**GK710X**芯片系列

**Linux内核配置用户手册**

用户手册

**湖南国科微电子有限公司**

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# 修订历史

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| Note 1：Do please update this table each time you change this document. | | | | |

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# 前言

## 目的

本文用于指导开发人员对GK710X Linux SDK所带的Linux内核进行配置选项的设置。

## 目标读者

基于GK710X Linux SDK进行开发的开发人员。

## 术语与缩写词

## 参考文档

## 参考软件及版本

# 文件系统内核配置

## UBI文件系统内核配置

配置MTD支持UBI接口，需选中如下选项：

--- >Device Drivers

--- >Memory Technology Device (MTD) support [=y]

--- >Enable UBI - Unsorted block images [=y]

配置内核支持UBIFS文件系统，需选中如下选项：

--- >File systems

--- >Miscellaneous filesystems [=y]

--->UBIFS file system support [=y]

## JFFS2文件系统内核配置

配置内核支持JFFS2文件系统，需选中如下选项：

--- > File systems

--- > Miscellaneous filesystems [=y]

--- >Journalling Flash File System v2 (JFFS2) support [=y]

--- >JFFS2 debugging verbosity [=0]

--- >JFFS2 write-buffering support [=y]

## SQUASHFS文件系统内核配置

配置内核支持SQUASHFS文件系统，需选中如下选项：

--- > File systems

--- > Miscellaneous filesystems [=y]

--- >SquashFS 4.0 - Squashed file system support [=y]

--- >Include support for XZ compressed file systems [=y]

其中Include support for XZ compressed file systems[=y] 选项表示内核支持采用XZ压缩算法的SQAUASHFS文件系统。目前，该算法提供了最大的压缩率。

# USB相关内核配置

## USB驱动内核配置

配置内核支持USB，需选中如下选项：

--->Device Drivers

--->USB support

--->Support for Host-side USB[=y]

--->USB device class-devices (DEPRECATED)[=y]

--->Dynamic USB minor allocation[=y]

--->Inventra Highspeed Dual Role Controller (TI, ADI, ...)[=y]

--->MUSB GK7101 support[=y]

--->MUSB DMA mode (Disable DMA(always use PIO))

--->USB Wireless Device Management support[=y]

--->USB Mass Storage support[=y]

--->The shared table of common (or usual) storage devices[=y]

--->USB Gadget Support[=y]

其中Inventra Highspeed Dual Role Controller选项，需先选中USB Gadget Support。

配置支持USB Mass Storage，需选中如下选项：

--->Device Drivers

--->SCSI device support

--->SCSI device support[=y]

--->legacy /proc/scsi support[=y]

--->SCSI disk support[=y]

--->SCSI low-level deivers[=y]

## USB WIFI 内核配置

配置网络支持WIFI API，需选中如下选项：

--->Networking support

--->Wireless

--->cfg80211 - wireless configuration API[=y]

--->enable powersave by default

--->Common routines for IEEE802.11 drivers[=y]

--->Generic IEEE 802.11 Networking Stack (mac80211)[=y]

--->Minstrel[=y]

---> Minstrel 802.11n support[=y]

配置驱动支持Realtek 8189E USB WiFi，需选中如下选项：

--->Device Drivers

--->Network device support

--->Wireless LAN[=y]

--->Realtek 8189E USB WiFi[=y]

# MMC相关内核配置

配置内核支持MMC，需选中如下选项：

--->Device Drivers

--->MMC/SD/SDIO card support[=y]

--->MMC host clock gating (EXPERIMENTAL)[=y]

--->MMC block device driver[=y]

--->(32) Number of minors per block device

---> Use bounce buffer for simple hosts[=y]

--->MMC host test driver[=y]

--->GK7101 Media Processor SD/MMC Host Controller driver[=y]

# 附录