

Twitter Thread by [foone](#)



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I'm watching these videos about the Georgia Phone Call and they're talking about if Dominion did any kind of weird hacks, and all I'm thinking is:

I need to get a voting machine.

Yeah, it turns out if you select the party vote option and toggle it Democrat-Republican-Democrat then tap the Libertarian candidate Jo Jorgensen three times, you'll trigger the Easter egg and you can play DOOM!

Set your location to California, vote no on Prop 22, party vote democrats and select the Green presidential campaign Howie Hawkins, then toggle Prop 22 to yes, then longpress "reset ballot" and you'll get rickrolled.

This is how my brain works. "the voting machines could be hacked! The president might be trying to steal the election! What should I do?"

Oh yeah, get a screwdriver and make a voting machine play DOS games."

I wonder if they're still x86 based? The last time we had a big electronic voting scandal, of the they were... But now we're in the arm era.

Obviously back in 2000 and 2004 the voting machines where going to basically be windows xp boxes running some custom software (well, not in 2000)

What are they today? Linux on arm? God, are they android?

Maybe they've gone for the one true atm operating system.
OS/2!

I took a picture of a Diebold atm the other day, and it was running windows 10.
(possibly on arm, though.)



Personally I think we should run all our voting machines on a well understood, well characterized chip, which we've had nearly half a century to get familiar with.

The 6502!

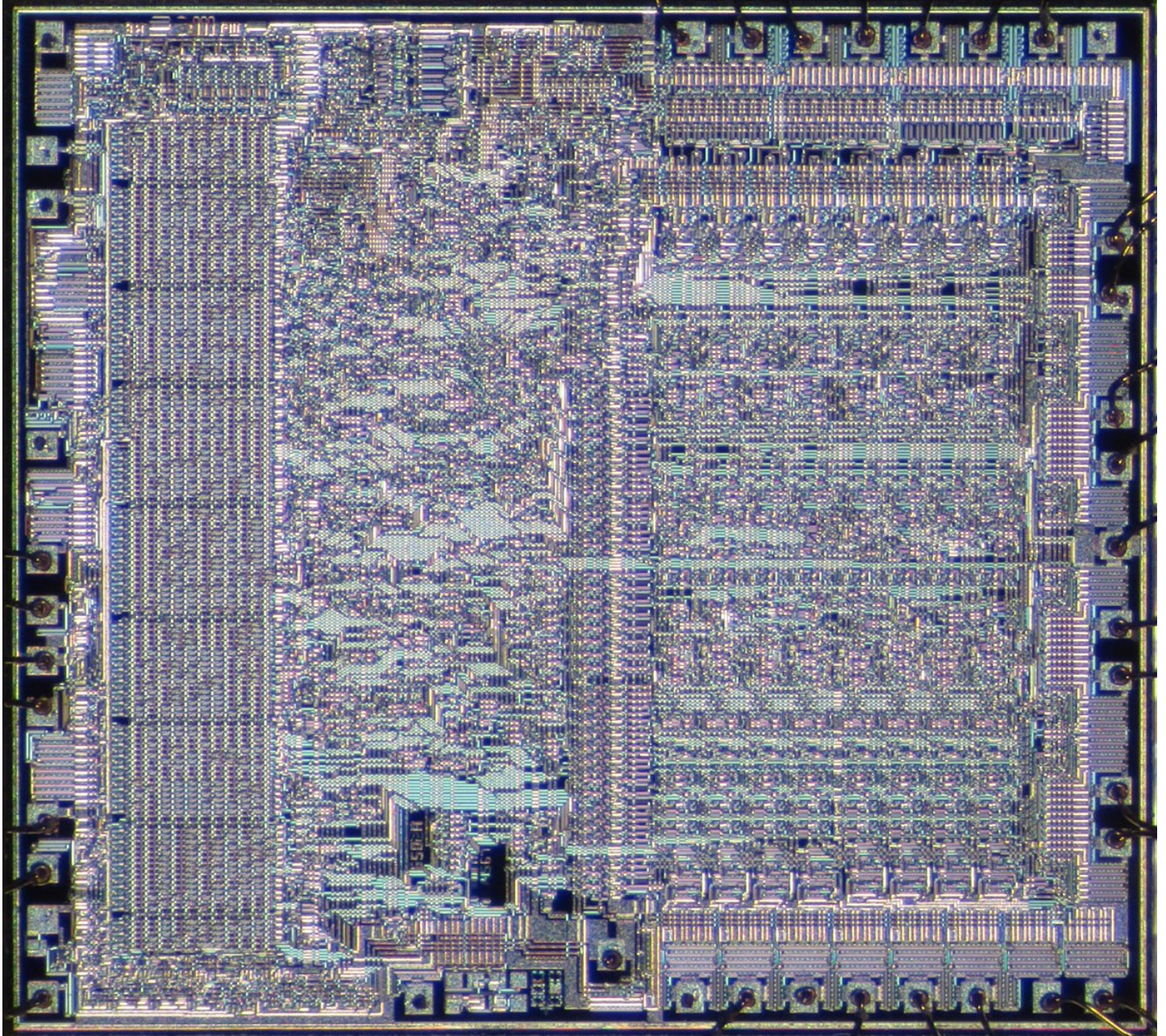


It powered everything from the Atari 2600 to the NES to the Apple II to the Commodore 64. A very versatile chip, and it's still manufactured today.

It also limits the ability of state-actors to execute complex attacks on it, because it's so simple.

Has the management engine been hacked with hidden invisible code?
Is there complicated glitch injection lurking in dark silicon?
Has the microcode been updated to calculate some things incorrectly?

No! It's a 6502! The chip is built on 8 um tech and the die looks like this and we know what every single bit of it does.



It'd be interesting to run voting machines like how the Vegas gaming commission runs slot machines.
At any point, inspectors can walk up to a machine and yank chips out to verify they're running the code they're supposed to.

Random spot checks of voting machines, with someone like John McMaster on hand to decap them and image the dies, to confirm they're the chips they claim to be.

Look, democracy can't work without sulfuric acid and electron microscopes

Anyway, if anyone has a voting machine they need to get rid of, let me know.
Georgia probably has a bunch they won't need by the end of the week.

The economics of voting machine companies must be really weird.
You basically have a product that no one needs, except every two years or so they need a couple million of them.

Do you even have stock during those lean years? Or do you just have them made in the run up to an election, then retrofit them all into ATMs and vending machines afterwards?

Do you redesign your system for every election? You've got plenty of time to iterate and improve... Or maybe you just hire all your programmers and engineers on short term contracts which end a week after the election

You've got 20 thousand employees, March to November on even years, and the rest of time you've got a dozen marketing people, a couple executives, and someone to make coffee for them.

Anyway I'm gonna go home and write my own voting software. It'll be open source and target the Apple II.
Of course, being an Apple II, you can only vote for Carter or Reagan.

Anyway, don't blame me, I voted for the doom slayer.
Vice President: Rick Astley
Party: MS-DOS
Campaign slogan: "You are huge! That means you have huge guts!"

Fun fact: the "swamp rabbit" that attacked Jimmy Carter, and possibly cost him the 1980 election?

That was Daisy, Doomguy's pet rabbit.

it turns out I don't need a voting machine, someone already did what I'd do (thanks to [@alanc](#) for alerting me to this)

<https://t.co/kj4Y58lebI>

Diebold DooM gameplay \U0001f918 pic.twitter.com/KMMFVdyEJW

— Hacker Fantastic \U0001f4e1 (@hackerfantastic) [March 3, 2020](#)