

?embedded ???bootloader (?uboot) ???? ????????? Flash ?

?????IC Reader and Wrtiter IC??? ??????

???FW171 3G (WR703N) 4MB Flash???8MB Flash??

Emebedd system ??Flash IC ???????..

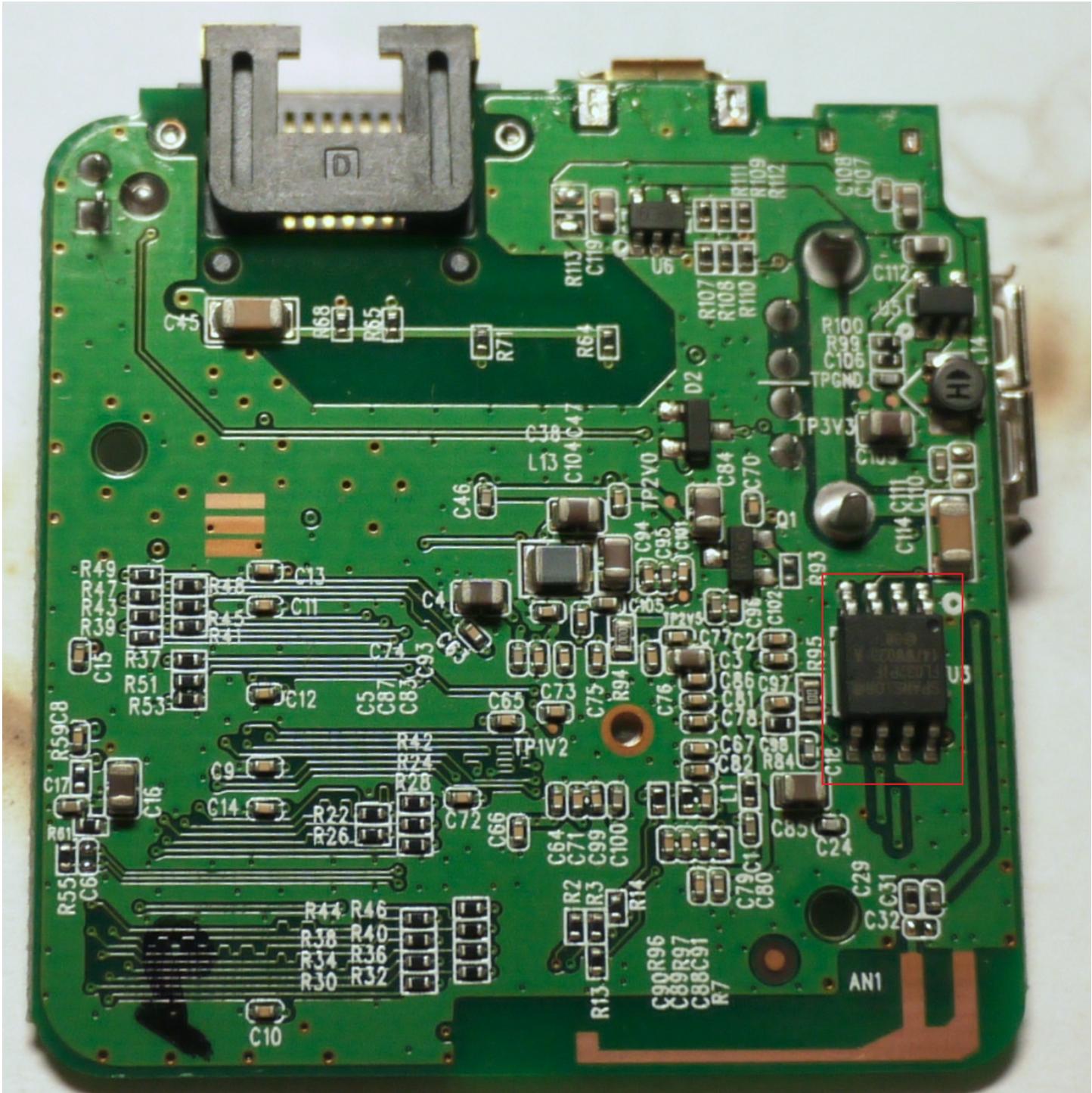
?????Tplink Atheros ??? SPI 8 Pin. ???Tsop ?? ??????SPI 16 pin TSOP ????

???? Nor Flash ??? openwrt ???support FTL

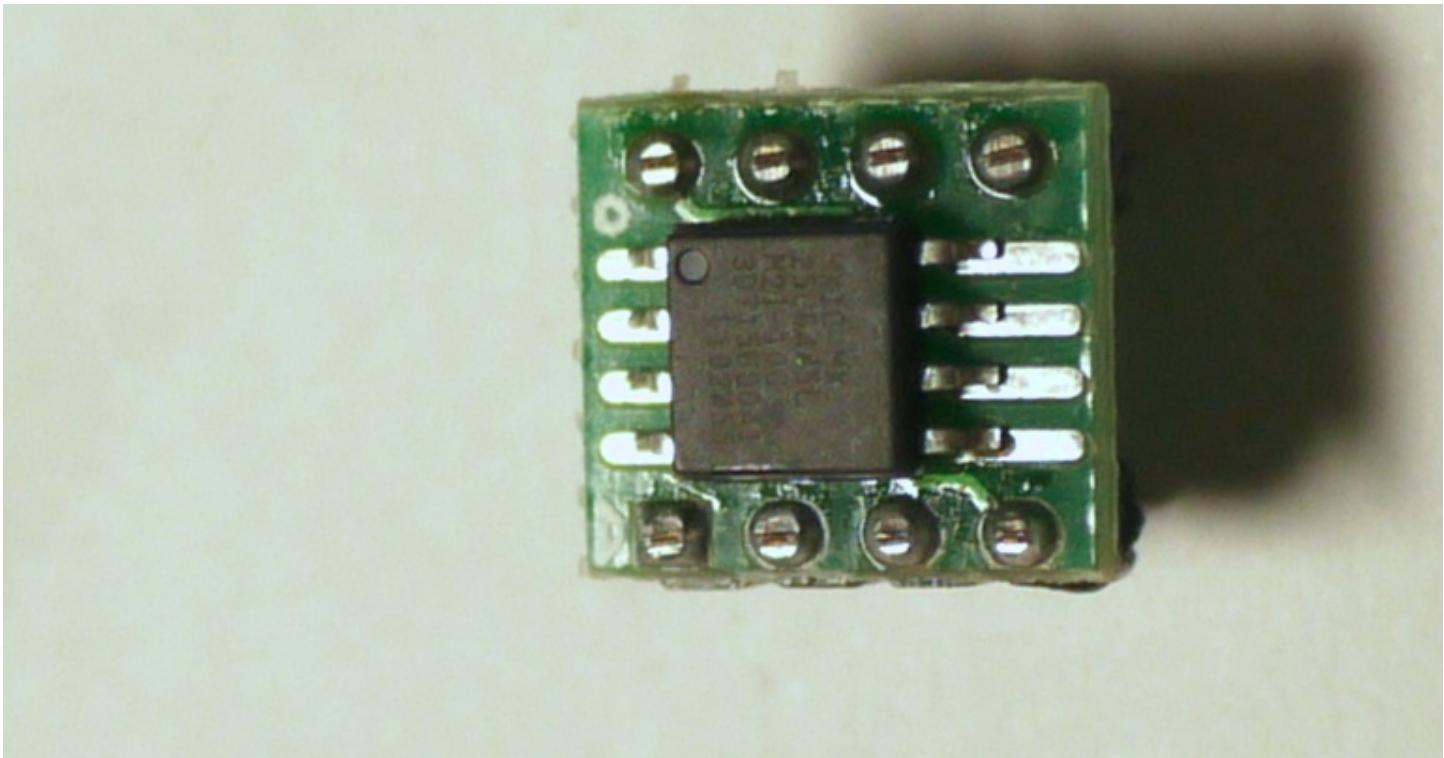
??????MX25L6405D 8MB SPI Nor Flash

<http://wiki.openwrt.org/doc/techref/flash.layout>

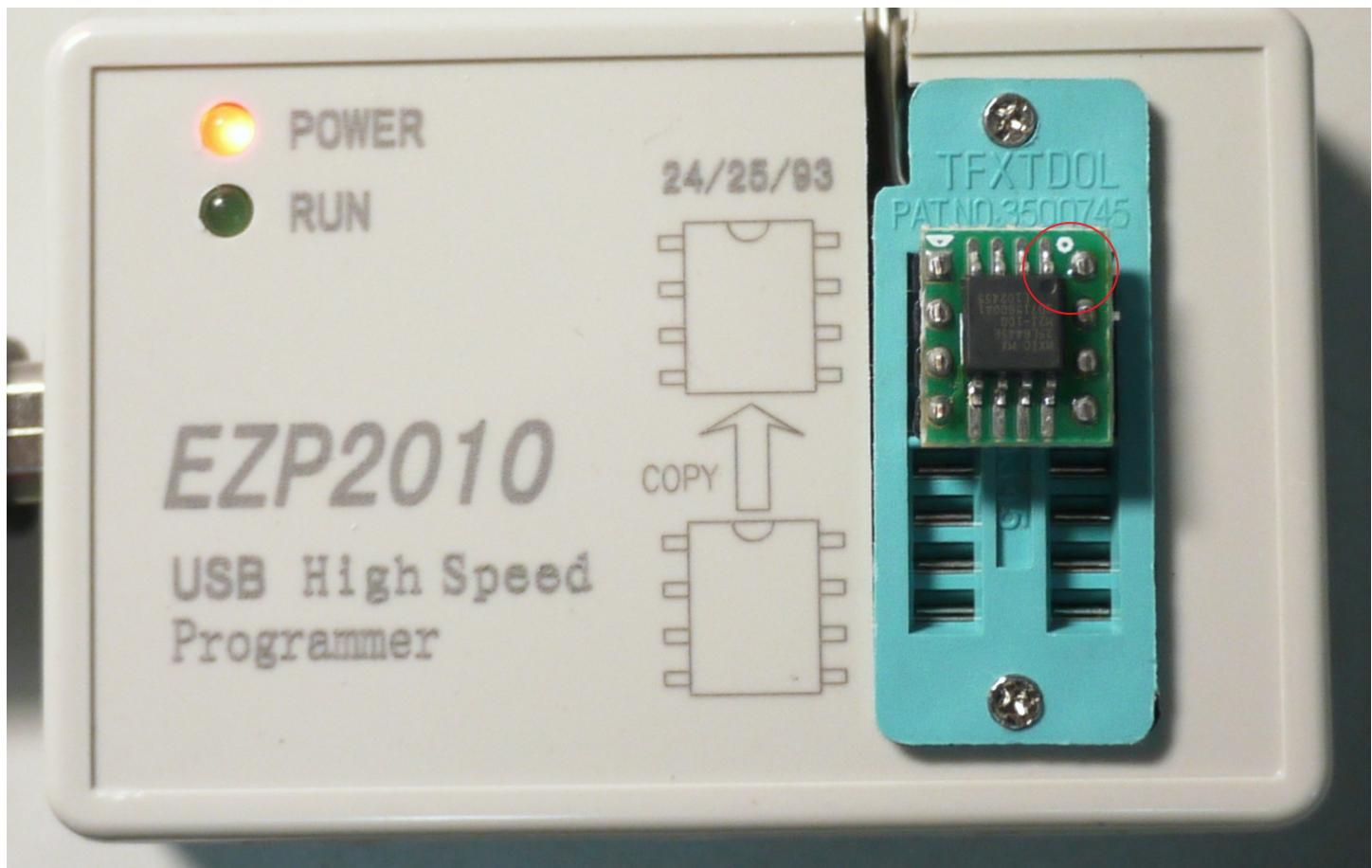
<http://wiki.openwrt.org/doc/techref/mtd>



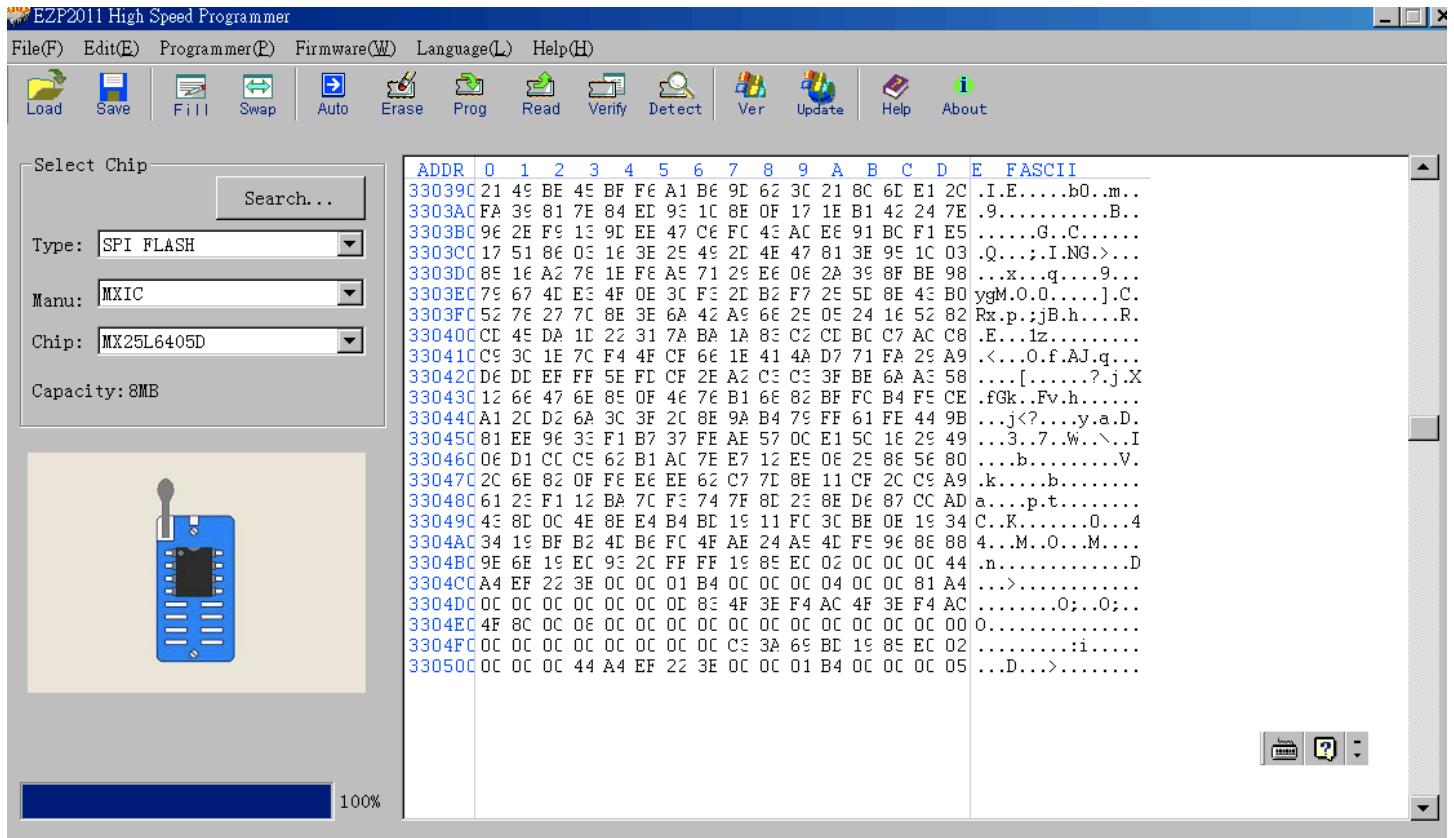
???Nor Flash IC??



?????????8MB FLASH ?? TSOP ?DIP ? ?IC??????



TSOP ?DIP ? ?IC???????



??IC Programer ??Detect .???????

OSSLab???? [8MB ??????](#)for 703 ,FW171 -3G ,MR11U ??

??Erase ?Prog ????. ?????Verify ??

?8MB Flash ?Tsop ??? ??????

```
root@OpenWrt:/# df -h
Filesystem      Size  Used Available Use% Mounted on
rootfs          2.9M   2.8M    140.0K  95% /
/dev/root        2.9M   2.8M    140.0K  95% / (live: wr703-8m-033)
tmpfs           14.4M  36.0K   14.4M   0% /tmp
tmpfs           512.0K    0    512.0K   0% /dev
root@OpenWrt:/#
```

?? 4MB Flash ??

Ubuntu Linux – Parallels Desktop

Mon Aug 13, 11:11 PM

thx@ubuntu: ~

File Edit View Search Terminal Help

http://192.168.1.1/cgi-bin/luci/stok=8e5a85ffd1c6a8f

WIRELESS FREEDOM

ATTITUDE ADJUSTMENT (Bleeding Edge, r31291)

* 1/4 oz Vodka Pour all ingredients into mixing
* 1/4 oz Gin tin with ice, strain into glass.
* 1/4 oz Amaretto
* 1/4 oz Triple sec
* 1/4 oz Peach schnapps
* 1/4 oz Sour mix 用户设置密码以保护路由器和开启SSH.
* 1 splash Cranberry juice

```
root@OpenWrt:/# df -h
Filesystem      Size   Used Available Use% Mounted on
rootfs          5.4M  984.0K     4.5M  18% /
/dev/root        1.5M    1.5M       0 100% /rom
tmpfs           14.3M  124.0K    14.1M   1% /tmp
tmpfs           512.0K      0    512.0K   0% /dev
/dev/mtdblock3    5.4M  984.0K     4.5M  18% /overlay
overlayfs:/overlay  5.4M  984.0K     4.5M  18% /
root@OpenWrt:/#
```

??8M Flash ???+4MB

MTD Flash ??

| TP-Link WR1043ND Flash Layout | | | | | | | |
|-------------------------------|--|------------------------------|----------------------------|---------------------------------|-----------------------|--|--|
| Layer0 | m25p80 w spi0.0 : m25p64 8192KiB | | | | | | |
| Layer1 | mtd0 u-boot 128KiB | mtd5 firmware 8000KiB | | | mtd4 art 64KiB | | |
| Layer2 | | mtd1 kernel 1280KiB | mtd2 rootfs 6720KiB | | | | |
| mountpoint | | / | | | | | |
| filesystem | | mini_fo | | | | | |
| Layer3 | | | | mtd3 rootfs_data 5184KiB | | | |
| Size in KiB | 128KiB | 1280KiB | 1536KiB | 5184KiB | 64KiB | | |
| Name | u-boot | kernel | | rootfs_data | art | | |
| mountpoint | none | none | /rom | /overlay | none | | |
| filesystem | none | none | SquashFS | JFFS2 | none | | |

```
root@OpenWrt:/# cat /proc/mtd
dev:    size   erasesize name
mtd0: 00020000 00010000 "u-boot"
mtd1: 000e0000 00010000 "kernel"
mtd2: 002f0000 00010000 "rootfs"
mtd3: 00010000 00010000 "art"
mtd4: 003d0000 00010000 "firmware"
```

????? ???rootfs_data

ART ??? Atheros Radio Test ???wlan Mac address ?wlan ???? ???? ????

<http://www.right.com.cn/forum/thread-72694-1-1.html>
<http://wenku.baidu.com/view/955077d7...aa811da26.html>
<http://wenku.baidu.com/view/7272d829...e09122bd5.html>
<http://wenku.baidu.com/view/8ae40e78...68762d6fa.html>

????FW for IC ??? ?????

1.??IC ??

2.

dd if=/dev/sda of=/temp/backup.dd
 ??winscp??