

BFX-AT100

Hardware Unit Test Report

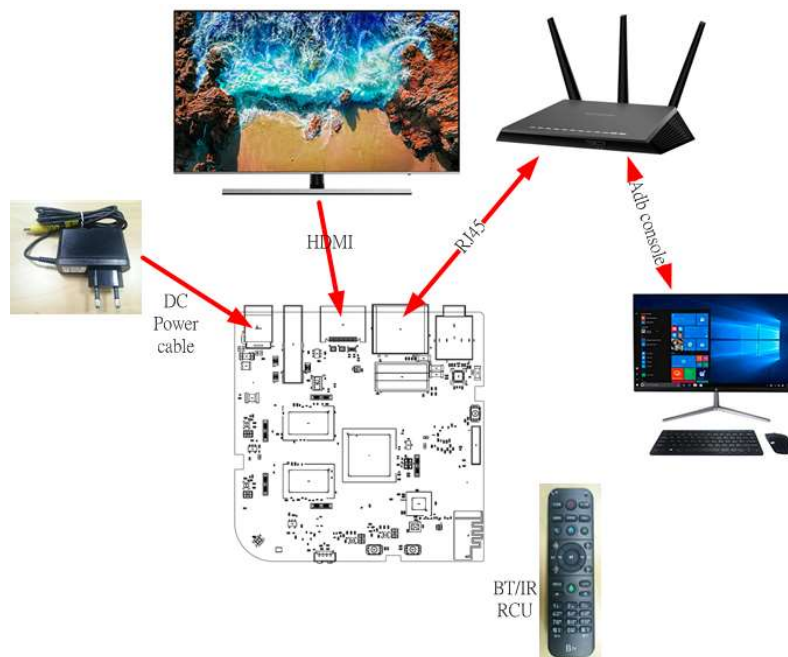
eMMC Stress Test

Data read, write, erase test

Hardware version	FW version	Sample No.	eMMC Flash P/N
V015	4.9.113 #29 Fri May 10 19:27:56 CST 2019 Build BFX_AT100-eng 9 PI 20190510 release-keys	S/N:	KLM8G1GETF-B041

1. eMMC Stress Test Setup

Data read, write, erase test



2. Test Command

```
adb connect xxx.xxx.xxx.xx
adb push emmc_test_write_verify.sh /data/
adb shell
cd /data
chmod 777 emmc_test_write_verify.sh
./emmc_test_write_verify.sh
```

3. Test Condition

Purpose: The script has read/write and erase function. The read/write data is 0x5A and 0xA5 and writing into 1Gb file in eMMC. After filling 1Gb file, the script will verify 1Gb file. The read/write cycle is 1Gb then check if any error. For example, write 0x5A to 1Gb, then read this 1Gb file and verify check. If verify is ok, remove the 0x5A file. Then write 0xA5 to 1Gb file and repeat the same work.

Content setup: Play 4Kp60 video repeat. The video is placed at local eMMC and use MoviePlayer.app to play video.

Adb Console: For test command and run stressapptest.bin provided by amlogic for testing.

Environment: 25 degree-C room temperature.

4. Result and Picture

The test result after 8TBW accumulatively is pass.

eMMC R/W test			
Date	Record(TBW)	Error	Pass/Fail
2019/5/27~2019/6/3	8.000	No	Pass

```
8187 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 49.127 secs (20355405 bytes/sec)
0m49.43s real    0m01.72s user    0m29.45s system
8188 : Write a5, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 45.467 secs (21993973 bytes/sec)
0m45.83s real    0m01.60s user    0m29.12s system
8189 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 47.189 secs (21191379 bytes/sec)
0m47.43s real    0m01.72s user    0m29.30s system
8190 : Write a5, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 49.021 secs (20399420 bytes/sec)
0m49.43s real    0m01.58s user    0m29.73s system
8191 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 50.442 secs (19824749 bytes/sec)
0m50.77s real    0m01.85s user    0m29.66s system
8192 : Write a5, verify ok
```

8187 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 49.127 secs (20355405 bytes/sec)
0m49.43s real 0m01.72s user 0m29.45s system
8188 : Write a5, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 45.467 secs (21993973 bytes/sec)
0m45.83s real 0m01.60s user 0m29.12s system
8189 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 47.189 secs (21191379 bytes/sec)
0m47.43s real 0m01.72s user 0m29.30s system
8190 : Write a5, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 49.021 secs (20399420 bytes/sec)
0m49.43s real 0m01.58s user 0m29.73s system
8191 : Write 5a, verify ok
1953125+0 records in
1953125+0 records out
1000000000 bytes transferred in 50.442 secs (19824749 bytes/sec)
0m50.77s real 0m01.85s user 0m29.66s system
8192 : Write a5, verify ok