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Trust, but Verify: Building the Foundations for Secure Software

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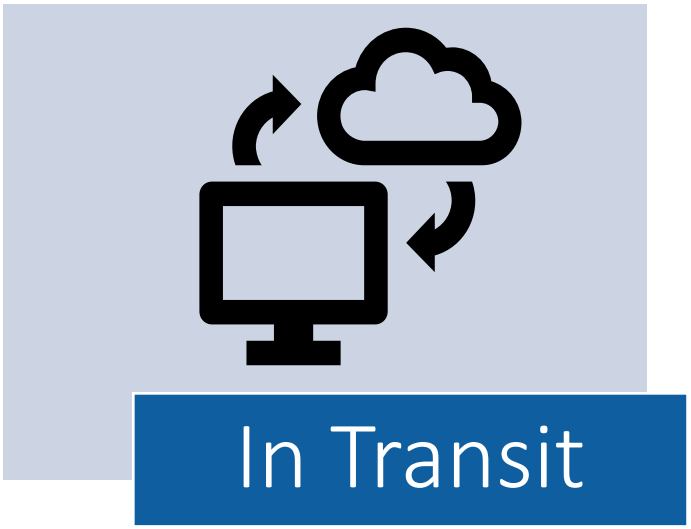
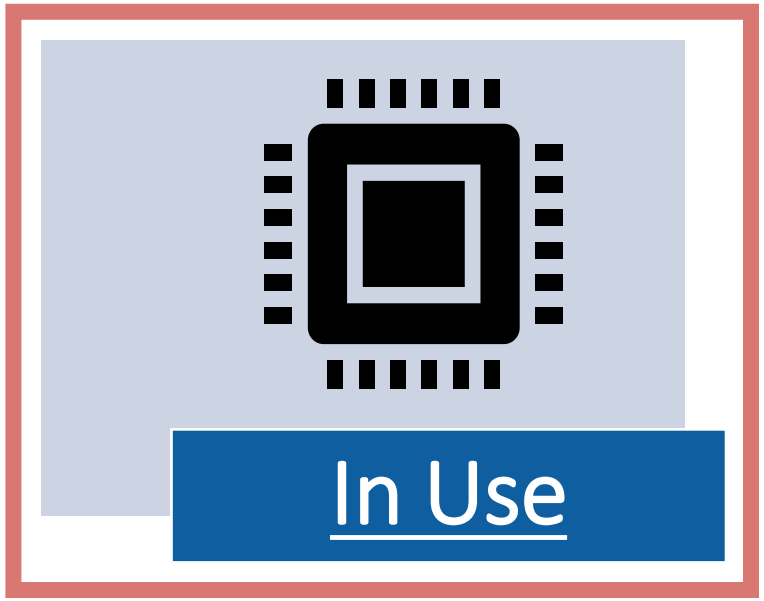
Devices make our life comfortable

Software makes our devices useful

But, software also puts us at risk

Attack surfaces for confidential data





Problem: Large Software Attack

Trust is good?

30 Million
Lines of Code
Without Proofs

Solution: Hardware-based Protection in the Cloud

Control is better!

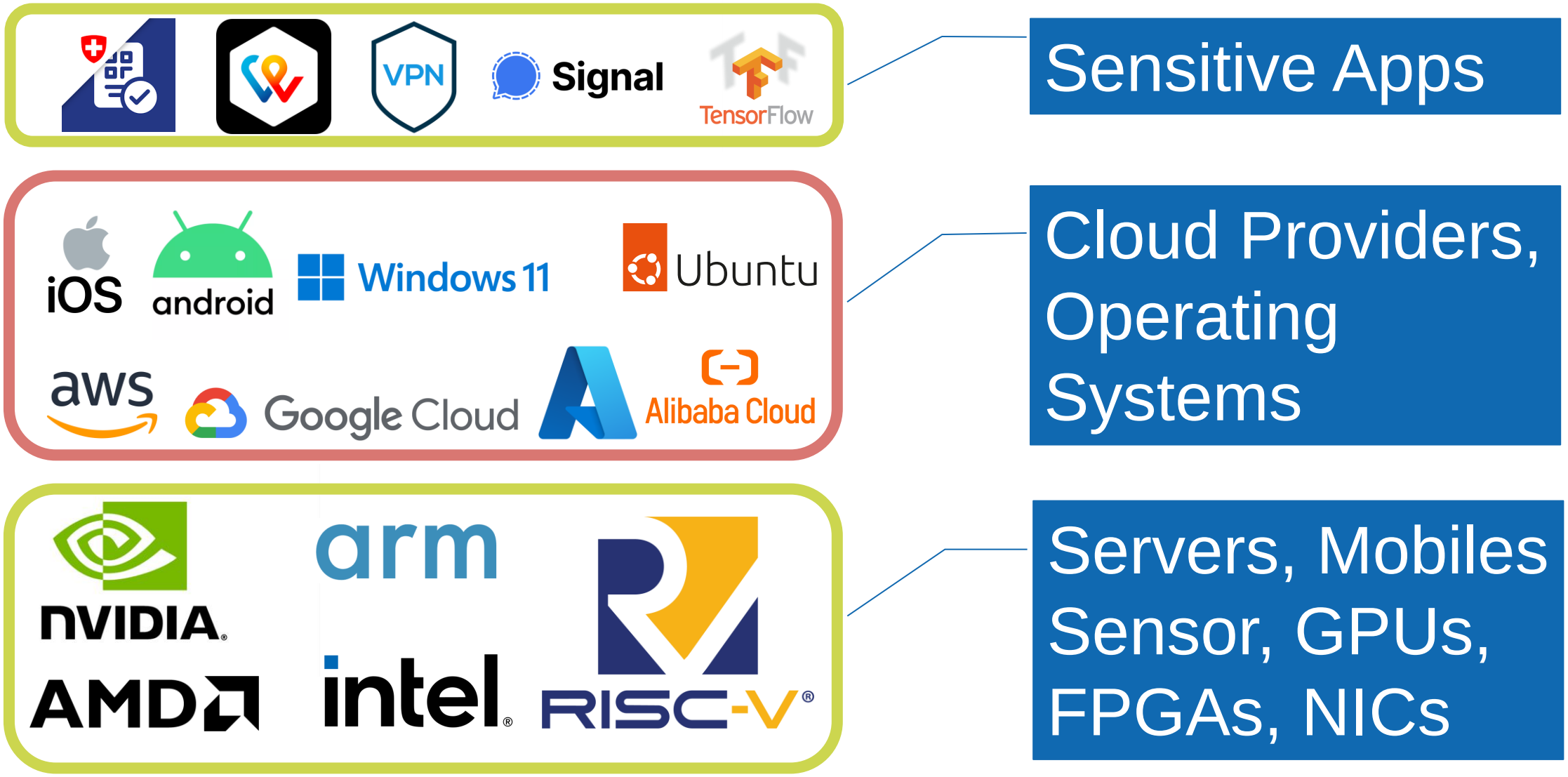
30 Thousand Lines of Code With Proofs

Solution: Hardware-based Protection on the Smartphone

Control is better!

30 Thousand Lines of Code With Proofs

Versatile Principle Applied to Real Systems



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Thank you for your attention!

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