



Application Notes

OTA +X g f ...  
Revision 0.2

Amlogic Confidential!

Amlogic, Inc.  
3930 Freedom Circle  
Santa Clara, CA 95054  
U.S.A.  
[www.amlogic.com](http://www.amlogic.com)

Legal Notices

© 2013 Amlogic, Inc. All rights reserved. Amlogic® is registered trademarks of Amlogic, Inc. All other registered trademarks, trademarks and service marks are property of their respective owners.

This document is Amlogic Company confidential and is not intended for any external distribution.

# Amlogic Application Notes

---

—

1.1	.....	4
2. G}5 OTA =	.....	5
2.1 ] *OTA =	.....	5
2.2 OTA =	.....	8
2.3 G}5 { >, · =	.....	15
3. +O @OTA 6 5	.....	16
3.1 - 7	.....	16
3.2 ! h5FB +O @ } (x \ ,zip 5	.....	16
3.3 +O @ (x \ > Z (x \ {L\$, ·5.....6	.....	16
4. G}5 OTA g1	.....	17
4.1 \$ Lt & · ..&	.....	17
4.2 Xsystem.prop] \$+ =	.....	17
4.3 6OTAUpgrade.apk n Ysystem/app	.....	17
5. «	.....	18
5.1 - 7	.....	18
5.2 G}5 paramete.conf	.....	18
5.3 G}5 debug.conf	.....	18
5.4 G}5 ota_update_example.xml	.....	19
5.5 7 w4 ..5	.....	19

Amlogic Confidential!

## Amlogic Application Notes

---

iA

Revision	Date	Owner	Changes
0.1	March 13, 2013	Yu Cheng	Draft
0.2	July 25, 2013	Jiquan Liu	<ul style="list-style-type: none"><li>● Add some remarks</li><li>● Enrich chapter 5.5</li><li>● Update index</li></ul>

Amlogic Confidential!

1. 1 β

OTA w4 ,· +XFJE 5 5, 6 n XOTA = : ,· w4 • & " wOTA` g1 " fE 0; t ;  
G}5 OTA = OTA g1  
● XOTA g1 F1 ;E>B'"r  
● = 1 FJE B'"r > " ,) update.zip `OTA g1 ,· fl :  
● OTA g1 w4 update.zip

\+X g { ... k?-L@F ; Z! P  
● G}5 OTA =  
● +O @OTA 6 5  
● G}5 OTA g1  
● , »

Amlogic Confidential!

### 2. G}5 OTA =

#### 2.1 ] \*OTA = ,). ‡

```
„>1java< j~JDK1.7 F1.6G- ~
```

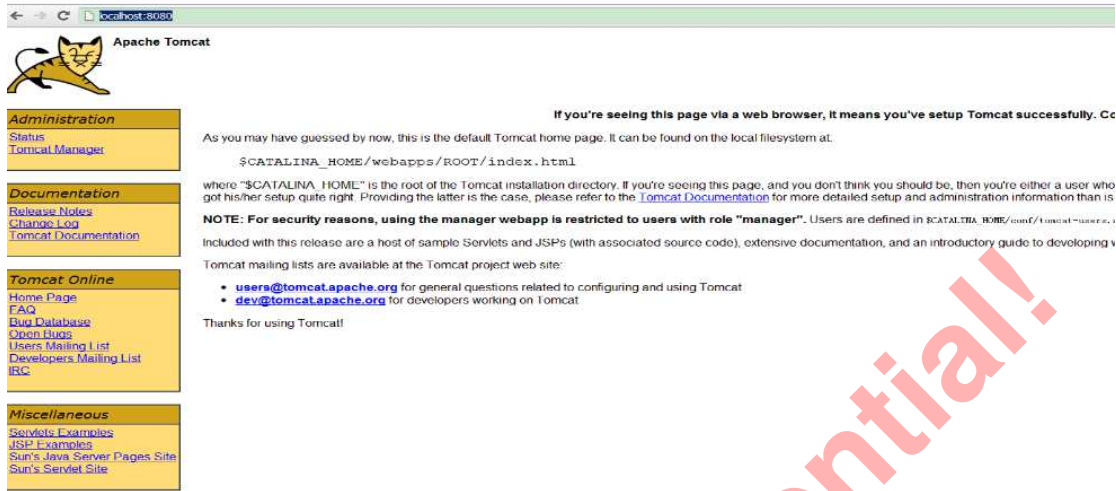
```
;E> f „>Apache tomcat= (JDK1.6 )
```

- X > >| Q ?cdF `@ »- bin- " †  
`cd /d E\apache tomcat6.0.3\bin`
- „>1 =  
`service.bat instal`
- +apachetomcat6.0.3\bin ;, .tomcat6.exe, = ~
- G}5 Btomcat= conf- ;, web.xml fl f \_ 1 >50 =0.img .aml œ >50 =0  
, .7J \, . ;E> ~ fG}5 Ø ? † ;  
`<mimemapping>`  
`<extension></extension>`  
`<mimemapping>`  
`<extension>aml</extension>`  
`<mimemapping>`  
`<extension>img</extension>`  
`<mimemapping>`  
`<extension>zip</extension>`  
`</mimemapping>`

# Amlogic Application Notes

P...Aæ tomcat

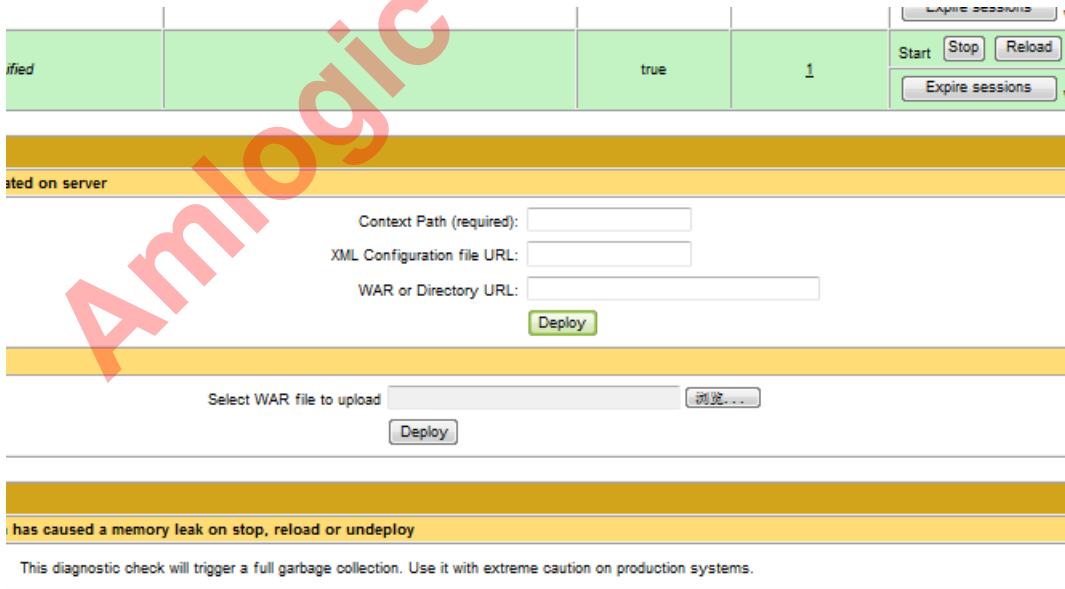
XIE # ?1 G E^http://localhost:8080/ \* ) .2.1 p/|M a > = ] \* @ ~ ~



.2.1 - Tomcat = P...Aæ @ ~ + |M

G 5¢

Lt & ],otaupgrade.war & \_FJE Lt @TA w4 3#q0;@ ,. = 1 ,) ,. 0 Z%D  
/j ~ X.2.1 ]F9 tomcat manager 2.2 p/j+|M 'f > WAR or Directory URL  
? ]F9 Lt & ] ,otaupgrade.war>|G 5¢ ~



.2.2 - G 5¢ + |M

# Amlogic Application Notes

P...AæG 5ç

A L http://127.0.0.1:18080/otaupdate/form.jsph \*) 2..3 p/j+|M " a> /jG 5ç @

```
id:1000
updating_apk_version:1.0
brand:MID
device:g24ref
board:g24ref
mac:172.17.72.254
firmware:1.2
android:4.1.1
time:20121212
builder:tingli
fingerprint:MID/g24ref/g24ref:4.1.1
```

.2.3 - G 5çP...Aæ @ ~+|M

<# > 8#! > OTA = , ·) ‡ "4 ] \* ..." ~

Amlogic Confidential!

## Amlogic Application Notes

2.2 OTA = ,G}5

OTA = 1 ,parameter.conf5 • &

```
+X P...Aæ gl D - " ) android W, gl ?- X! G}5 • & ]F >| 3R $ ~  
device=g24ref  
board=g24ref  
android=4.1.1
```

OTA = 1 ,update.conf5 • &

- }OTA = 1 G}5 +X, debug.confB'G}5 F Z • &

● < 03+5 &, •G}5 1

0041100=http://192.168.0.124:8080/update/xml/update/ota\_test\_1.xml

0041100=http://192.168.0.124:8080/update/xml/update/ota\_test\_2.xml

lastest@0411003

● / Zandroid@+5 W(x \ \$4.1.14.2.0\*\* jFJG} ~

0041104=http://192.168.0.124:8080/update/xml/update/ota\_test\_

0041113=http://192.168.0.124:8080/update/xml/update/ota\_test\_

.....

0042000=http://192.168.0.124:8080/update/xml/update/ota\_test\_

0042000=http://192.168.0.124:8080/update/xml/update/ota\_test\_

lastest@0411003

<# >

● 1y ' EØ, • \_ \* &(x \ /

● #EØ \_ ) ~,xml 7 • &, •F ` p

● lastest@0411003 /j 3, • (x \0411003x \



## Amlogic Application Notes

7J \ 1 QTA = 1 ,xml 7 • &,•G}5 Ø ?

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

```
<update>
```

```
  <command force="false" name="update_with_script">
```

```
    <url name="update.zip" locattr="/storage/external_storage/sdcard1/update
updatezip="true">http://10.18.19.10:8080/otaupdate/xml/download/zip/02_03_upda
url>
```

```
    <md5 name="update.zip">cc4a842ce8e50aacc02bab6e234cb7dc</md5>
```

```
    <url name="uImage_recovery"
```

```
locattr="/storage/external_storage/sdcard1/recovery.img"
```

```
updatezip="false">http://10.18.19.10:8080/otaupdate/xml/download/zip/recovery
>
```

```
    <md5 name="uImage_recovery">46BC1F23569D90EB3DE6CD78FB6154BB</md5>
```

```
    <url name="factory_update_param.aml"
```

```
locattr="/storage/external_storage/sdcard1/factory_update_param.aml"
```

```
updatezip="false">http://10.18.19.10:8080/otaupdate/xml/download/script/facto
_param.aml</url>
```

```
    <md5 name="factory_update_param.aml">75ADBC5315C2F356154BB29FD9CC</md5>
```

```
    <storagemem>3145728</storagemem>
```

```
    <!--B @0 : ;F9 " + " 9-( ) ~,•B @0 " aFcountry~ 1 _ 9'
android7 9 ,• - ->
```

```
    <description country="CN" language="zh" >1.修复.7 9 & # fl+Xug.2.H F? N`
n x </description>
```

```
    <description country="TW" language="zh">1.! UP I 9 r'Q# fl+Xug.2.Z F?~Nk
n x .</description>
```

```
    <description country="ELSE" language="en">1.fix a bug that the mouse can
used sometimes.2.perfect the video play effect.</description>
```

```
  </command>
```

```
</update>
```

```
<# > md5 >M ,• 0 b l _FMD5.exe SA 1'*,• p?- w4 • &,• < l l "+X P... ;E> >,
• & W ? _ V-( < " • & _ V X ;E>E 0; ] 9 ~
```

## Amlogic Application Notes

M 7J \ 1 OTA = 1 ,xml 7 • &,•G}5 Ø ?

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

```
<update>
```

```
  <command force="false" name="update_with_inc_ota">
```

```
    <url name="update.zip" locattr=""
```

```
updatezip="true">http://10.18.19.10:8080/otaupdate/xml/download/zip/02_03_update.  
url>
```

```
  <md5 name="update.zip">cc4a842ce8e50aacc02bab6e234cb7dc</md5>
```

```
  <storagemem>3145728</storagemem>
```

```
  <!--B @0 : ;F9 " + " 9-( ) ~,•B @0 " aFcountry ~ 1 _ 9'  
android7 9 ,• - ->
```

```
  <description country="CN" language="zh">UP 7 9 & # fl+ug.2.H F? N`  
n x </description>
```

```
  <description country="TW" language="zh">UP.I 9 r'Q# fl+ug.2.Z F?~Nk  
n x .</description>
```

```
  <description country="ELSE" language="en">1.fix a bug that the mouse can  
used sometimes.2.perfect the video play effect.</description>
```

```
  </command>
```

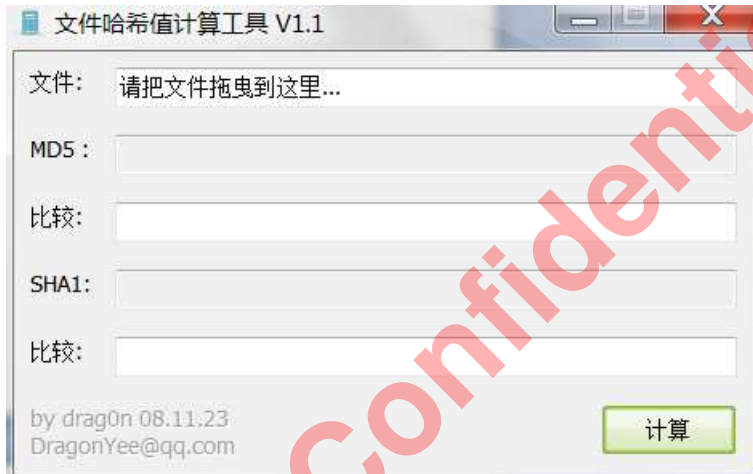
```
</update>
```

```
<# > md5 >M ,• 0 b 1 _FMD5.exe SA 1 * ,• p?- w4 • &,• < 1 1 "+X P.. ;E >  
• & W ? _ V-( < " • & _ V X ;E>E 0; ] 9 ~
```

## Amlogic Application Notes

OTA = 1 ,xml 7 • &,·G}5 G}5 B\$ >

- w4 • & n5 ,· }5 \_+a = <url>71fi ;,<locatt> W 7 °,·9~B W 1 j0" " I  
J n5 data jF >| w4 ~
- <storagemem71fiA ¶ 6?- ;E> • & pM0?-,· k0"L\$,· W ? "> sdcfaFG ØG ~7J  
\ W ¶ w4 5 W ? ^,·?-"r st&xragejtrue,· 1 ; 9 x ~
- Command namd=update\_with\_script >B 1 j7J \ w4 "M0?- < & \_ 17J \ " w  
æ )sdcardA 7,·?-"r ~B 1 ; g1 \_ ) w4 m55P>.Aæ " f =P...Aæ „>1 5 \_  
V ! . „>1 " p 9 „>1E 0; 5 7J \ >|
- MD5 1 FJE Lt & ]+O @2.4.~



.2.4 - +O @MD5,· S+|M

- IP ` p XF G -; 2.5 ~

Server Information							
Tomcat Version	JVM Version	JVM Vendor	OS Name	OS Version	OS Architecture	Hostname	IP Address
Apache Tomcat/7.0.23	1.6.0_21-b07	Sun Microsystems Inc.	Windows XP	5.1	x86	aml-fa607489aa2	10.28.19.44

.2.5 - -;IP ` p,·+|M

## Amlogic Application Notes

---

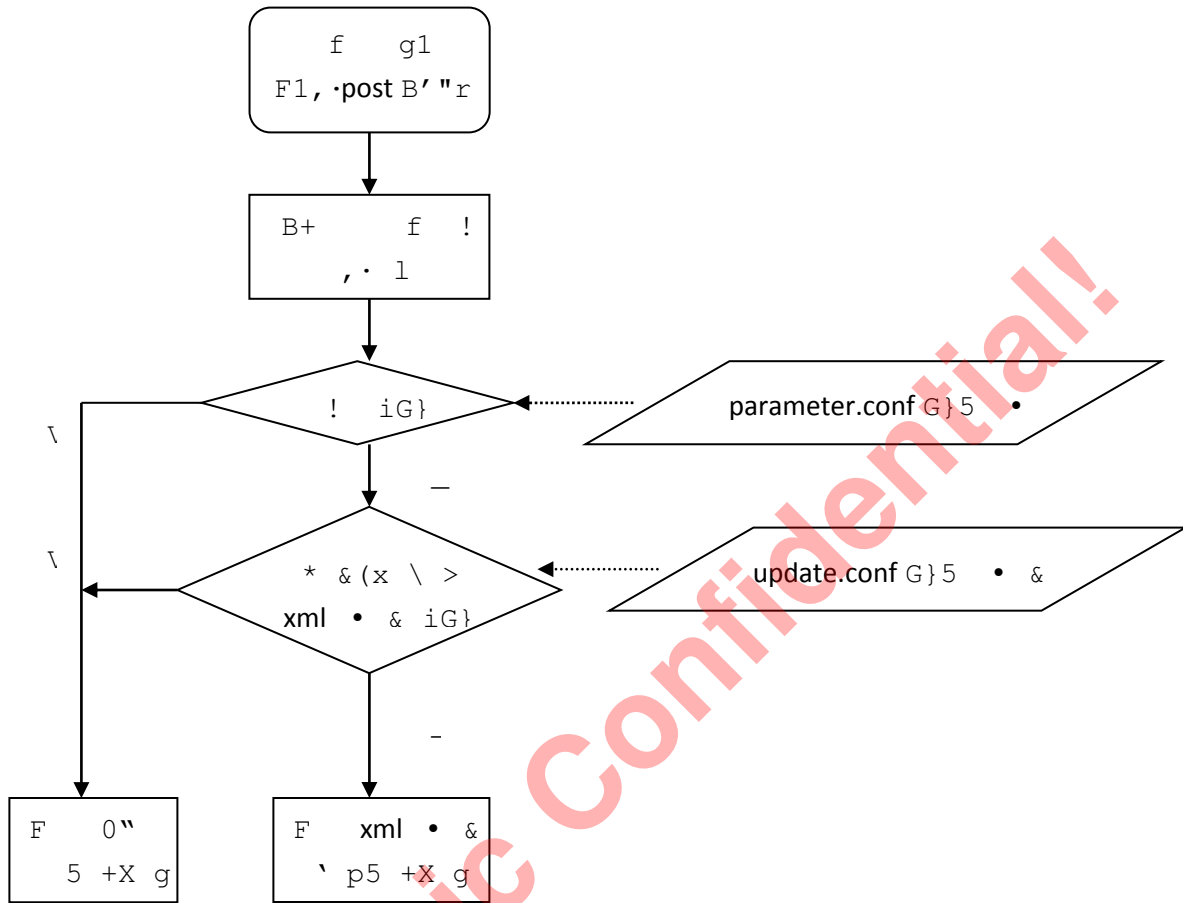
OTA g1 , · G>

```
XOTA g1 OTA = B' "r $ , · &OTA" g1 J OTA = F1 G>
<id>188</id>
<updating_apk_version>1</updating_apk_version >
<brand>MID</brand>
<device>g24ref</device>
<board>g24ref</board>
<mac>00.11.22.33.44.55</mac>
<firmware>1.0</firmware>
<android>4.1.1</android>
<time>20120301.092251</time>
<builder>buildername</builder>
<fingerprint>00421003</fingerprint>
```

<# >:

- OTA g1 , · G =?OTA = ,parameter.confdebug.conf..update.conf ZG}5  
• &G M , · G - ( ) ~ ~
- Lt & Demo, · = brand'board'firmware...android >| ¶?-"r ~

= >|#q0; 2.6 -



.2.6 - = >|#q0;

# Amlogic Application Notes

= G}5 ,.# ? »N'

- ! !Q n5 > w4 5 > "M0e1oadB webapp"G}5 } +0 x 2.7 - ~

<a href="#">/otaupdate</a>	None specified		true	3	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle <input type="text" value="30"/> minutes

.2.7 - G E webapp ·+|M

- ! Z • &,md5 1?-A 1'! . ~
- 6 5X 3 { } " x?- X \ ` w4 " . ° f \_ V! . ~

Amlogic Confidential!

## Amlogic Application Notes

### 2.3 G}5 { >, · = #{B

- = 1 G}5 ¶ 0 Z+X #{form.jsp
- G}5 > = { > " X# ?! E192.168.0.124update/form.jsp #{B +|M ~2.8 -
- +|M n/j ¶ g1 , · G> ð i ,Lu i - i "'f > " Q  
1 Fl,postB' "r
- + iG}! .fiDrmwar(x \ 9 ) ~,xml • & "F x 6F url=) ~xml • &K. ` \  
p ~ » + url=http://192.168.0.124update/xm/debug/v0.3.xml
- + = iG} "F xF \_0", · " £# ?! n/j ~\_0", ·
- + iG} ¶ " vfirmwar(x \ = ) "F xF ,url=null" £# ?! n/j, · \_  
url=null ~

id: 1000  
updating\_apk\_version: 1.0  
brand: MID  
device: g24ref  
board: g24ref  
mac: 172.17.72.254  
firmware: 1.2  
android: 4.1.1  
time: 20121212  
builder: tingli  
fingerprint: MID/g24ref/g24ref.4.1.1/JF

.2.8 - form.jsp#{B+|M

<# >

- #{B ,id ' \_1000
- 1000B3+X, · debug.conf, 1000B3+X, · update.conf
- Updating\_apk\_version 0 ,1.3(x \ "+X 0 1:3(x \
- <firmware?- update.conf M , · (x \ '

3. +O @OTA 6 5

3.1 - 7

```

M0?--+O @ J Z 6~5» +) XM0?- 034(x \ " { } "4 0.1 "0.2 ...0.3 9 Z(x \ "
F xM0?--+O @ Z 6 5
● 0.4 >0.1 {L$. 6 5
● 0.4 >0.2 {L$. 6 5
● 0.4 >0.3 {L$. 6 5

```

3.2 ! h5FB+O @ } (x \,zip 5

- >| :> > " X- out/target/product/g\*\*ref\*/obj/PACKAGING/target\_files\_intermedi  
;+O @xxx-target\_filesxxxxxxx.zip  
\$ makeotapackagej
- B • & £ } (x \,zip 5target\_files\_packageM0?- 7 - ~
- 9 (x \ w4 & "M0?--+X `B •>@ @ (x \,• 6~5

3.3 +O @ (x \ > Z (x \ {L\$,6.5

- 6 (x \,zip 5target\_files\_package= new.zip
  - 6 7 -,• (x \,zip 5target\_files\_package= jold.zip
  - 6new.zip...old.zipn Xandroidi- ,•8 ° y • &ota ; ~ †android4.1.1/ota
  - >| ; > +Oota/update.zip  
\$ ./build/tools/releasetools/ota\_from\_targetifold.zip ota/new.zip ota/update.zi
- <# >
- +O @ 6 5 { > " FJE G > = Ø A Z 6 5 ) ~,• \_ T Z(x~\»•†  
v0.1v0.4.zipv0.2v0.4.zip...v0.3v0.4.zip~
  - +O @B 6 5 { > " 6B • & = f ` \ j " \ ` w4 P...Aæ
  - \ ` w4 P...Aæ @ ~ > " tM0?-" I+cB' n ` = : .) w4 ,• ~7-



## 4. G}5 OTA g1

### 4.1 \$ Lt & • &

```
Android 4.1-4.1.1\0001\make-ota-script\work.patch  
Android 4.2-4.2.0\0001\make-ota_script\work.patch
```

```
<# > ) 4.13+5 œ : (x \ =M0?- , -Patch
```

### 4.2 Xsystem.prop] \$+ -

```
#support for OTAUpdate  
ro.product.firmware=00421001  
ro.product.otaupdateurl=http://10.28.19.44:8080/otaupdate/update
```

```
<# > IP ` p i 8 ! , . A 5
```

### 4.3 6OTAUpgrade.apk n Ysystem/app

```
cp /storage/external_sdcard/sdcard1/OTAUpgrade.apk /system/app/OTAUpgrade.apk  
chmod 644 /system/app/OTAUpgrade.apk  
reboot
```

```
<# > android4.1 >OTA w4 , OTAUpgrade.apk4 - `3+5 M0! ! P ~
```

### 5. »

#### 5.1 - 7

```
G}5 Tomcat ;M , parameter.conf debugconf ...ota_update_example.xml
```

#### 5.2 G}5 parameter.conf

```
android=4.1.1  
device=g24ref  
board=g24ref
```

#### 5.3 G}5 debug.conf

```
00421001=http://10.28.19.44:8080/otaupdate/xml/update/ota_update_example.xml  
lastest=00421002
```

Amlogic Confidential!

## 5.4 G}5 ota\_update\_example.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<update>
  <command force="false" name="update_with_inc_ota">
    <url name="update.zip" locattr=""
updatezip="true">http://10.28.19.44:8080/otaupdate/xml/download/zip/update.zip
    <md5 name="update.zip">461C4C706F6252F29132E746833FB87B</md5>
    <storagemem>1394606</storagemem>
    <!--B @0 : ;F9 " + " 9-( ) ~, .B @0 " aFcountry ~ 1 _ 9'
android7 9 , . - ->A
    <description country="CN" language="zh" & # fl+Xug.2.H F? N`
n x </description>
    <description country="TW" language="zh" & # fl+Xug.2.Z F? ~Nk
n x .</description>
    <description country="ELSE" language="en">1.fix a bug that the mouse can
used sometimes.2.perfect the video play effect.</description>
    <!-- } 6 5,fingerprint
softwinners/crane_evb_v12r/crane12r:4.0.4/IMM76D/20120628:engkeyst
6 5 ) ~ w4 (x fingerprint:
softwinners/crane_evb_v12r/crane12r:4.0.4/IMM76D/20120628:engkeyst
-->
  </command>
</update>
```

## 5.5 7 w4 5

- 'CM w4 update.ziprecovery.img • & ` \Tomcat 7.\@webapp\otaupdate\xml\download\zip\update.zip
- 'CMfactory\_update\_param.xml 7J \ • & ` \Tomcat 7.\@webapp\otaupdate\xml\download\script\factory\_update\_param.xml
- G}5 ) ~,conf • & " X j : OTAUpgrade.apk>| w4 ~