Putting it all together

The diagram below wraps up our discussion so far:

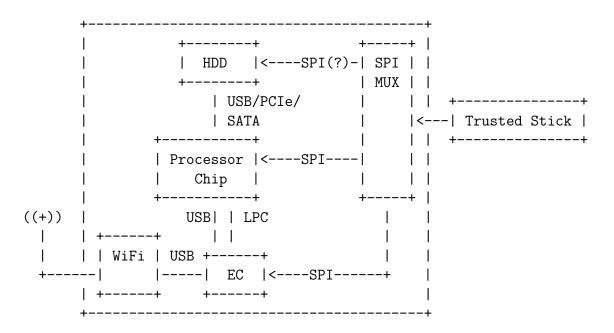


Fig 1. The stateless laptop with trusted internal disk and network proxy.

A new element introduced on the above diagram is the "SPI MUX" box. It's a multiplexer for the SPI buses coming from different devices, which are normally expecting to be the only ones talking to the SPI flash chip. It should be possible to implement this using an FPGA (for a prototype) or an inexpensive ASIC (for production models).

The next diagram shows a simplified laptop: without trusted internal disk (implemented according to the requirements laid out above), and also without networking proxy (as discussed later), but rather using an external USB-connected WiFi device.