Application Notes

Amlogic Airplay User Guide

Revision 0.1

AMLOGIC, Inc.

2518 Mission College Blvd

Santa Clara, CA 95054

U.S.A.

www.amlogic.com

AMLOGIC reserves the right to change any information described herein at any time without notice.

AMLOGIC assumes no responsibility or liability from use of such information.
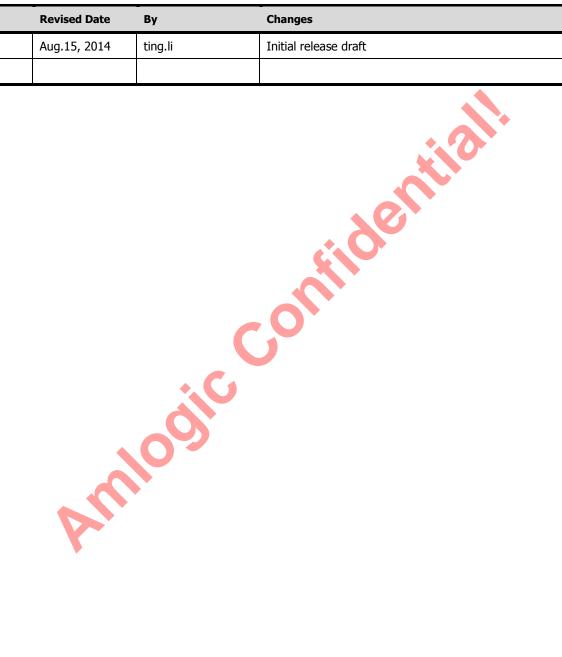
Content

Revision History

Revision	Revised Date	By	Changes
0.1	Aug.15, 2014	ting.li	Initial release draft

1. Introduction

AirPlay is Apple's wireless streaming technology.AirPlay enables audio to be sent from an AirPlay compatible device (i.e. iPod touch, iPhone, iPad or a Mac or PC running iTunes), wirelessly to audio products such as Bowers & Wilkins Wireless Music Systems.

AirPlay uses your network router to enable communication between your Wireless Music System and AirPlay capable device. Audio is sent wirelessly from the device to the Wireless Music System via the network router, so the communication is not direct (peer-to-peer). Therefore, in order for audio to be sent between the device and the Wireless Music System they must be connected to the same wireless network router.

2. How to enable Airplay

Airplay is default enable on k200 platform in amlogic SDK.So take k200 as an example here.

In file device/amlogic/k200/k200.mk

        remotecfg \
+   DLNA \
        OTAUpgrade \

It will build apk packages/amlogic/DLNA to path system/app,then you can use Airplay funciton on your platform.

3. How to Debug

1),enable prop

setprop rw.app.airlay.debug true

2),check network status

08-20 18:35:28.124 W/ContextImpl(2800): Calling a method in the system process without a qualified

user: android.app.ContextImpl.sendBroadcast:1162 android.content.ContextWrapper.sendBroadcast:365 com.amlogic.mediacenter.airplay.proxy.AirplayBroadcastFactory.sendRefreshImageBroadcast:100 com.amlogic.mediacenter.airplay.proxy.AirplayController.launchImagePlayer:237 com.amlogic.mediacenter.airplay.proxy.AirplayController.sendEvent:139

--------- beginning of /dev/log/main

08-20 18:35:28.194 D/dalvikvm(2800): GC_FOR_ALLOC freed 596K, 18% free 6425K/7832K, paused 43ms, total 44ms

08-20 18:35:28.194 I/dalvikvm-heap(2800): Grow heap (frag case) to 9.072MB for 2908176-byte allocation

08-20 18:35:28.244 D/dalvikvm(2800): GC_FOR_ALLOC freed <1K, 14% free 9265K/10676K, paused 41ms, total 41ms

08-20 18:35:28.334 D/dalvikvm(2800): GC_CONCURRENT freed 150K, 13% free 9433K/10816K, paused 3ms+14ms, total 94ms

[6365.753498@1] CPU1: Booted secondary processor

[6368.505772@1] IRQ93 no longer affine to CPU1

[6368.506030@0] CPU1: shutdown

08-20 18:35:50.794 W/ContextImpl(2800): Calling a method in the system process without a qualified user: android.app.ContextImpl.sendBroadcast:1162 android.content.ContextWrapper.sendBroadcast:365 com.amlogic.mediacenter.airplay.proxy.AirplayBroadcastFactory.sendMoviePlayerControlBroadcast:74 com.amlogic.mediacenter.airplay.proxy.AirplayController.exitVideoPlayer:197 com.amlogic.mediacenter.airplay.proxy.AirplayController.sendEvent:122

08-20 18:35:50.804 W/ContextImpl(2800): Calling a method in the system process without a qualified user: android.app.ContextImpl.sendBroadcast:1162 android.content.ContextWrapper.sendBroadcast:365 com.amlogic.mediacenter.airplay.proxy.AirplayBroadcastFactory.sendExitImageBroadcast:107 com.amlogic.mediacenter.airplay.proxy.AirplayController.exitImagePlayer:242 com.amlogic.mediacenter.airplay.proxy.AirplayController.sendEvent:145

08-20 18:35:50.834 D/ActivityManager(478): resumeClassName is com.amlogic.mediacenter.MediaCenterActivity

08-20 18:35:50.834 D/ActivityManager(478): resumePackageName is com.amlogic.mediacenter

08-20 18:35:52.114 D/dalvikvm(2800): GC_CONCURRENT freed 4525K, 37% free 7876K/12408K, paused 17ms+36ms, total 163ms

08-20 18:36:00.124 D/MediaBoxLauncher(1853): netReceiver action = android.intent.action.TIME_TICK

08-20 18:36:01.424 I/System(2800): 2014???8???20? — ? ??????6:36:01 org.phlo.AirReceiver.RaopRtspChallengeResponseHandler <init>

08-20 18:36:01.424 I/System(2800): INFO: Cipher acquired sucessfully. transformation: RSA/None/PKCS1Padding

08-20 18:36:01.644 I/System(2800): 2014???8???20? — ? ??????6:36:01 org.phlo.AirReceiver.RtspLoggingHandler channelConnected

08-20 18:36:01.644 I/System(2800): INFO: Client /192.168.0.105:49225 connected on /192.168.0.101:50000

[6398.813310@1] CPU1: Booted secondary processor

08-20 18:36:02.604 V/AudioFlinger(2075): sendIoConfigEvent() num events 1 event 0, param 0

08-20 18:36:02.604 V/AudioFlinger(2075): thread 0xb3694008 type 0 TID 2096 waking up

08-20 18:36:02.614 V/AudioFlinger(2075): sendIoConfigEvent() num events 1 event 0, param 0

08-20 18:36:02.614 V/AudioFlinger(2075): acquireWakeLock_l() AudioOut_2 status 0

08-20 18:36:02.614 V/AudioFlinger(2075): processConfigEvents() remaining events 1

08-20 18:36:02.614 V/AudioFlinger(2075): thread 0xb3512008 type 0 TID 2097 waking up

08-20 18:36:02.614 V/AudioFlinger(2075): acquireWakeLock_l() AudioOut_7 status 0

08-20 18:36:02.614 V/AudioFlinger(2075): processConfigEvents() remaining events 1

08-20 18:36:02.614 V/AudioFlinger(2075): sendIoConfigEvent() num events 1 event 0, param 0

08-20 18:36:02.614 V/AudioFlinger(2075): thread 0xb33d1008 type 2 TID 2098 waking up

08-20 18:36:02.614 V/AudioFlinger(2075): acquireWakeLock_l() AudioOut_8 status 0

08-20 18:36:02.614 V/AudioFlinger(2075): processConfigEvents() remaining events 1

4. Reference source

AirTunes 2 Protocol

http://git.zx2c4.com/Airtunes2/about/

AirReceiver

https://github.com/fgp/AirReceiver/tree/STABLE_1_X

JmDNS

http://sourceforge.net/projects/jmdns/