



Meltdown basically works like this: 1. READ secret from forbidden address 2. Stash away secret before CPU detects wrongdoing 3. Retrieve secret

## MELTDOWN & SPECTRE FOR NORMAL PEOPLE

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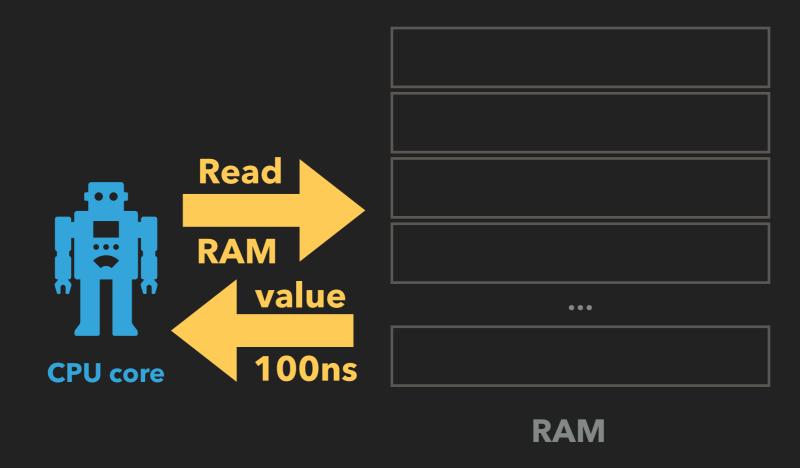






## MELTDOWN: STASHING AWAY - SIDECHANNEL





- Data is stored in RAM
- RAM is very slow
- $\blacktriangleright$  Reading one byte stalls the CPU for hundreds of  $\mu$ OPs

## **MELTDOWN**



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