

Flowstone capable HTPC setup using a Zotac ID40 and Windows XP SP3.

1. Purchased Zotac ID40 media PC (US\$260 after \$30 rebate at Fry's Electronics)
  - a. Specs:
    - i. Intel Atom D525 - dual core, 1.8GHZ), 800mhz FSB
    - ii. Intel NM10 Express chipset
    - iii. Nvidia ION GPU (512MB DDR3 memory)
    - iv. 2GB DDR2-800 SO-DIMM memory
    - v. Gigabit LAN
    - vi. 802.11n WIFI
    - vii. SD/SDHC/MMC/MS/MS Pro/xD memory card
    - viii. 8ch Digital Audio
    - ix. HDMI, DVI, SPDIF, Mic/Headphones, 6xUSB 2.0 RJ45 Ethernet, eSATA
    - x. 7.4" x 7.4" x 1.73" (188mm x 188mm x 44mm)
    - xi. Ships with removable VESA mount for LCD monitor
2. Purchased 4GB USB flash drive. Windows XP setup CD needs approx 700MB. Room is also needed for driver disk and some needed programs. Make SURE that the USB disk is perfect. Installing Windows from an old USB flash drive will make you sorry you did, also do NOT use a standard USB hard drive. WinToFlash will install to this just fine, however during the install process on the HTPC, Windows will attempt to scan the USB drive as a standard hard disk, versus a flash disk and will show the drive as corrupted. A standard flash disk is recognized by Windows XP as removable so is not scanned. This is probably a limitation of Windows XP only.
3. Obtain LCD monitor. Hook up to HTPC via DVI-to-VGA dongle supplied with HTPC.
4. Obtain USB keyboard/mouse. Hook up to HTPC also.
5. Download and install MagicISO. This program will be needed to create the ISO file from the driver CD.
6. Download WinToFlash. This will be used to create the USB flash drive Windows XP install.
7. Download Daemon Tools Lite, realVNC, and WinRAR.
8. Use WinToFlash to create Windows Install CD (used Windows XP SP3 OEM DVD for files) onto USB flash drive.
9. Use MagicISO to create driver ISO image of Zotac driver CD.
10. Copied driver ISO onto USB flash drive after finishing ISO creation process.
11. Copied Daemon Tools lite, MagicISO, VNC, and WinRAR to USB flash disk in separate folder named, 'drivers'.
  - a. Daemon Tools Lite is used to mount driver CD as a virtual CD inside Zotac
  - b. VNC is used after Windows XP install to remote desktop into Zotac through Ethernet IP so that monitor, keyboard, or mouse is not needed after initial install.
12. Plug in the USB flash drive, before powering unit.
13. Power up Zotac HTPC. The Zotac splash screen should show. Hit DELETE during this process to enter BIOS setup. By the way, this HTPC is really quiet...
14. After entering BIOS, go to Boot Configuration and make sure USB is recognized and set to first priority.

15. After bootup, a text-based startup screen should come up. Select option 1. This is the text based Windows install stage.
16. Windows will now install. There should be no errors or corrupted files during install. If so - re-do the USB flash disk with another, and repeat step 8.
17. Installed Windows XP SP3 from USB flash disk.
18. Once first reboot is done, text startup screen should return on boot. Select option 2 at this point, the GUI based install stage.
19. After 2nd reboot, Windows should boot up first time as usual.
20. After bootup is complete, copy contents of USB flash drive into a folder on drive C:. This will allow you to add/remove Windows components without need USB flash drive again, as well as copy over those needed applications.
21. Install DAEMON tools first. This allows ISO driver disk to be mounted.
22. After Daemon tools is installed, mount ISO file.
23. After Zotac driver install comes up. Select Intel chipset install first.
24. Reboot when prompted.
25. Next, install Nvidia drivers.
26. Reboot when prompted.
27. Next, install the HDA sound drivers.
28. Reboot when prompted.
29. Next, install the Realtek PCIE network driver.
30. Next, install Ralink Wireless driver.
31. Next, connect to your wireless network. This should now work after the last step. From here on, a wireless network is needed for the additional Flowstone related testing and drivers.
32. Activate Windows now.
33. Finally, install the Realtek USB 2.0 card reader driver.
34. Exit out of Zotac driver installer. All hardware on Zotac should now be functional, along with Windows. Verify no driver conflicts or issues by pulling up Control Panel, System, Hardware Tab, and Device Manager. There should be no conflicts visible.
35. Add a new user and set that new user up for administrator rights.
36. Log off, and log onto the new user that was added. All programs installed now will be under that desktop and user.
37. Download and install your favorite browser ASAP. (mine is Chrome)
38. On my main computer, I loaded the Flowarm v107 fsm file, since it is a pretty intensive application. I created an EXE of it.
39. From the HTPC, I went to my main PC folder where the EXE was, and copied it over to the local drive. It worked flawlessly!
40. Next, from the HTPC I went to the Phidget website, and downloaded the latest drivers for XP. These will install the .Net 2.0 files also.
41. Downloaded and installed Flowtone itself. This will allow some limited development from this HTPC. We will see how it runs.
42. Ok. Flowstone runs, albeit slowly. I was able to successfully run a small fsm program to test my Phidget LCD display with built in 8/8/8 module. I was able to connect to both modules, and enter a text message, and turn on an output (LED).

43. From a full power down, to complete readiness, the bootup time was between 1 minute and 1 minute 30sec.
44. Install VNC server and viewer on both computers (main and HTPC)
45. On HTPC, go into Firewall settings and add a new port exception, on ports 5800 and 5900 for TCP traffic. Also change scope to "my network (subnet) only.
46. Now, using VNC viewer, connect to the IP address of the HTPC, running the VNC server.
47. You should now see the desktop of the HTPC. At this point, keyboard, and mouse are redundant.
- 48.