI_PW

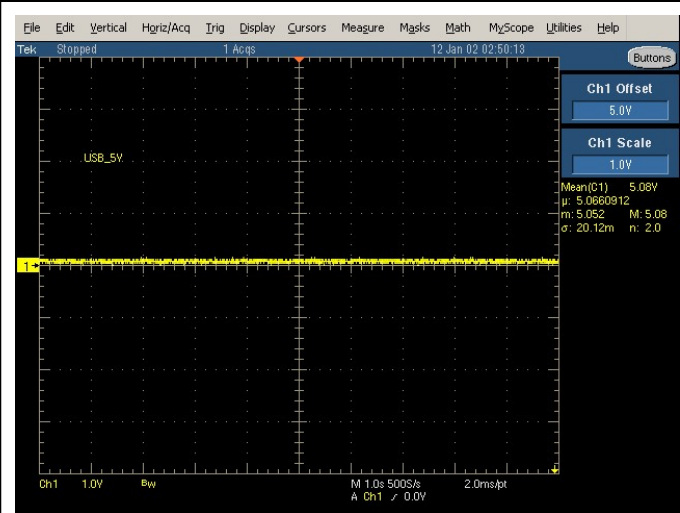


Fig. 24: USB_5V



Fig. 25: VDD_EE

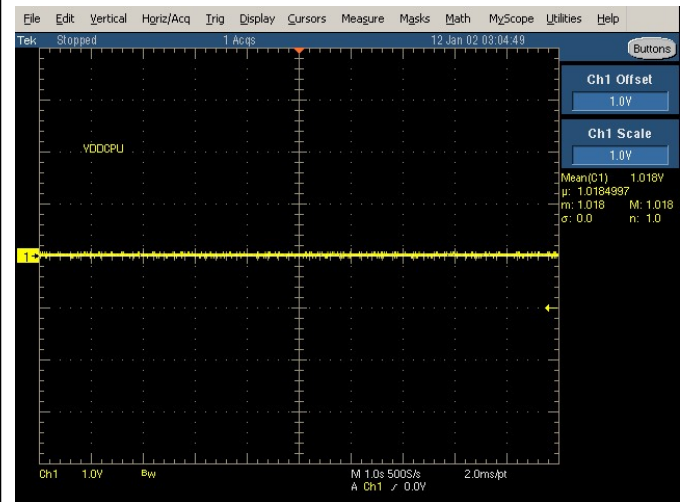


Fig. 26: VDDCPU

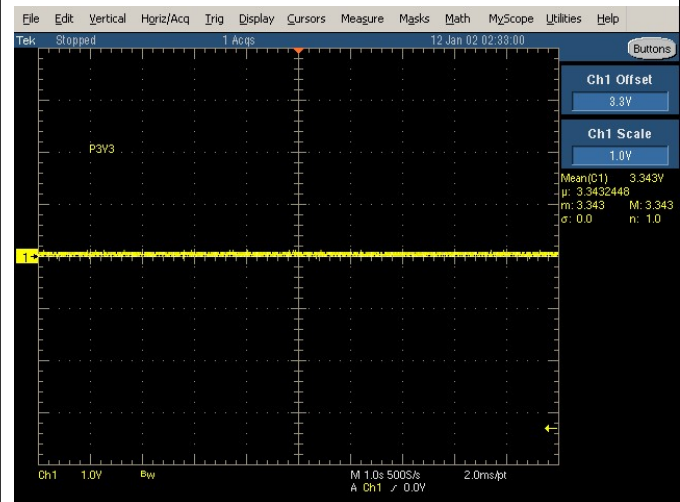


Fig. 27: P3V3

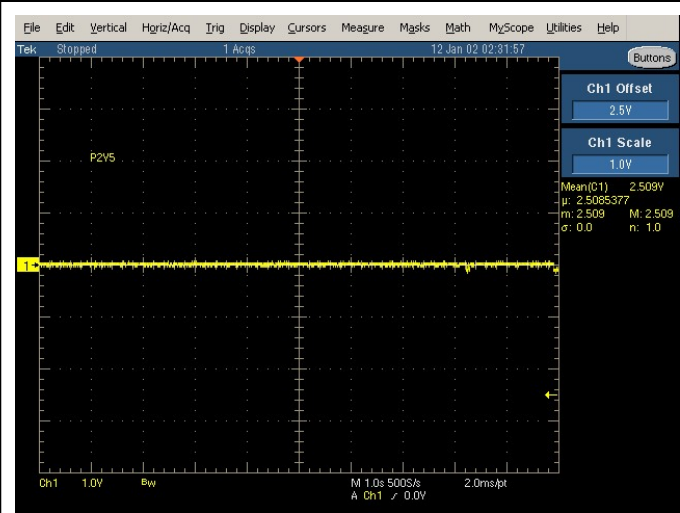


Fig. 28: P2V5

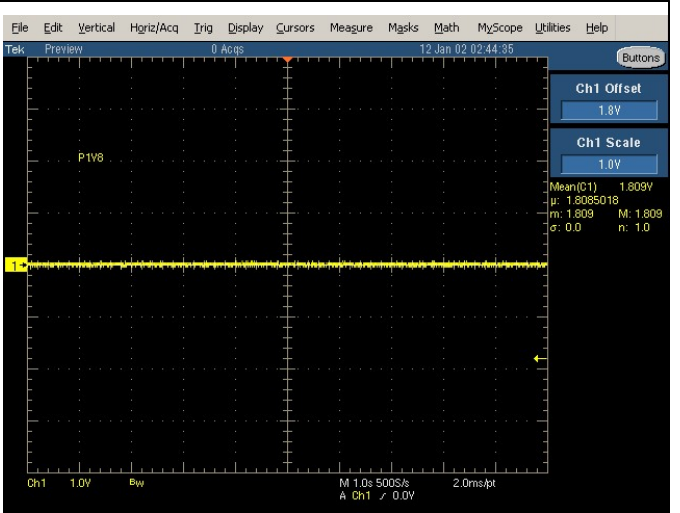


Fig. 29: P1V8

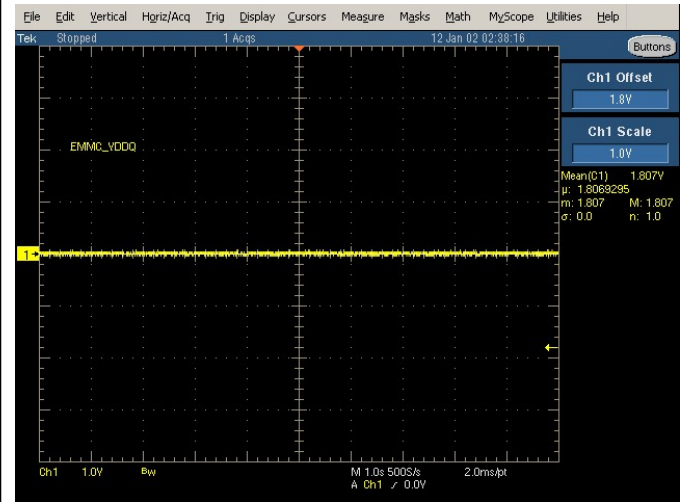


Fig. 30: EMMC_VDDQ

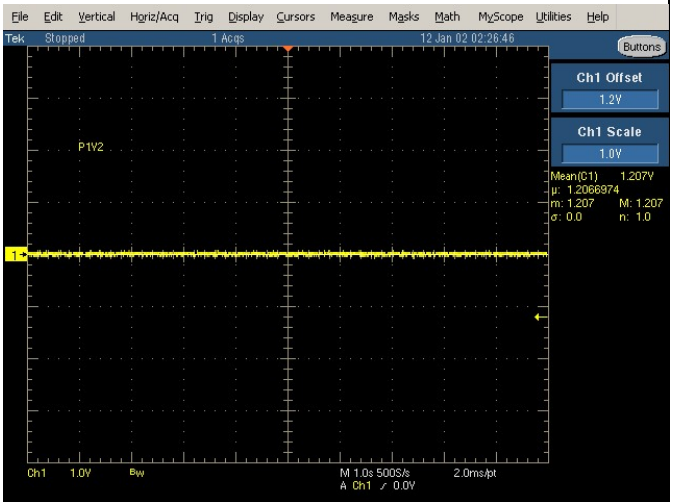


Fig. 31: P1V2