Twitter Thread by foone

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@Foone

I got a Toshiba T1200, which has a bad screen, and a dead CMOS battery, and I thought the hard drive was broken too...

but I rebooted it and heard a KTHUNK and a really loud spin-up noise and holy shit, the hard drive works!

and it still has files on it. the newest date is January 1994.

It's a 21mb hard drive, with ~37k of bad sectors.

This fucker is never going to spin up again, so I better go find some serial cables and copy shit off now.

The backlight is fucked so I'm shining a flashlight on it.
without it, it looks like this.

FastLynx has a cool mode where you can use it between two DOS machines and you only have to install it on one of the machines, it bootstraps itself over the serial port to the one without it.

dang it. They're communicating enough to bootstrap, but not enough to actually work in fastlynx mode

ah-ha! It's this "Serial Accelerated (7-wire) Mode".
Turning that off makes it work.

COPYING! starting on the most useless files

I stopped it and reconfigured the serial port.
even with only 21mb, 9600 baud is way too slow

huh, gnu manuals? didn't expect to see that on a DOS machine not touched since 1994

and it's done copying! you can go to your rest, poor old hard drive.

the next computer I'm gonna work on is... another T1200!
This one is fully dead. No error blinks, nothing.

It's a surprisingly simple machine inside. Not super-cramped like a lot of portables.

it's got a cmos battery and a little speaker over here

Which is weird because the system has another battery over here.

neither of which are the main battery!

This one is also the same sort of setup where it's a floppy drive and a hard drive.
You could also get this in a dual-floppy model.

This little add-on here is the hard drive controller.

This was a weird thing. It kinda looks like it'd be a trackpad but it's on the bottom and this machine has no trackpad.

Turns out: it's RAM!

The whole motherboard

The floppy drive is by Toshiba, it's an ND-352S-A, or FDD4271G0W, or even a JAH1058939.

And it looks like a normal floppy drive but it's got the wrong connector. 26-pin IDC, for some reason.

The hard drive is even weirder.
It's by JVC! Yes, that JVC.
It's a JD3824G01-4.

And it has NO DEFECTS, woo!

And it turns out it uses the same 26-pin connector as the floppy drive.

the bottom of the hard drive is interesting

It's some kind of self-parking system.

This one also has something not in the other one:
A modem add-on!

The bottom.

That chip has an interesting pinout.
The sides have 10 pins, but they're arranged as two sets of 5, with a gap.

It's an HD637b05v0f, which is an 8-bit Hitachi microcontroller

Anyway I was hoping to combined these two into one machine, maybe even image the other hard drive?
But sadly I can't get machine 1 to power on anymore.
So I currently have two dead machines.

and I think that's all I'm gonna work on for tonight, so I'll have to hopefully pick this up some other time.

I have a third one in storage, but it makes these two look like they're in good shape

ooh, found a service manual:
https://t.co/E1I5AAzVuh

BTW a fun thing about this system is that the back of the power supply has two power switches.
One of them is for the system, and the other one is for the hard drive!

you can seriously boot up the laptop with the hard drive turned off. it's amazing.

also it has a function called "hard ram", which is why it has so many batteries.
You can set it up so that the expanded RAM is battery-backed, so you can set up a ramdisk that is maintained while the system is off.

Annoyingly the service manual doesn't explain the floppy or hard drive connectors.
It explains random pinouts for things like the display controller, but no hard drive/floppy pinouts.

oh neat. u/ConventionalMemories on retrobattlestations has built a CF-card adapter for these laptops, but it plugs into the expansion slot instead of the hard drive port.

https://t.co/WZXFPtnkGA