Genesi Efika MX

Quick Startup Guide

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Welcome to your Efika MX

Thank you for your purchase of the Genesi Efika MX. Inside the package you will find the Efika MX unit itself, and a power supply and US power cable.

Power Cable

If you are not in a territory that uses US-style 3-prong power cables, then you may find any "C5" or "Cloverleaf" power cable at any discount electronics store (for example Maplin in the UK, or Conrad in Germany) or high street supplier. These cables are very common on laptops and therefore very common on store shelves.

Boot Operation

When you turn on the Efika MX it will start by blinking the power LED blue. It will blink for 3 seconds while the boot loader (U-Boot) waits for user input on the serial port to cancel boot. When it finds the Linux kernel, it will activate the red LED to denote that it is reading from the disk, and then it will change the LED to a green color to signify that it has exited the boot loader and is now "running".

By default the Genesi kernel ships with the LED colors configured to respond to PATA SSD access (red/orange color) and SD card access (blue color). This will create a "fun" lightshow on the power button to signify activity on the system. Details on how to change this configuration, the colors for each activity, and to assign different activities, can be found online

Hint: search for "sysfs led trigger"

Display

By connecting an HDMI or HDMI-to-DVI connector you can enable a console display. By default, without a connection, the kernel will default to the closest mode to 1280x720@60Hz display which should work on every monitor. If a connection is plugged in, it will gather monitor information (EDID) and set the display mode to the maximum possible supported by the Efika MX and the monitor combined.

Note: the i.MX515 processor has a maximum pixel clock of 133MHz. The maximum bandwidth of an HDMI connection is 165MHz. This means that many monitor are designed around HDMI rates and on the Efika, may not be running at "native" panel resolution, for example 1080p (1920x1080@60Hz) for many HDTVs.

In the case of being configured to find the maximum possible resolution, the kernel will gracefully find the next best resolution (for example 1920x1080@24, 1680x1050@60 or 1440x900@60) that the monitor reports it supports.

While supporting extremely large displays (greater than 1000 pixels in either direction) is possible and does work, it should be noted that graphics performance and especially digital video playback is not guaranteed past the standard HDTV 1280x720@60Hz (720p) resolution. For this reason the current system is limited to modes around 720p that your monitor reports that it can support.

Operating System

The Genesi Efika MX ships with Ubuntu 10.10 "Maverick Meerkat" which has been built using bootstrap tools and significant configuration differences from the standard Ubuntu release.

It is not officially supported by Canonical or Ubuntu, and is provided as a convenience to users of the Efika MX platform.

First Boot

Upon first boot of the system you will be presented with an option to change the language of the installer. You may pick the one you are comfortable with. Afterwards, it will ask for a timezone, let you detect your keyboard layout, and enter a username and password, and name your machine for the network. You may want to connect the system to a network at this point (the Wireless icon in the top left will let you select an SSID of the nearest appropriate access point) since it will set the time and also download any package updates required by the installation system if you picked a language other than English.

After installation you will be presented with a login screen, or logged in automatically depending on the options you selected. Congratulations, your system is installed!