

**Telechips TCC880x/TCC892x
Android ICS
Memory Map**

Rev 1.4
June 25, 2012

Telechips

TCC880x 512MB Memory Map

| Address (Hex) | Description | Size | Comment |
|----------------------|---------------------|---------------|--|
| 40000100 - 40007FFF | ATAG | 32KB | |
| 40008000 - | Kernel Image | About 4 - 5MB | |
| 41000000 - | ramdisk (initramfs) | About 600KB | |
| 40000000 - 57DFFFFFF | Kernel / User | 382MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 59200000 - 59200000 | pmem (obsolete) | 0MB | |
| 59200000 - 59200000 | VIQE | 0MB | 4MB if VIQE is used |
| 59200000 - 5AA00000 | UMP | 24MB | For contiguous physical memory |
| 5AA00000 - 5B600000 | Overlay | 12MB | |
| 5B600000 - 5B800000 | External camera | 2MB | 8MB if external camera is used |
| 5B800000 - 5F200000 | Video | 58MB | |
| 5F200000 - 5FA00000 | FB | 8MB | |
| 5FA00000 - 60000000 | FB (Scaler) | 6MB | |
| 60000000 - 60000000 | Video_dual | 0MB | 8MB if Video_dual is used |
| 60000000 - 60000000 | CC_UI | 0MB | 24MB if CC_UI layer is used |
| 59200000 - 60000000 | Total reserved | 110MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory

Confidential

TCC892x 512MB Memory Map

| Address (Hex) | Description | Size | Comment |
|----------------------|---------------------|---------------|--|
| 80000100 - 80007FFF | ATAG | 32KB | |
| 80008000 - | Kernel Image | About 4 - 5MB | |
| 81000000 - | ramdisk (initramfs) | About 600KB | |
| 80000000 - 97DFFFFFF | Kernel / User | 382MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 98A00000 - 98A00000 | pmem (obsolete) | 0MB | |
| 98A00000 - 99A00000 | VIQE | 16MB | |
| 99A00000 - 9B200000 | UMP | 24MB | For contiguous physical memory |
| 9B200000 - 9BE00000 | Overlay | 12MB | 32MB if CCFB is used |
| 9BE00000 - 9BE00000 | External camera | 0MB | 8MB if external camera is used |
| 9BE00000 - 9F800000 | Video | 58MB | |
| 9F800000 - A0000000 | FB | 8MB | |
| A0000000 - A0000000 | FB (Scaler) | 0MB | 12MB if HDMI_UI_DISPLAY_MEM is used |
| A0000000 - A0000000 | Video_dual | 0MB | 8MB if Video_dual is used |
| 98A00000 - A0000000 | Total reserved | 118MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory

Confidential

TCC892x STB 512MB Memory Map

| Address (Hex) | Description | Size | Comment |
|---------------------|---------------------|-----------|--|
| 80000100 - 80007FFF | ATAG | 32KB | |
| 80008000 - | Kernel Image | About 6MB | |
| 81000000 - | ramdisk (initramfs) | About 1MB | |
| 80000000 - 989FFFFF | Kernel / User | 394MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 98300000 - 98300000 | pmem (obsolete) | 0MB | |
| 98300000 - 99300000 | VIQE | 16MB | |
| 99300000 - 9AE00000 | UMP | 27MB | For contiguous physical memory |
| 9AE00000 - 9BA00000 | Overlay | 12MB | over lay(8MB), over lay1(4MB) |
| 9BA00000 - 9BA00000 | External camera | 0MB | 16MB if external camera is used |
| 9BA00000 - 9F800000 | Video | 62MB | jpeg_header(192KB), jpeg_raw(16MB), jpeg_stream(4MB) |
| 9F800000 - A0000000 | FB (Video) | 8MB | |
| A0000000 - A0000000 | FB (Scaler) | 0MB | fb_scale0(0MB), fb_scale1(0MB), fb_g2d0(0MB), fb_g2d1(0MB) |
| A0000000 - A0000000 | Video_dual | 0MB | 8MB if Video_dual is used |
| A0000000 - A0000000 | CC_UI | 0MB | 24MB if CC_UI layer is used |
| A0000000 - A0000000 | OUTPUT_ATTACH | 0MB | 16MB if OUTPUT_ATTACH is used |
| 98300000 - A0000000 | Total reserved | 125MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory

Confidential

TCC880x 1GB Memory Map

| Address (Hex) | Description | Size | Comment |
|---------------------|---------------------|---------------|--|
| 40000100 - 40007FFF | ATAG | 32KB | |
| 40008000 - | Kernel Image | About 4 - 5MB | |
| 41000000 - | ramdisk (initramfs) | About 600KB | |
| 40000000 - 42000000 | Kernel / User | 914MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 48E00000 - 80000000 | | | |
| 42000000 - 42000000 | pmem (obsolete) | 0MB | |
| 42000000 - 42000000 | VIQE | 0MB | 4MB if VIQE is used |
| 42000000 - 43800000 | UMP | 24MB | For contiguous physical memory |
| 43800000 - 44400000 | Overlay | 12MB | |
| 44400000 - 44600000 | External camera | 2MB | 8MB if external camera is used |
| 44600000 - 48000000 | Video | 58MB | |
| 48000000 - 48800000 | FB | 8MB | |
| 48800000 - 48E00000 | FB (Scaler) | 6MB | |
| 48800000 - 48800000 | Video_dual | 0MB | 8MB if Video_dual is used |
| 48E00000 - 48E00000 | CC_UI | 0MB | 24MB if CC_UI layer is used |
| 42000000 - 48E00000 | Total reserved | 110MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory

Confidential

TCC892x 1GB Memory Map

| Address (Hex) | Description | Size | Comment |
|---------------------|---------------------|---------------|--|
| 80000100 - 80007FFF | ATAG | 32KB | |
| 80008000 - | Kernel Image | About 4 - 5MB | |
| 81000000 - | ramdisk (initramfs) | About 600KB | |
| 80000000 - 82000000 | Kernel / User | 906MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 89600000 - C0000000 | | | |
| 82000000 - 82000000 | pmem (obsolete) | 0MB | |
| 82000000 - 83000000 | VIQE | 16MB | |
| 83000000 - 84800000 | UMP | 24MB | For contiguous physical memory |
| 84800000 - 85400000 | Overlay | 12MB | 32MB if CCFB is used |
| 85400000 - 85400000 | External camera | 0MB | 8MB if external camera is used |
| 85400000 - 88E00000 | Video | 58MB | |
| 88E00000 - 89600000 | FB | 8MB | |
| 89600000 - 89600000 | FB (Scaler) | 0MB | 12MB if HDMI_UI_DISPLAY_MEM is used |
| 89600000 - 89600000 | Video_dual | 0MB | 8MB if Video_dual is used |
| 82000000 - 89600000 | Total reserved | 118MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory

TCC892x STB 1GB Memory Map

| Address (Hex) | Description | Size | Comment |
|---------------------|---------------------|-----------|--|
| 80000100 - 80007FFF | ATAG | 32KB | |
| 80008000 - | Kernel Image | About 6MB | |
| 81000000 - | ramdisk (initramfs) | About 1MB | |
| 80000000 - 82000000 | Kernel / User | 899MB | Maximum Mali heap size is 300MB Maximum UMP heap size is 64MB |
| 89D00000 - C0000000 | | | |
| 82000000 - 82000000 | pmem (obsolete) | 0MB | |
| 82000000 - 83000000 | VIQE | 16MB | |
| 83000000 - 84B00000 | UMP | 27MB | For contiguous physical memory |
| 84B00000 - 85700000 | Overlay | 12MB | over lay(8MB), over lay1(4MB) |
| 85700000 - 85700000 | External camera | 0MB | 8MB if external camera is used |
| 85700000 - 89500000 | Video | 62MB | jpeg_header(192KB), jpeg_raw(16MB), jpeg_stream(4MB) |
| 89500000 - 89D00000 | FB (Video) | 8MB | |
| 89D00000 - 89D00000 | FB (Scaler) | 0MB | fb_scale0(0MB), fb_scale1(0MB), fb_g2d0(0MB), fb_g2d1(0MB) |
| 89D00000 - 89D00000 | Video_dual | 0MB | 8MB if Video_dual is used |
| 89D00000 - 89D00000 | CC_UI | 0MB | 24MB if CC_UI layer is used |
| 89D00000 - 89D00000 | OUTPUT_ATTACH | 0MB | 32MB if OUTPUT_ATTACH is used |
| 82000000 - 89D00000 | Total reserved | 125MB | |

* Mali / UMP memory is dynamically allocated in Kernel memory