**Case Study: Smart Home and Building Technologies Leader Upgrades Cybersecurity Across Product Lines**

**Challenge**

This manufacturer of smart home and building technologies needed to upgrade the security across a broad set of product lines including surveillance cameras, thermostats, HVAC systems, fire and safety systems and handheld scanners. Each of these products are typically installed or used in environments that are difficult to physically secure. The company was concerned about hackers being able to physically compromise a device and install malware that would give them control of the device or access to private data.

Over the years, the company had adopted a variety of approaches to device security across their product portfolio. In some cases, devices used single-factor password authentication only. In other cases, devices used open source SSL libraries to encrypt the data communications, leaving the device itself vulnerable to physical attack. The company markets its products to businesses of all sizes from small businesses to Fortune 500 companies and governments. It needed a strong solution that could support the NIST FIPS 140-2 cybersecurity standard.

**Mocana Solution**

This manufacturer selected Mocana’s IoT Security Platform, an embedded security software solution optimized for use in industrial control and IoT devices. The software is designed to compile into the firmware of the device. The Mocana solution provides the manufacturer with:

- FIPS 140-2 Level 1 validated crypto engine that was free of open source security software
- Support for secure SSL, SSH, multicast and IPsec communications
- Support for extended authentication and multi-factor authentication
- Ability to support digital identities and certificate management using X.509 certificates.

**Impact**

The global manufacturer was able to harden their devices, starting first with their line of thermostats. It then deployed Mocana across their other product lines for HVAC, fire and safety, scanners and finally surveillance cameras. By standardizing on Mocana across their product lines and leveraging an enterprise licensing model, the company was able to make it easy for cyber architects and product managers to implement strong security in a standard fashion across all products.

**About the Smart Home and Buildings Technologies Manufacturer**

This global manufacturer is a provider of industrial, commercial and home products and services. With more than $30 billion in revenue and 100,000 employees, the company manufactures aerospace systems, industrial controllers and heavy machinery, commercial safety systems, and consumer technologies. The company provides a broad set of solutions for enterprises, industrial companies, governments, and consumers.