



IOT - Embedded Security

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Innovation follows a predictable trend - Functionality, Stability, Reliability, and then Security. Despite naysayers and criticism, mainstream computing has reached the point where security has become a consumer demand and product requirement. However, we have to acknowledge that the world of embedded and IOT devices isn't nearly as mature, and product security is still a luxury. First, we'll look back at some history of hardware and software development to identify how we allocated our spare cycles over time to show how we got to the point in time where mainstream computing could support consumer demand for security. Then, I'll take a look at the current state of embedded and IOT devices. I'll show a few indicators of where I think we are on the path to security - and why it's going to be a while before we get there. For context, I'll present a few common attacks that work great on embedded devices but hopefully won't in the near future. Finally, I'll wrap up with a few ideas about how to design embedded devices for security and how to estimate the value of those security investments.