

Engineering Cybersecurity

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Contents

Cybersecurity challenges in embedded systems:

- Architecture complexity is the enemy
- There is no simple solution to securing assets
- There are not significant technologies to defend against sophisticated attacks
- Embedded systems have complex trade space between space, weight, power, and computational requirements

Attack difficulties:

- Speed of attacks
- Greater sophistication of attacks
- Simplicity of attack tools
- Attackers can detect vulnerabilities more quickly and more readily exploit these vulnerabilities
- Delays in patching hardware and software products
- Most attacks are now distributed rather than coming from only one source
- User confusion