Cybersecurity Services

The hyperscale growth in the number of connected endpoints, massive amount of streaming data, related mobile and web applications along with cloud exposure increases the attack surface and potential vulnerabilities by an order of magnitude. Additionally, major zero-day vulnerabilities growth in cyber-attacks, DDoS attacks along with tightening security regulations across global markets have underlined the need for end to end cybersecurity strategy and sound implementation approach.

eInfochips helps companies design, develop and manage secure connected products across device, connectivity and application layers using diverse security platform services and tool stacks. We also offer web and mobile application security testing along with enterprise cybersecurity services. Our expertise spans across strategic assessments and transformations, turnkey implementations, and managed security operations.

eInfochips Cybersecurity Services

Security Assessment

- Security Scoping & Requirement Assessment
- Security Scoping & Requirement Assessment
- Cybersecurity Assessment Framework

Security by Design

- Secure Architecture
- Threat Modelling
- Defense in Depth,
- Secure Design Best Practices Applicability & Review

Security Implementation & Testing

- Security Environment, Secure coding, Code Reviews
- Software Composition Analysis, SAST, DAST
- Security Requirements Testing
- Vulnerability Assessment & Penetration Testing

Security Monitoring & Response

- Threat Investigation & Analysis
- Incident & Vulnerability Management
- L1/L2/L3 support for SOC monitoring
- EDR end to end management
- Security Information & Event Management (SIEM) implementation
- DevSecOps
- Governance & Risk Compliance

Devices & Firmware
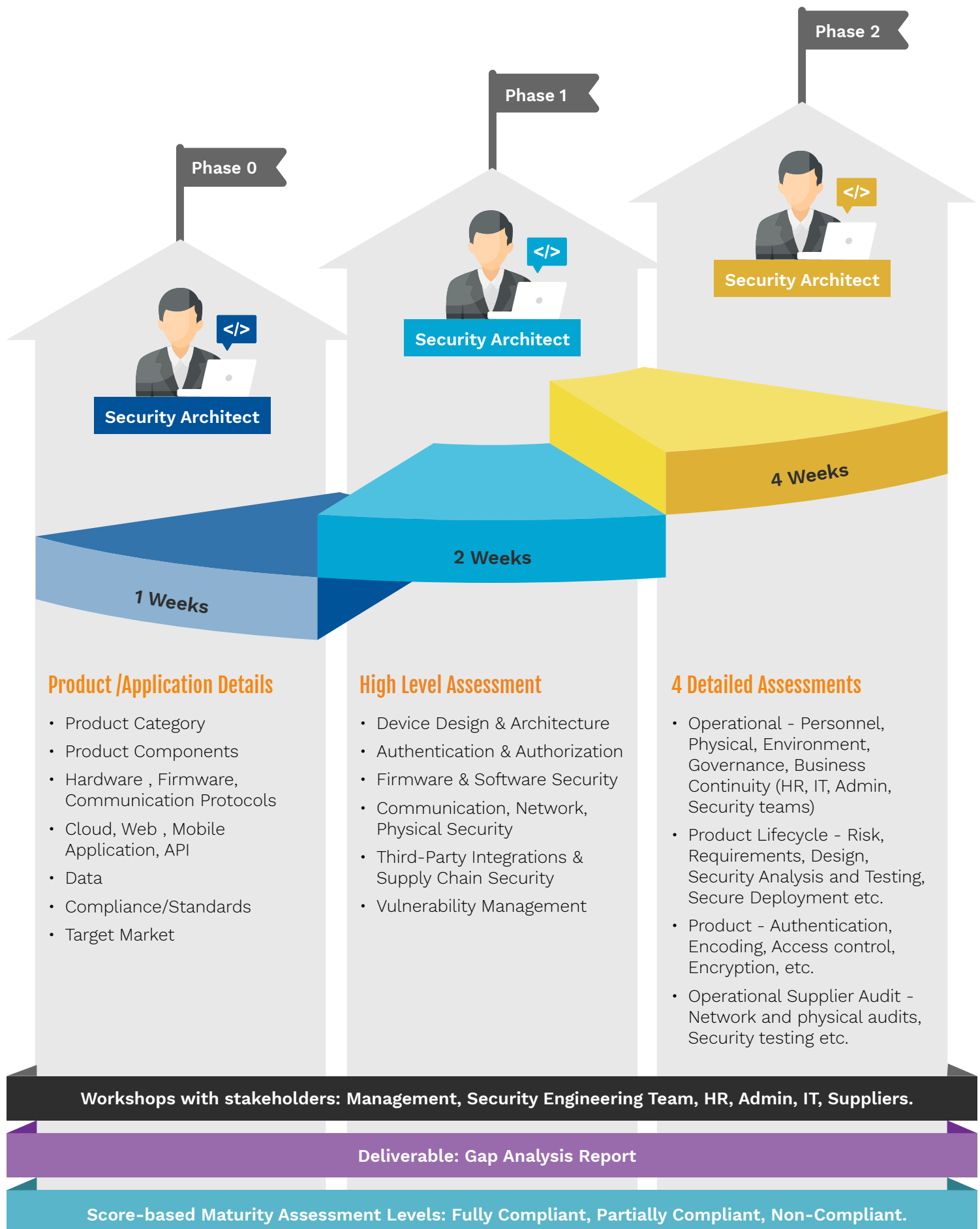
Applications (Mobile & Web)

Cloud

Network

Cybersecurity Assessment Framework

Phase 0

Security Architect

1 Weeks

Phase 1

Security Architect

2 Weeks

Phase 2

Security Architect

4 Weeks

Product /Application Details

- Product Category
- Product Components
- Hardware , Firmware, Communication Protocols
- Cloud, Web , Mobile Application, API
- Data
- Compliance/Standards
- Target Market

High Level Assessment

- Device Design & Architecture
- Authentication & Authorization
- Firmware & Software Security
- Communication, Network, Physical Security
- Third-Party Integrations & Supply Chain Security
- Vulnerability Management

4 Detailed Assessments

- Operational - Personnel, Physical, Environment, Governance, Business Continuity (HR, IT, Admin, Security teams)
- Product Lifecycle - Risk, Requirements, Design, Security Analysis and Testing, Secure Deployment etc.
- Product - Authentication, Encoding, Access control, Encryption, etc.
- Operational Supplier Audit - Network and physical audits, Security testing etc.

Workshops with stakeholders: Management, Security Engineering Team, HR, Admin, IT, Suppliers.

Deliverable: Gap Analysis Report

Score-based Maturity Assessment Levels: Fully Compliant, Partially Compliant, Non-Compliant.

*Timeline may vary based on company size, scoping/requirement/responses

Tools & Technology Expertise

Web/Mobile Penetration Testing

acunetix · FRIDA · MobSF · OWASP Zed Attack Proxy · BURPSUITE · drozer · appknox · QARH Quick Android Review Kit

Network VAPT

OpenVAS Open Vulnerability Assessment Scanner · nessus Professional · Qualys · NMAP.ORG

Threat Modelling

foreseeti · RSA · metricstream · OWASP · exabeam

Web Vulnerability Assessment

w3af Web Application Attack and Audit Framework · WAS · tenable · netsparker

Device Penetration Testing

metasploit · SHODAN · HomePWN

Static Code Analysis

NowSecure · FORTIFY An HP Company · VERACODE · sonarqube

Certified Ethical Hacker

Azure Certified Admin

Offensive Security Certified Professional

Certified Information Security Manager (CISM)

AWS Solution Architect and Security Specialist

Licensed Penetration Tester – one of the 100 professionals in the world
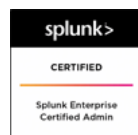
Splunk Certified Enterprise Admin

Certified Information Systems Auditor (CISA)

GDPR – Data Protection Officer (DPO)

Certified in Risk and Information Systems Control (CRISC)

Leading Industrial Automation Company

- Defined security requirements, assessed security risk and built secure product design for IP camera
- Conducted threat modelling, static code analysis, code review, firmware binary scans , vulnerability testing , secure boot, crypto authentication
- Enabled ISA certification, UL CAP (cybersecurity assurance program)
- Designed 'Secure by default' cyber secure architecture

Tools and technologies:

Fortune 500 Industrial, Commercial & Consumer Markets Provider

- NIC module security implementation, IEC62443 compliance, certification
- Planning, design and implementation for
  - IEC 62443-4-1 – secure product development process and
  - IEC 62443-4-2 – technical controls and security requirements for IACS components

Leading Healthcare & Pharmaceutical Company

- Mobile app security testing for native iOS, Android apps
- STRIDE based threat modelling, MobSF based SAST/ DAST, cryptography verification
- Artefact scope - local data storage, network, authentication & authorization, platform IPC
- Ensured OWASP compliance

Tools and technologies:

US Based Company Providing Innovative Medical Products

- AWS IoT-based smart surgical display platform, offering real-time access to clinical references and cloud-based data streams
- Cybersecurity testing, threat modeling, cloud security, regulatory and compliance support
- Ensure compliance to FDA 510(k) and ISO 14971
- Secure cloud configurations through regular checks and adherence to best practices

Tools and technologies:

Microsoft threat modeling tool   AWS Cloud watch   AWS IAM   Jira   AWS IoT Core

UK-based Automotive OEM

- Developed cybersecurity controls by implementing security mechanisms
- Integrated WolfSSL library/stack for cryptographic functionalities & implemented secured debug port using MEM Tool
- Created cybersecurity plan, TARA for cybersecurity software development activities
- Work products developed in compliance with ISO 21434 cybersecurity standard

Europe-based Leading Tier 1 Supplier

- Camera ECU for BMW based on Infineon AURIX TC37x and vector AUTOSAR stack
- AUTOSAR, Bootloader, HSM, software development & testing
- Security concept development, penetration testing, secure storage concept and implementation, certificate and key management, manufacturing security implementation
- AURIX TriCore to/from HSM custom secure IPC

US-based Security Products & Solutions Provider

- Managing the SOC and SIEM and integrating new log sources
- Container level cybersecurity for Docker images and Kubernetes containers in AWS EKS
- Handling security incidents efficiently aligning to MITRE ATT&CK® framework
- DevOps to DevSecOps – Jenkins CI/CD pipeline integrated with Qualys

Tools and technologies:

Qualys. VERACODE protecode MITRE

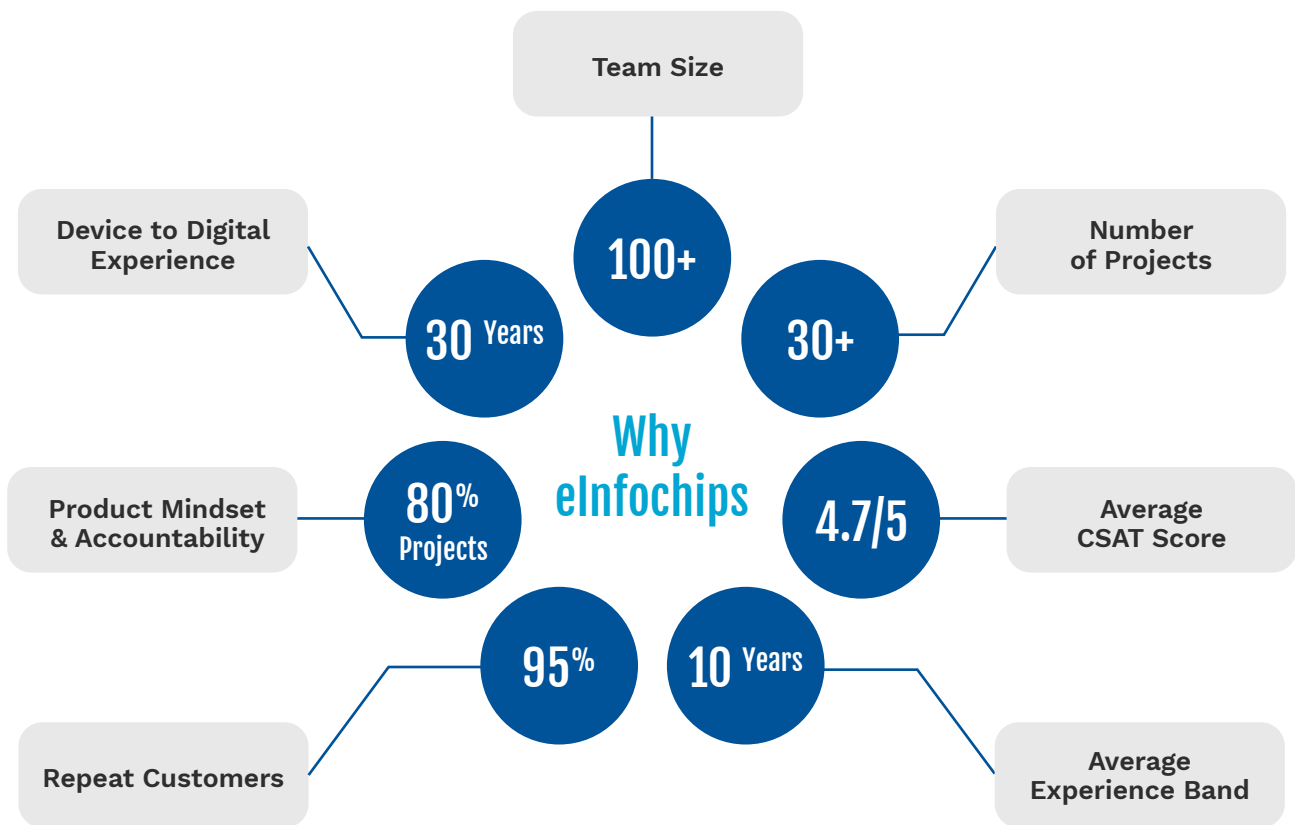AWS Advanced Shield Amazon EKS

A Leading US-based Robot Vacuum Company

- Reproduce and report issues in eInfochips cybersecurity lab reported using bugcrowd - crowdsourced security platform
- Vulnerability management – firmware, web app, mobile (Android & iOS), cloud security
- Threat modeling for AWS based web platform used for remote management of robots
- Resolution for 200+ critical/high vulnerabilities with secure component analysis

Tools and technologies:

BLACKDUCK NowSecure BURPSUITE WIZ LACEWORK

Why eInfochips

- **Team Size** — 100+
- **Number of Projects** — 30+
- **Average CSAT Score** — 4.7/5
- **Average Experience Band** — 10 Years
- **Repeat Customers** — 95%
- **Product Mindset & Accountability** — 80% Projects
- **Device to Digital Experience** — 30 Years

Core Strengths

Single Point of Ownership
End to end edge to cloud cybersecurity provider

Cybersecurity CoE
One stop shop including infra/resource /program management with a focus on business outcomes

Core Competency and DNA
in building OT systems and related cybersecurity posture

Cybersecurity Labs
with Dedicated Infrastructure for VAPT

Advanced Level Partnerships
with Qualcomm, Nvidia, NXP focusing on edge cybersecurity

Assessment Frameworks
Overall security assessment framework, detailed Compliance assessment frameworks for CRA, RED 3, IEC 62443, ISO 21434 etc.

About eInfochips

eInfochips, an Arrow Electronics company, is a leading provider of digital transformation and product engineering services. eInfochips accelerates time to market for its customers with its expertise in the areas of IoT, AI/ML, security, sensors, wireless, cloud, and power. eInfochips has been recognized as a leader in Engineering and R&D services by many top analysts and industry bodies, including Gartner, Zinnov, ISG, IDC, NASSCOM, and others.

Visit us at

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