HP EliteDesk G1 800 mini - Volumio notes

Intro

This is another little x86 device that does Volumio very well.
It has been pre-installed with **Volumio-3.378-2022-09-30-x86_amd64.**

Note: the Installation wizard was interrupted in order to allow a proper shutdown.
Please restart the Wizard when you start your installation.

Support
Ask in the "X86 Hardware issues /WiFi, DAC..." thread (so others may profit) or if it really has to be: PM or email me directly (email ge.koerkamp@bluewin.ch).

BIOS

The unit has been reset to factory settings.
A DP → HDMI adapter may be needed. I used a cheap 5€ HDMI1.1 version from Amazon, it worked fine.
Not sure an adapter will work with HDMI Audio out (untested).

To be able to boot from a USB stick, the boot order needs to be set accordingly, as long as the bias settings are kept default, this should just work.
This has been done for the initial setup, but you can change it whatever order you want.
Note:
Though there is an NVME slot underneath the cooler unit, this has not been tested.
Therefore I can't guarantee it will work.

In case you wish to update the BIOS or need to modify the boot order, connect a monitor and keyboard.

Plugin power, press the power button and start hitting the ESC key until you see the HP Logo appearing
Follow the menu, you will find more info in the link I posted

Audio/ Headphone Out

There is an audio port at the front and back

Audio/ USB

Onboard audio on x86 devices is no different from arm boards and therefore never the greatest.
In this case it is reasonable, but I recommend using USB Audio for this one.

It has been tested with three USB Audio devices, a Khadas Tone board and a Khadas Tone 2 Pro, both
working without glitches or stutter. USB seems to be fine in this case.

WiFi/ Bluetooth

Note the HP EliteDesk 800 G1 min has no WiFi (as stated on the forum).
There is a slot underneath the SSD, there are no antenne cablesd as far as I could see.
Rewfere to the manual link below for further details.
I can also recommend to use a TP-LINK Archer T3U AC1300 mini or plus USB dongle. The driver was added
as of version 3.197.
Note the TP-Link does not support Bluetooth, for that you would need to find your own combo dongle.
Don't hesitate to ask for driver support.
I'll integrate it in the x86 kernel when not done yet.
But of course, only when available as a DKMS package on the internet.

Wireless dongles with RTL8812BU/ RTL8822BU/ RTL8811CU/ RTL8812AU chipsets will work out-of-the-box.

Other sources of information

[HP EliteDesk 800 G1 Desktop Mini PC](#)

Alternatives to the HP EliteDEsk 800 G1 mini

You will find many of these sort of devices on auction sites like eBay, 3-6 year old "low spec" thin clients with more than enough power to run Volumio 3.
Other examples you will find from HP, Igel, Dell, Fujitsu etc.
Try them or encourage friends to use them!

(Re-)Installation (the pre-install way)

For installation (other than OTA) you will need:
• a DP capable monitor and a DP → DP cable or
• an HDMI capable monitor, a DP → HDMI adapter and an HDMI → HDMI cable
• a keyboard and a mouse

Preparation

• Start with downloading the latest (or known working) Volumio 3 image for x86_amd64.
• Flash it to a USB stick, my preferred windows tool: **Rufus**
• Linux/Mac users know how to use "dd**"**

Boot from USB

• Insert the USB stick in one of the USB ports.
• Apply power, the power button's led will light up shortly, wait till is goes off a few seconds later.
• Now press the power button.
• After 1 or 2 seconds, start hitting your keyboard's ESC key in a 1 second rhythm.
• Do this until the HP logo shows.
• If it doesn't and continues to boot, repeat the above and hit ESC in a higher rhythm.
• When OK, you'll the boot menu.
• Choose the UEFI or Legacy, whichever way you prefer.

Install to internal SSD

The above boots Volumio from the USB stick, also good for testing a new version before installing.
In case you want it to boot from the internal disk, boot from USB and then got to the Systrem menu.
Select "Install to Disk" and choose the 128 or 256 Gb SSD.
Follow the instructions when finished.

Digital copy
Just let me know in case you wish a document in PDF format.

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