

Here I am starting to collect a list of (mostly) papers that are relevant to [Project Open TEE](#), which is an effort to arrive at a TEEs with acceptable security models for “web3”.

Good for understanding TEEs in general:

- [SoK: Hardware-supported Trusted Execution Environments](#)
- the main thing I got out of this paper is a nice taxonomy of adversarial models and subproblems in TEE design
- they also provide a framework to think about different kinds of techniques employed to solve key subproblems.
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- [Keystone](#)
- really clean explanation of how a TEE works at a high level.
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- [SGX explained](#)
- really long and detailed. Better to go looking for something specific than read front to end
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TDX stuff:

- [TDX Demystified](#)
- Mostly useful to coming to understand how TEEs actually work.
- found the attestation section useful
- still had some questions on the hardware
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- [Google's TDX security review](#)
- lists a bunch of vulnerabilities found in an audit.
- provides more colour on where keys are stored in hardware
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Understanding specifics:

- [An Off-Chip Attack on Hardware Enclaves via the Memory Bus](#)
- good for understanding bus attacks
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- [Software-Based Off-Chip Memory Protection for RISC-V Trusted Execution Environments](#)
- useful for understanding how memory protection works
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(Physical) Side Channel Analysis (SCA):

- [Differential Power Analysis](#)
- [Automatic Extraction of Secrets from the Transistor Jungle using Laser-Assisted Side-Channel Attacks](#)

PUFs

- [A PUF Taxonomy](#)
- useful given that PUFs are likely the route to know that the manufacturer doesn't have a store of the hardware secrets somewhere
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Tamper Resistance

- [Hardware-Based Methods for Electronic Device Protection against Invasive and Non-Invasive Attacks](#)
- [Smart Anti-Tamper Conformal Coating System for Electronic Circuits](#)