

ODROID-XU3/XU4 Partition Table

Android Partition Table

- Odroid-xu3 has Min 8Gbyte eMMC or [MicroSD](#) memory card for system area.
- FAT partition to calculate the remaining blocks to create the partition.

Mainline U-boot (odroidxu4-v2017.05)

Area Name	Size	From(sector #)	To(Sector #)	Name for Fastboot	Partition Name
MBR	512	0	0		
BL1	15KB	1	30	fwbl1	
BL2	16KB	31	62	bl2	
U-boot	720KB	63	1502	bootloader	
TrustZone SW	256KB	1503	2014	tzsw	
U-boot Environment	16KB	2015	2046		
Kernel	8MB	2047	18431	kernel	
Reserved	54.9MB	18432	131071		
EXT4 for Android system	1GB	131072	2228223		mmcblk0p2
EXT4 for Android cache	256MB	2228224	2752511		mmcblk0p4
FAT32 for Internal Storage	100Mb	2752512	2957311		mmcblk0p1
EXT4 for Android userdata	Up to 120GB	2957312	remaining blocks		mmcblk0p3

U-boot (odroidxu3-v2012.07)

Area Name	Size	From(sector #)	To(Sector #)	Name for Fastboot	Partition Name
MBR	512	0	0		
BL1	15KB	1	30	fwbl1	
BL2	16KB	31	62	bl2	
U-boot	328KB	63	718	bootloader	
TrustZone SW	256KB	719	1230	tzsw	
U-boot Environment	16KB	1231	1262		
Kernel	8MB	1263	17646	kernel	
Reserved	55MB	17647	131071		
EXT4 for Android system	1GB	131072	2240179		mmcblk0p2
EXT4 for Android userdata	2GB	2228224	6446519		mmcblk0p3
EXT4 for Android cache	256MB	6422528	6979919		mmcblk0p4
FAT32 for Storage	Up to 120GB	6946816	remaining blocks		mmcblk0p1

* **Sector number - 1** in SD map is used in the eMMC map.

* How to adjust the userdata partition manually. [Instruction](#)

Ubuntu Partition Table

Mainline U-boot (odroidxu4-v2017.05)

Area Name	Size	From(sector #)	To(Sector #)	Name for Fastboot	Partition Name
Partition table / MBR	512	0	0		
fwbl1	15KB	1	30	fwbl1	
bl2	16KB	31	62	bl2	
u-boot	720K	63	1502	bootloader	
TrustZone SW	256KB	1503	2014	tzsw	
u-boot environment	16KB	2015	2046		
FAT16 for boot	129M	3072	266239		mmcblk0p1
EXT4 for root file system	Up to 64GB	266240	remaining blocks		mmcblk0p2

U-boot (odroidxu3-v2012.07)

Area Name	Size	From(sector #)	To(Sector #)	Name for Fastboot	Partition Name
Partition table / MBR	512	0	0		
fwbl1	15KB	1	30	fwbl1	
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FAT16 for boot	129M	3072	266239		mmcblk0p1
EXT4 for root file system	Up to 64GB	266240	remaining blocks		mmcblk0p2

* **Sector number - 1** in SD map is used in the eMMC map.

Boot Sequence

Upon power on the board will search for the boot media. It will perform the following:

1. iROM (Code inside the [SoC](#)) will attempt to read the boot media at the first 512 bytes of it. On those first 512 bytes fwbl1 should exist.
2. fwbl1 will load bl2 (SPL) that is part of the U-boot.
3. bl2 will load U-boot.
4. U-Boot will do whats left, such as handle [TrustZone](#), load kernel image if setted.

fwbl1

This blob is the first thing that CPU will call, we don't have much information on it since its provided by Samsung.

bl2

This is the SPL, part of the U-Boot, upon building U-Boot you'll have the mkspl program what will extract it from the u-boot.bin

u-boot.bin

This is the U-Boot itself built. For more information about U-Boot please check their website: <http://www.denx.de/wiki/U-Boot>

TrustZone Software

This is the blob done by Samsung/ARM to support Trustzone platform.

Default Env

The default env provided in U-Boot will attempt the following:

1. Load boot.ini script from the first FAT type partition from the boot media.
2. Load kernel from its on media (This is the Android Boot)

From:
<http://wiki.odroid.com/> - **ODROID Wiki**

Permanent link:
http://wiki.odroid.com/odroid-xu4/software/partition_table

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