

Accelerate[®] - SPB209A EVB- User Guide

Installing driver patches

1. Download the currently used Linux kernel source to a temporary library such as Home/Downloads/.

```
cd ~/Home/Downloads/  
sudo apt-get source linux-image-$(uname -r)
```

2. Download the mentioned patches in below table to the downloaded kernel source library for the mwifiex and btmrvl driver library.

```
cd ~/Home/Downloads/<kernel version>/drivers/net/wireless/mwifiex/
```

and

```
cd ~/Home/Downloads/<kernel version>/drivers/bluetooth/
```

| <u>Description</u> | <u>Ref</u> | <u>File</u> |
|--|---|---|
| Patch mwifiex 4-4 update to operate TCP in 802.11n mode | https://patchwork.kernel.org/patch/8391451/ | 4-4-mwifiex.patch |
| Patch btmrvl 0001 to release sdio bus after firmware is up | | 0001-Bluetooth-btmrvl.patch |
| Patch btmrvl 0002 to fix hung task warning dump | | 0002-Bluetooth-btmrvl.patch |

3. Change directory to the new downloaded kernel source library.

```
cd ~/Home/Downloads/<kernel version>/
```

4. Apply patches to mwifiex driver by

```
sudo git apply drivers/net/wireless/mwifiex/<patch name>.patch
```

5. Apply patches to btmrvl driver by

```
sudo git apply drivers/Bluetooth/<patch name>.patch
```

6. Change directory to kernel source library for the mwifiex and then btmrvl.

```
cd ~/Home/Downloads/<kernel version>/drivers/net/wireless/mwifiex/
```

and

```
cd ~/Home/Downloads/<kernel version>/drivers/bluetooth/
```

7. Build drivers for mwifiex and btmrvl

```
sudo make -C /lib/modules/$(uname -r)/build M=$(pwd) modules
```

8. Verify that the SPB209A EVB is removed from the SDIO supported SD slot. Replace mwifiex and btmrvl drivers in currently used kernel library modules with the new ones, and then make sure no old modules is operating on the system (rmmod command).

```
cd ~/lib/modules/<kernel version>/drivers/net/wireless/mwifiex/  
sudo cp ~/Home/Downloads/<kernel version>/drivers/net/wireless/mwifiex/mwifiex.ko .  
sudo cp ~/Home/Downloads/<kernel version>/drivers/net/wireless/mwifiex/mwifiex_sdio.ko .  
sudo rmmod mwifiex_sdio  
sudo rmmod mwifiex
```

and

```
cd ~/lib/modules/<kernel version>/drivers/bluetooth/  
sudo cp ~/Home/Downloads/<kernel version>/drivers/bluetooth/btmrvl.ko .  
sudo cp ~/Home/Downloads/<kernel version>/drivers/bluetooth/btmrvl_sdio.ko .  
sudo rmmod btmrvl_sdio  
sudo rmmod btmrvl
```

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