

## MX31ADS Linux BSP Release History

No.	Version Number / Release Date	Key Features – What's New
Alpha	20050922	<ul style="list-style-type: none"> <li>Pre-built Linux-2.6.10 kernel and packages with these features: <ul style="list-style-type: none"> <li>UART --On chip &amp; External</li> <li>Framebuffer</li> <li>Ethernet</li> <li>Keypad</li> <li>SPI</li> <li>Touchscreen</li> <li>iMagic MI8012 camera</li> <li>Video4Linux Pre-Processing support</li> <li>I2C</li> <li>Video Post-Processing</li> <li>Video Pre-Processing</li> <li>ATA – PIO Mode</li> </ul> </li> <li>Redboot version FSL 200539</li> <li>GNU ARM gcc 3.4.3, glibc2.3.4, binutils 2.16, and linux-libc-headers-2.6.11.2</li> </ul>
Beta	20051222	<p>Linux-2.6.10 kernel</p> <ul style="list-style-type: none"> <li>- UART --On chip</li> <li>- Framebuffer</li> <li>- Synchronous Display</li> <li>- Asynchronous Display</li> <li>- Keypad</li> <li>- TV-OUT VGA mode</li> <li>- Ethernet</li> <li>- SPI</li> <li>- Touchscreen</li> <li>- iMagic IM8012 camera</li> <li>- Video4Linux: Pre-Processing support, SDC, ADC, iMagic Camera</li> <li>- I2C</li> <li>- Video Post-Processing</li> <li>- Video Pre-Processing</li> <li>- ATA – 0-4 PIO Mode, UDMA 0-3 Mode</li> <li>- Audio – OSS, 44.1 KHz, stereo</li> <li>- USB Host: Mass Storage</li> <li>- USB Gadget: Mass Storage, Ethernet, HID devices</li> <li>- Power Management: Doze mode, backlight control, DPM, DPTC, DVFS</li> <li>- Battery Gauge</li> <li>- NAND Boot, MTD</li> <li>- NOR Boot, MTD</li> <li>- CodeTEST</li> <li>- RTC</li> <li>- Watchdog</li> </ul> <p>Redboot version FSL 200544</p> <p>GNU ARM gcc 3.4.4, glibc 2.3.4, binutils-2.15.94, and linux-libc-headers-2.6.11</p>
1	20060217 (FCS)	<ul style="list-style-type: none"> <li>- Linux-2.6.10 kernel</li> <li>- UART --On chip</li> <li>- Framebuffer</li> </ul>

		<ul style="list-style-type: none"> <li>- Synchronous Display</li> <li>- Asynchronous Display</li> <li>- Keypad</li> <li>- TV-OUT VGA mode</li> <li>- Ethernet</li> <li>- SPI</li> <li>- Touchscreen</li> <li>- iMagic IM8012 camera</li> <li>- Video4Linux: Pre-Processing support, SDC, ADC, iMagic Camera</li> <li>- I2C</li> <li>- Video Post-Processing</li> <li>- Video Pre-Processing</li> <li>- ATA PIO 0-4 Mode, UDMA 0-3 Mode</li> <li>- OSS Audio: 44.1 kHz, 16 bits, stereo output</li> <li>- USB Host: Mass Storage</li> <li>- USB Gadget: Mass Storage, Ethernet, HID devices</li> <li>- Power Management: Doze mode, backlight control, DPM, DPTC, DVFS</li> <li>- Battery Gauge</li> <li>- NAND Boot, MTD</li> <li>- NOR Boot, MTD</li> <li>- CodeTEST</li> <li>- RTC</li> <li>- Watchdog</li> <li>- PCMCIA</li> </ul> <p>Redboot version FSL 200606 NAND Boot</p> <p>GNU ARM gcc 3.4.3, glibc 2.3.4, binutils-2.16, and linux-libc-headers-2.6.11</p> <p>GDB 6.3</p>
2	20060707	<ul style="list-style-type: none"> <li>- Linux-2.6.16 kernel</li> <li>- UART --On chip</li> <li>- Framebuffer</li> <li>- Synchronous Display</li> <li>- Asynchronous Display</li> <li>- NEC VGA Panel</li> <li>- Keypad</li> <li>- TV-OUT VGA, NTSC, PAL</li> <li>- Ethernet</li> <li>- SPI</li> <li>- Touchscreen</li> <li>- iMagic IM8012 camera</li> <li>- Video4Linux: Pre-Processing support, SDC, ADC, iMagic Camera</li> <li>- I2C</li> <li>- Video Post-Processing</li> <li>- Video Pre-Processing</li> <li>- ATA PIO 0-4 Mode, UDMA 0-3 Mode</li> <li>- ALSA Audio with OSS emulation</li> <li>- USB Host: Mass Storage</li> <li>- USB Gadget: Mass Storage, Ethernet, HID devices</li> <li>- USB OTG pin detect</li> <li>- Power Management: Doze mode, backlight control, DPM, DPTC, DVFS</li> <li>- Battery Gauge</li> <li>- NAND Boot, MTD</li> <li>- NOR Boot, MTD</li> <li>- CodeTEST</li> <li>- RTC</li> <li>- Watchdog</li> </ul>

		<ul style="list-style-type: none"> <li>- PCMCIA</li> <li>- Hantro</li> <li>- OpenGLES</li> </ul> <p>Redboot version FSL 200617 NAND Boot</p> <p>GNU ARM gcc 4.1.1, glibc 2.4, binutils-2.16, and linux-libc-headers-2.6.16</p> <p>GDB 6.4</p>
3	20070127	<p>Changes for this release include:</p> <p><b>Updates</b> 2.6.19.2 kernel 4.1.1-6 gcc toolchain Redboot 200639</p> <p><b>New Features</b> Qtopia Magnapix MC521DA 2MP camera SD/SDIO support</p> <p><b>Bug fixes</b></p> <ul style="list-style-type: none"> <li>110 glibc math libs not built with VFP</li> <li>111 shm (shared memory) not working properly</li> <li>129 ipc_perm structure has different definitions on user space and on kernel space</li> <li>184 df command can't find the root device on a jffs2 rootfs deployment</li> <li>186 init.d/local isn't being run</li> <li>206 multiple uarts can't be initialized</li> <li>213 TLSbo80902 Audio recording doesn't work</li> <li>217 I2C stop condition setup timing violation</li> <li>266 VFP: Error: unhandled bounce</li> <li>270 When inserting SD card to i.MX31 ADS board, console hangs</li> <li>275 TLSbo79471 XIP: while the kernel is booting it crashes in the NAND driver</li> <li>TLSbo76692 Change I2C functions and video encoder API in i.MX27/i.MX31 FS453 driver</li> <li>306</li> <li>308 TLSbo79526 RTIC test fails on i.MX31 ADS</li> <li>309 TLSbo83375 startup script probe of i.MX31 ADS PCMCIA socket failed</li> <li>313 TLSbo82176 i.MX31: MMC driver doesn't work</li> <li>314 DSPHl28279 Enhance the clock API to retrieve more clocks such as GPT on i.MX31</li> <li>315 TLSbo70205 PLL relock API on i.MX31 causes kernel crashes if DDR is used</li> <li>316 TLSbo74373 Remove WFI software workarounds for i.MX31</li> <li>317 TLSbo77678 i.MX31 ADS EXPIO: Spurious interrupt</li> <li>318 TLSbo78761 i.MX31 workaround ARM11 bug: I-cache corruption on WFI</li> <li>319 TLSbo75077 Eliminate i.MX31ehci-arc dependency on usb_create_hcd</li> <li>320 TLSbo76813 Correct SMBUS support in I2C driver</li> <li>322 TLSbo76010 Change MXC RTC driver to use PMIC RTC APIs</li> <li>323 TLSbo77477 RTC - move plaform_device_register to devices.c</li> <li>324 TLSbo75293 Implementing the review comments for Community SPI driver</li> <li>325 TLSbo76282 Static analysis errors in spi-core.c</li> <li>326 TLSbo79767 SPI driver out of bounds if CONFIG_SPI_NB_MAX is 2</li> <li>327 TLSbo81059 SPI reads/writes problematic in L26.1.17</li> <li>335 MX31ADS usb doc missing important conflict pin info.</li> <li>337 TLSbo85807 ALSA : Playback on Voice Codec produces noise occasionally</li> <li>339 touchscreen driver gets stuck after sometime</li> <li>343 ALSA driver multiple open fail</li> </ul>

		345 i.mx31 PM & video capturing issue 346 Ensure splash screen is up to date in final kernel 353 jffs2 flash erase size default should be 128 363 MXC IDE Hangs on unload/reload 357 DPM missing from release 364 MBX package needs updating for release 3 365 MXC_TS kernel_thread not suspend able
4	20070511	<b>Updates</b>  Redboot 200712 DVFS support for 399Mhz Porting Guide from 2.6.16 to 2.6.19 kernel Mx31_linux.pdf Individual configuration options for USB H1 and H2 ports USB modules autoloading  <b>New Features</b>  Gstreamer  <b>Bug Fixes</b>  43 FIR does not work on i.MX31 231 DSPH128525. Unable to wake up from State Retention and DSM mode on i.MX31 233 TLSbo79609. i.MX31 ADS DVFS Demo test fails and causes system crash TLSbo79608 i.MX31 ADS Low Level Power management driver test fails on Stop 307 and Doze 344 MX31ADS -- unable to resume with keypad 422 Second MMC/SD slot (SDHC2) is disabled in the code 467 MPEG4 decoder causes kernel build failure 468 tvout test sets the wrong bpp 496 mxc-gpio: invalid GPIO 224 546 modules aren't autoloading 555 NAND partition table is static 556 Nandboot JFFS2 error on multiple reboot