

## What is the Meltdown bua?

The Meltdown bug looks to gain access to where all your Wifi keys, passwords and other information is stored. These are kept under lock and key by the operating system. However during speculative execution, the CPU may cache some data and you can measure if something is there or not. If the CPU has the Meltdown bug then it can be forced to push usually protected data into the cache.

Multiple CPU architectures are vulnerable to Meltdown, including Apple, ARM and Intel.

A conversation between a Here's how a conversation should look between a computer program and the OS memory

Computer Program

Hey dude!

**Operating System Memory** 

Hey!?

How'd you get this number?

Mad skillz m8

Dood you got the code for the wifi?

Mate I don't know you, so no, on lockdown

Computer Program added CPU

CPU dude, hook a fella up with the wifi code

\*\*beep boop beep\*\*

What is wifi?

Computer Program left the conversation

Haha!

Haha! n00b

computer program and OS memory if the CPU has the Meltdown bug

Computer Program

Dude wifi code!

**Operating System Memory** 

Narp!

Computer Program added CPU Computer Program added Meltdown

> CPU m8, you got the code for the wifi

> > Ummmm....

Meltdown

Stage 1: Does it start with A...

..B..

..D..

Well thats a yes, on to stage 2....

Dude!?

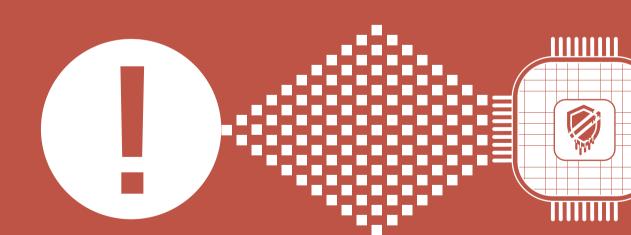
What? I didn't say it was?!

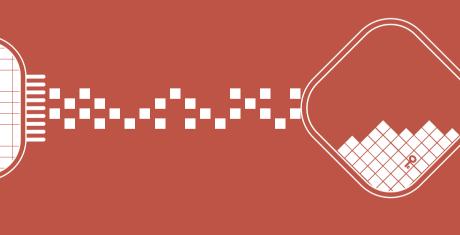
But you didn't say it wasn't

oops...

sorry #overwhelmed

Another way of looking at this is, that by bombarding the CPU, it gets too busy to think regularly so it has to push things to cache to make thinking room. While cached, this information could be open to interrogation from malicious sources via a side channel.









## Help is at hand

Patches are available to fix your devices, visit:

to see the latest news and trusted patches for Meltdown and Spectre

