君正 **Linux** 系统资源指南

Revision: 1.1
Date: Mar. 2008

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Release history

Date	Revision	Change
Mar. 2008	1.1	Add mplayer and realplayer media format description
Dec. 2007	1.0	First release

Disclaimer

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内容

1 概述

Jz4730 和 Jz4740 是北京君正推出的两款高性能低功耗的 MIPS 内核 32 位潜入式处理器，主频 350MHz，支持 MMU，包括 16KB 的 I-Cache 和 16KB 的 D-Cache，同时还集成了大量的外围设备。在君正处理器平台上可以运行 Linux、WinCE 和 uCOS-II 等操作系统，适合用来开发个人数字助理（PDA）、便携媒体播放器（PMP）、卫星导航仪（GPS）、数码学习机/电子辞典、数码像框、电子书和智能手机等多媒体和通信设备。

北京君正提供完整的 Linux 系统支持，帮助用户在君正 Jz 系列处理器平台上快速完成产品开发。为方便用户在产品设计过程中快速检索 Linux 系统下的各种可用资源，本文将详细列出目前已支持的基于 Linux 开发的各种资源，包括编译工具链，引导程序，和 Linux 系统核心、设备驱动程序支持、文件系统等。

2   系统资源列表

Table 1 Toolchain

Features	说明
GCC 3.3.1 + GLIBC-2.3.2	在 Linux 2.4 上使用
GCC 4.1.2 + GLIBC-2.3.2	在 Linux 2.4 上使用
GCC 4.1.2 + GLIBC-2.3.6	在 Linux 2.6 上使用

Table 2 U-Boot Resource (Version 1.1.6)

Features	Status
Boot from NOR Flash	Support
Boot from NAND Flash	Support
NOR Flash driver	Support
NAND Flash driver	Support
Serial console and download	Support
Ethernet download	Support
LCD driver	Support
MMC/SD driver	Support
I2C driver	Support

Table 3 Linux Resource

Features	Linux 2.4	Linux 2.6
➢ **Device Drivers**		
Standard serial driver	Support	Support
Ethernet MAC driver	Support	Support
NOR flash driver	Support	Support
SLC/MLC NAND flash driver	Support	Support
NAND Flash Translation Layer driver		
- Hardware ECC	Support	Support
- Bad block management	Support	Support
- Logical to physical address mapping	Support	Support
- Weal leveling	Support	Support
MMC/SD driver (support up to 32GB)	Support	Support
LCD framebuffer driver (Parallel 16/18-bit, Serial 24-bit)	Support	Support
Audio driver		
- OSS AC97 audio driver	Support	Support

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- OSS I2S audio driver		
- JZ4740 internal audio codec	Support	Support
- AK4642 external audio codec	Support	Support
- ALSA audio driver	×	Support
Camera sensor (CIM) driver	Support	Support
Touchscreen driver		
- via JZ4740 internal SADC	Support	Support
- via external AK4182	Support	Support
- via external UCB1400 codec	Support	Support
- via external WM9712 codec	Support	Support
Keypad driver	Support	Support
USB host driver	Support	Support
USB device driver		
- USB file storage gadget driver	Support	Support
- USB serial gadget driver	Support	Support
- USB ethernet gadget driver	Support	Support
- USB RNDIS support	Support	Support
I2C driver	Support	Support
SPI driver	Support	Support
IDE driver in PIO mode	Support	×
JZ4740 On-Chip RTC driver	Support	Support
External RTC driver (PCF8563)	Support	Support
WIFI driver		
- Marvell WM8686 WIFI driver (SDIO & SPI mode)	x	Support
- Atheros AR6001X WIFI driver (SDIO mode)	x	Support
- Atheros ZD1211 WIFI driver (USB dongle)	x	Support
- VIA VT6656 WIFI driver (USB dongle)	x	Support
Bluetooth support	Support	Support
MobileTV support (Afond AD1000)	Support	Support
➤ **File System**		
EXT2/EXT3	Support	Support
FAT16/FAT32	Support	Support
JFFS/JFFS2	Support	Support
YAFFS/YAFFS2	Support	Support
UBIFS	x	Support
➤ **Power Management**		
CPU clock change	Support	Support
IDLE mode	Support	Support
SLEEP mode	Support	Support
HIBERNATE mode	Support	Support
Power off mode	Support	Support
Advance Power Management (APM)	Support	Support

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➢ **MPlayer**	
H264	Support
MPEG2	Support
MPEG4	Support
FLV	Support
WMV	Support
XVID	Support
AVI	Support
MJPEG	Support
MP3, WMA, AAC etc.	Support
➢ **Realplayer**	
RM and RMVB	Support

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