

This guide is *only* for the EA6900 v1.x!

**WARNING: The EA6900 v2 is a Mediatek MT7621AT device and not supported by DD-WRT! [FCC link]**

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## Hardware Specifications

The XAC1900, which comes as part of a kit with a separate DSL modem (APM105), appears to be the same device as a user has flashed one to the EA6900 firmware.

<b>FCC ID</b>	Q87-EA6900
<b>Industry Canada ID</b>	3839A-EA6900
<b>Power</b>	12 VDC, 3.5 A
<b>CPU</b>	Broadcom BCM4708A0
<b>CPU Speed</b>	800 MHz (2 cores)
<b>Flash/RAM</b>	128 MiB / 256 MiB
<b>WI1 chip</b>	Broadcom BCM4360
<b>WI1 protocols</b>	an+ac
<b>WI1 MIMO config</b>	3x3:3
<b>WI2 chip</b>	Broadcom BCM4360
<b>WI2 protocols</b>	bgn
<b>WI2 MIMO config</b>	3x3:3
<b>Antenna connectors</b>	U.FL, RP-SMA
<b>Switch</b>	Broadcom BCM4708A0
<b>LAN / WAN ports</b>	4 / 1 (up to 1 Gb/s)
<b>USB ports</b>	2 (USB 3.0, USB 2.0)
<b>Serial</b>	6-pin header, internal

## Installation

Please refer to this forum thread for the latest info: "[Linksys EA 6900 Install Guide](#)"

## Boot Partitions

The Linksys CFE partitions flash with two linux boot partitions, switching between them after three (consecutive?) incomplete or failed boots. It also has a bug that limits NVRAM to 32KB, for which a third-party XVortex CFE (ported from an Asus RT-AC68U) is available to mitigate. The XVortex CFE only uses a single linux boot partition.

To check the boot partitions, run this from telnet or ssh:

```
cat /proc/mtd
```

The main boot partition is 'linux' and the Linksys CFE will also have 'linux2'.

To force switching to the other partition from current, unplug the router after ~10 seconds into boot. After the third try, it will switch the 'bootpartition' which is stored in nvram. It can also be manually altered:

```
nvram get bootpartition
```

This returns the current boot partition (0 for linux, or 1 for linux2). To change the boot e.g. to 1:

```
nvram set bootpartition=1
```

The number of partial boots to switch linux partitions is controlled by maxpartialboots (default is 3):

```
nvram get maxpartialboots
```

And can be changed with 'set' as well. The current number of incomplete boots is tracked with 'partialboots':

```
nvram get partialboots
```

The partitions can be directly written to 'linux' (or use 'linux2' for that partition) from command prompt:

```
wget {firmware path}
```

Or enable SSH and then WinSCP (or similar) can be used to copy the file.

```
mtd unlock linux
mtd write {firmware file} linux
reboot
```

Note: if an error returns from the mtd commands, instead try 'write {firmware file} linux' (no mtd command)

## Links

DD-WRT [Firmware FAQ](#)