

RIFF BOX JTAG firmware/hardware supports communication with single or multichained TAP controllers. All currently supported cores, according to IEEE 1149.1 Test Access Port standard, put 0b1 data into IR register upon CAPTURE state. Thus it makes possible automatic detection of IR register size of each TAP present on the JTAG chain. In this case IR 'pre-' and 'post-' stuffing bit sizes are not required to be specified by user and are determined automatically. All is needed is a TAP controller position number of the device user is trying to connect to.

Here are ARM cores currently supported by the RIFF BOX JTAG firmware:

- ARM926
- ARM946
- ARM920T
- ARM1136
- PXA312
- PXA270
- Cortex-A8
- OMAP3 (TAP Router handling)

"Supported" means the full JTAG functionality: core detect, reset/halt, go, core registers access, core coprocessor access, core memory access, breakpoints programming.

NAND memory interfaces supported (through the RIFF DCC Loader™ code):

- Direct;
- OneNAND;
- Intel XScale PXA312 NAND Controller;
- Qualcomm MSM62xx (except MSM625x group) NAND Controller;
- Qualcomm MSM625x NAND Controller;
- Qualcomm ESM62xx NAND Controller;
- Samsung S3C2410 NAND Controller;
- Samsung S3C2440 NAND Controller;
- Samsung S3C6410 NAND Controller;
- Broadcom BCM21xxx NAND Controller;
- Qualcomm QSC6240 NAND Controller;
- Qualcomm MSM7xxx OneNAND through SFLASH Interface;
- Qualcomm MSM7xxx NAND Controller;
- CFI compliant NOR Memories.

In short, if you have a device in hands which has supported NAND memory interface inside then you can connect and read/write memory of your device over JTAG link.

Currently supported models by RIFF BOX JTAG software are listed in Table 1 ("*supported*" means there is an available resurrector DLL for each specified model).

Please note: in case you have a not supported device in hands you can use this table for quick reference in order to search for a possible match. If you can't find an exact match (*Target Id* and *FLASH memory type*) you still can write own hardware initialization script for

your device and then use one of the pre-compiled DCC Loaders (according to loader RAM base and NAND type it manages). For this, use *Custom Target Settings* feature and *DCC Loader Settings* button; assemble proper binary file with bootcore and other data needed for successful resurrection (or read data from exactly same alive model) and flash device manually.

Table 1 List of Available resurrector DLLs

| Model Name | Platform, Core | Target ID, hex | Multichain position, TAP# | I/O Voltage, V | FLASH Access | NOR-Like Base Address |
|---------------------|-----------------|----------------|---------------------------|----------------|--------------|-----------------------|
| Samsung S5510 | QSC6240, ARM926 | 0x4015F0E1 | 0x00 | 2.6V | Chipset | - |
| Samsung C5510 | QSC6240, ARM926 | 0x4015F0E1 | 0x00 | 2.6V | Chipset | - |
| Samsung T669 | QSC6270, ARM926 | 0x4015F0E1 | 0x00 | 2.6V | OneNAND | 0x38000000 |
| Samsung S3370 | QSC62XX, ARM926 | 0x4015F0E1 | 0x00 | 2.6V | Chipset | - |
| Samsung S5350 | QSC62XX, ARM926 | 0x4015F0E1 | 0x00 | 2.6V | Chipset | - |
| Samsung F500 Modem | MSM, ARM926 | 0x300600E1 | 0x00 | 2.6V | Chipset | - |
| Samsung G810 Modem | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung G810 PDA | OMAP2430, ARM11 | 0x07B3602F | 0x01 | 1.8V | OneNAND | 0x00000000 |
| Samsung i450 Modem | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i450 PDA | OMAP2430, ARM11 | 0x07B3602F | 0x01 | 1.8V | OneNAND | 0x00000000 |
| Samsung i550 Modem | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i550 PDA | OMAP2430, ARM11 | 0x07B3602F | 0x01 | 1.8V | OneNAND | 0x00000000 |
| Samsung i560 Modem | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i560 PDA | OMAP2430, ARM11 | 0x07B3602F | 0x01 | 1.8V | OneNAND | 0x00000000 |
| Samsung i710 | PXA270 | 0x79265013 | 0x00 | 3.0V | OneNAND | 0x00000000 |
| Samsung i718 | PXA270 | 0x79265013 | 0x00 | 3.0V | OneNAND | 0x00000000 |
| Samsung i740 PDA | PXA312 | 0x1E649013 | 0x00 | 3.3V | Chipset | - |
| Samsung i740 Modem | NXP 5213EL1 | 0x1594602B | 0x00 | 3.3V | NOR | 0x10000000 |
| Samsung i780 PDA | PXA312 | 0x1E649013 | 0x00 | 3.3V | Chipset | - |
| Samsung i780 Modem | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i780 Modem | MSM, ARM926 | 0x100D10E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i900 Modem | MSM, ARM926 | 0xA00C00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i900 PDA | PXA312 | 0x2E649013 | 0x00 | 3.3V | OneNAND | 0x10000000 |
| Samsung i5800 | S5P6422, ARM11 | 0x07B76F0F | 0x01 | 2.8V | OneNAND | 0xB0000000 |
| Samsung i8320 Modem | MSM, ARM926 | 0x101C00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i8320 Modem | MSM, ARM926 | 0x301C00E1 | 0x00 | 2.6V | Chipset | - |

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|---------------------|---------------------|------------|------|------|-------------------------|------------|
| Samsung i8910 Modem | MSM, ARM926 | 0x101C00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung i8910 PDA | OMAP3430, Cortex-A8 | 0x0B6D602F | 0x01 | 1.8V | OneNAND | 0x08000000 |
| Samsung S3310 | BCM2133x, ARM926 | 0x07926F0F | 0x00 | 3.0V | Chipset | - |
| Samsung S5230 | BCM2133x, ARM926 | 0x07926F0F | 0x00 | 3.0V | Chipset | - |
| Samsung S5560 | BCM2133x, ARM926 | 0x07926F0F | 0x00 | 3.0V | Chipset | - |
| Samsung S5600 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung S7070 | BCM2133x, ARM926 | 0x07926F0F | 0x00 | 3.0V | Chipset | - |
| Samsung T669 | QSC6240, ARM926 | 0x4015E0E1 | 0x00 | 2.6V | Chipset | - |
| Samsung S7350 | MSM, ARM926 | 0xA00C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung S7350i | MSM, ARM926 | 0xA00C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung F480 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung M7500 | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung M7600 | MSM, ARM926 | 0xA00C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung S8000 | S3C6410, ARM11 | 0x07B76F0F | 0x01 | 2.6V | Chipset | - |
| Samsung I5500 | MSM7225, ARM926 | 0x203C10E1 | 0x00 | 2.6V | Chipset | - |
| Samsung I5700 PDA | S3C6410, ARM11 | 0x07B76F0F | 0x01 | 2.6V | Chipset | - |
| Samsung I7500 | MSM7200A, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |
| Samsung I8000 | S3C6410, ARM11 | 0x07B76F0F | 0x01 | 2.6V | Chipset | - |
| Samsung S8300 | MSM, ARM926 | 0xA00C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung T919 | MSM, ARM926 | 0x101C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung A887 | MSM, ARM926 | 0x301C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung U700 | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung U800+ | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung F490 | MSM, ARM926 | 0x100D00E1 | 0x00 | 2.6V | Chipset | - |
| Samsung U900V | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | OneNAND | 0x40000000 |
| Samsung B7330 | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | OneNAND through Chipset | - |
| Samsung T939 | MSM, ARM926 | 0x301700E1 | 0x00 | 2.6V | OneNAND through Chipset | - |
| Samsung Z240 | MSM6250, ARM926 | 0x300400E1 | 0x00 | 2.6V | Chipset | - |
| Samsung Z540 | MSM6250A, ARM926 | 0x120400E1 | 0x00 | 2.6V | Chipset | - |
| Samsung T939 | MSM7200, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |

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|--------------------|--------------------|------------|------|------|---------|------------|
| Samsung S8500 PDA | S5PC110, Cortex-A8 | 0x1BA00477 | 0x00 | 2.8V | OneNAND | 0xB0000000 |
| Samsung i9000 | S5PC110, Cortex-A8 | 0x1BA00477 | 0x00 | 2.8V | OneNAND | 0xB0000000 |
| Samsung i897 | S5PC110, Cortex-A8 | 0x1BA00477 | 0x00 | 2.8V | OneNAND | 0xB0000000 |
| Samsung T959 | S5PC110, Cortex-A8 | 0x1BA00477 | 0x00 | 2.8V | OneNAND | 0xB0000000 |
| Samsung GT-P1000 | S5PC110, Cortex-A8 | 0x1BA00477 | 0x00 | 2.8V | OneNAND | 0xB0000000 |
| Samsung SPH-A900 | MSM6500, ARM926 | 0x6003C0E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| Huawei Modem E1550 | MSM, ARM926 | 0x401200E1 | 0x00 | 2.6V | Chipset | - |
| Huawei Modem E1550 | MSM, ARM926 | 0x4012F0E1 | 0x00 | 2.6V | Chipset | - |
| Huawei E169 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei E220 | MSM, ARM926 | 0x100C00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei E220 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei E17x | MSM7200, ARM926 | 0x300E00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei E585 | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei C2806M | QSC6010, ARM926 | 0x220B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| Huawei C2901M | QSC6010, ARM926 | 0x220B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| Huawei C2901M | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| Huawei C8500 | MSM7625, ARM926 | 0xC01E00E1 | 0x00 | 2.6V | Chipset | - |
| Huawei EC189 | MSM, ARM926 | 0x100F80E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| Eten X800 | S3C2440, ARM920T | 0x0032409D | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| Daewoo DPN3500 | S3C2440, ARM920T | 0x0032409D | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| ZTE Modem MF100 | MSM, ARM926 | 0x401200E1 | 0x00 | 3.3V | Chipset | - |
| ZTE Modem MF112 | MSM, ARM926 | 0x301C00E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF112 | MSM, ARM926 | 0x101C00E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF170 | QSC6240, ARM926 | 0x4015E0E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF180 | MSM, ARM926 | 0x401200E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF190 | MSM, ARM926 | 0x301C00E1 | 0x00 | 2.6V | Chipset | - |

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|-----------------|------------------|------------|---------|------|---------------|-------------------|
| ZTE Modem MF622 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF628 | MSM, ARM926 | 0x200C00E1 | 0x00 | 2.6V | Chipset | - |
| ZTE Modem MF626 | MSM, ARM926 | 0x201200E1 | 0x00 | 3.3V | Chipset | - |
| ZTE Modem MF626 | MSM, ARM926 | 0x401200E1 | 0x00 | 3.3V | Chipset | - |
| ZTE Modem MF627 | MSM, ARM926 | 0x101C00E1 | 0x00 | 3.3V | Chipset | - |
| ZTE Modem MF627 | MSM, ARM926 | 0x201200E1 | 0x00 | 3.3V | Chipset | - |
| ZTE S100 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| | | | | | | |
| HTC Diamond | MSM7201A, ARM926 | 0xA01700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Diamond | MSM, ARM926 | 0x201700E1 | 0x00 | 2.6V | Chipset | - |
| HTC HD | MSM7201A, ARM926 | 0xA01700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Chief | MSM7625, ARM926 | 0xC01E00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Cedar | MSM7625, ARM926 | 0xC01E00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Hero | MSM7200A, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Imagio | MSM7???, ARM926 | 0x301000E1 | 0x00 | 2.6V | Chipset | - |
| HTC Smart | MSM7???, ARM926 | 0x301C00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Jade | MSM7225, ARM926 | 0x901B10E | 0x00 | 2.6V | Chipset | - |
| HTC Magic 32A | MSM7200A, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Magic 32B | MSM7201A, ARM926 | 0xA01700E1 | 0x00 | 2.6V | Chipset | - |
| HTC HD2 | QSD8250, ARM926 | 0x202400E1 | 0x00 | 2.6V | Chipset | - |
| HTC Desire | QSD8250, ARM926 | 0x202400E1 | 0x00 | 2.6V | Chipset | - |
| HTC Nexus | QSD8250, ARM926 | 0x202400E1 | 0x00 | 2.6V | Chipset | - |
| HTC Raphael | MSM7201A, ARM926 | 0xA01700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Rhodium | MSM7200, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |
| HTC RhodiumW | MSM7600, ARM926 | 0x301000E1 | 0x00 | 2.6V | Chipset | - |
| HTC Herald | OMAP850, ARM926 | 0x0692602F | 0-0-C-2 | 3.3V | DiskOnChip G4 | 0x00200000 |
| HTC Elf | OMAP850, ARM926 | 0x0692602F | 0-0-C-2 | 3.3V | DiskOnChip H3 | Not supported yet |
| HTC Topaz | MSM7200A, ARM926 | 0x301700E1 | 0x00 | 2.6V | Chipset | - |
| HTC Mega | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Tattoo | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | Chipset | - |

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|--------------------|------------------|------------|------|------|---------|------------|
| HTC Wildfire | MSM7225, ARM926 | 0xC01B30E1 | 0x00 | 2.6V | Chipset | - |
| HTC Wings | MSM7200, ARM926 | 0x300E00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Snap | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Snap | MSM7225, ARM926 | 0x901B10E1 | 0x00 | 2.6V | Chipset | - |
| HTC Dash | MSM7225, ARM926 | 0xC01B00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Dash | MSM7225, ARM926 | 0x901B10E1 | 0x00 | 2.6V | Chipset | - |
| HTC Cedar | MSM7625, ARM926 | 0xC01E00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Legend | MSM7227, ARM926 | 0x203C00E1 | 0x00 | 2.6V | Chipset | - |
| HTC Nike | MSM7200, ARM926 | 0x300E00E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| Toshiba G910 | MSM7200, ARM926 | 0x300E00E1 | 0x00 | 2.6V | Chipset | - |
| Toshiba G810 | MSM7200, ARM926 | 0x300E00E1 | 0x00 | 2.6V | Chipset | - |
| Toshiba TG01 | QSD8250, ARM926 | 0x202400E1 | 0x00 | 2.6V | Chipset | - |
| Toshiba G500 Modem | MSM, ARM926 | 0x100C00E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| SE X1 | MSM7201A, ARM926 | 0xA01700E1 | 0x00 | 2.6V | Chipset | - |
| SE X1 | MSM, ARM926 | 0x201700E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| DELL Streak | QSD8250, ARM926 | 0x202400E1 | 0x00 | 2.6V | Chipset | - |
| DELL XCD28 | MSM7???, ARM926 | 0x203C00E1 | 0x00 | 2.6V | Chipset | - |
| | | | | | | |
| Haier C2027 | QSC6010, ARM926 | 0x220B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| | | | | | | |
| LG RD3000 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD3100 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD3500 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD3510 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD3540 | QSC6010, ARM926 | 0x220B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD3610 | QSC6010, ARM926 | 0x220B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |
| LG RD6100 | QSC6010, ARM926 | 0x200B10E1 | 0x00 | 2.6V | NOR | 0x00000000 |

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|-----------------|------------------------|-------------------|-------------|-------------|----------------|----------|
| LG GT540 | MSM7227, ARM926 | 0x203C00E1 | 0x00 | 2.6V | Chipset | - |
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