

本 NanoNote™

Info Guide

气 Qi Hardware Inc.

www.qi-hardware.com

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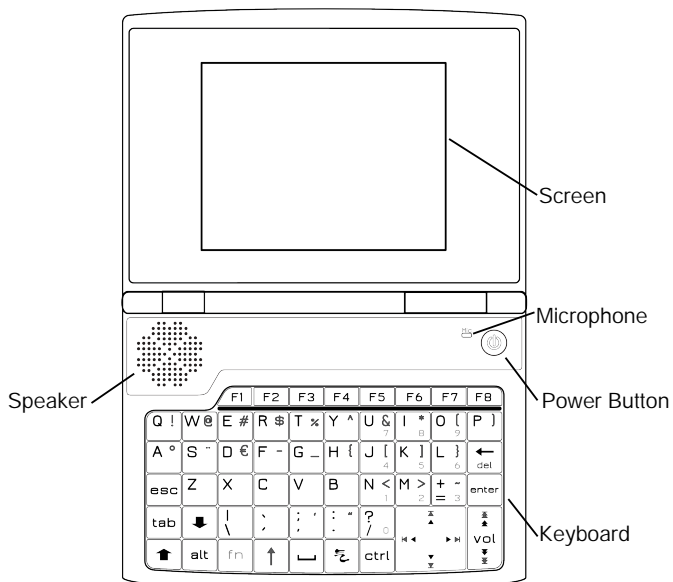
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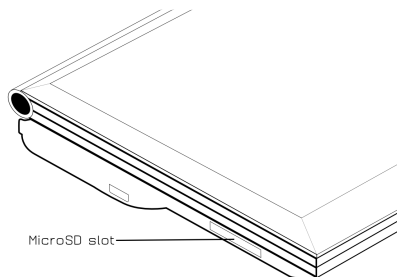
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The Ben NanoNote

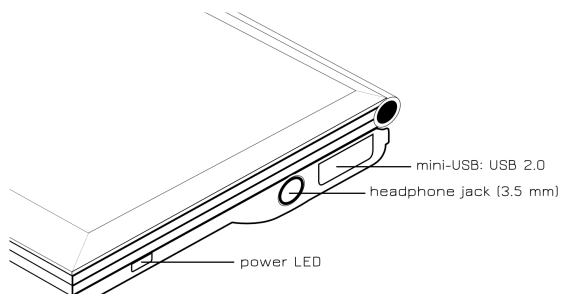
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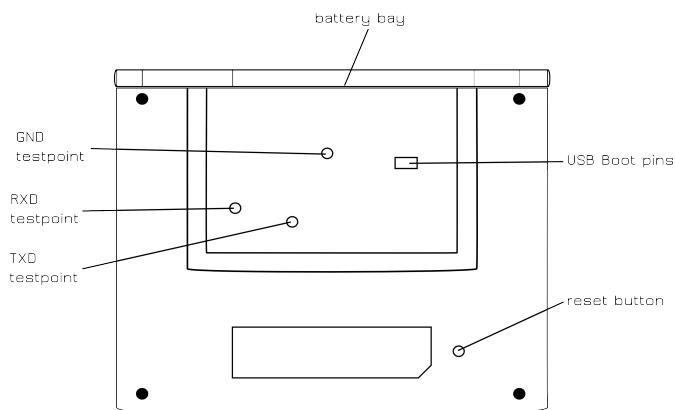
left side



right side



back side



Specifications

- * 336 MHz XBurst Jz4720 MIPS-compatible CPU
- * display: 3.0" color TFT
- * resolution: 320 x 240, 16.7M color
- * dimension (mm): 99 x 75 x 17.5 (lid closed)
- * weight: 126 g (incl. battery)
- * DRAM: 32MB Synchronous DRAM
- * headphone jack (3.5 mm)
- * SDHC microSD
- * 850mAh Li-ion battery
- * 2GB NAND flash memory
- * mini-USB: USB 2.0 High-Speed Device
- * speaker and microphone

HowTos

USB Boot

What you need:

- a usb to mini-USB cable
- something to shorten two pins (eg. a screw-driver)

1) Remove the battery

2) Connect NanoNote to your computer with a USB cable (NOTE: sometimes the device will turn on by itself when connecting via USB cable, if that happens just unplug and replug the USB cable until it remains off)

3) Turn the device around short the two pins in the battery bay marked with "USB Boot" (NOTE: best results have been achieved using a screw-driver)

4) now while holding the pins shortened press the power button for 2 seconds, the screen should remain black and the LED on the right side will flash a few times

5) if the device is in USB boot mode dmesg should show you a message like:
Product: JZ4740 USB Boot Device

Reflashing the Ben

What you need:

- the image (kernel and rootfs) you want to flash (potentially also an uboot image)
- a PC/Laptop with usbboot installed

1) Put the ben into USB Boot mode (see above)

2) open a console and type (as root user):
`usbboot -c "boot"`

3) IF you want to reflash uboot (NOTE: this should not be necessary) type in the console (as root user):
`usbboot -c "nprog 0 [PATH TO BOATLOADER IMAGE] 0 0 -n"`

4) to flash the kernel image type in the console (as root user):
`usbboot -c "nprog 1024 [PATH TO KERNEL IMAGE] 0 0 -n"`

5) to flash the rootfs type in the console (as root user):
`usbboot -c "nprog 2048 [PATH TO ROOTFS IMAGE] 0 0 -n"`

If everything went ok, remove the cable from the NanoNote, put the battery back in and boot the device. NOTE: Booting the device might take longer the first time after you reflashed

Dos and Dont's

(warrenty and legal stuff)

Please do:

- use this device for whatever purpose you want
- share your software with as many people as possible
- feel free to build upon this hardware design
- reflash the software as often as you want
- tell us about your experience and help us to improve it
- feel free to take the device apart, but only if you are qualified
- feel save that there is no spyware whatsoever on this device

Please don't:

- throw the battery into open fire
- expose the battery to extreme temperatures
- take the battery apart
- use the device in the shower or while taking a bath
- use the device while driving
- leave small parts with unattended children
- expose the device to strong electro-magnetic fields
- expose the device to extreme temperatures
- use the device when handling explosives
- expect us to replace a device if you broke it

Links

Qi Hardware

webpage:

<http://www.qi-hardware.com>

wiki:

<http://wiki.qi-hardware.com>

projects:

<http://projects.qi-hardware.com>

Software

Qi Hardware:

<http://projects.qi-hardware.com>

OpenWrt:

<http://www.openwrt.com>

Schematics

<http://projects.qi-hardware.com/index.php/p/board-qi-avt2/source/tree/master/>

APPENDIX

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6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- * a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- * b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
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- * d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- * e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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