



Qualcomm Haven™ Security Platform

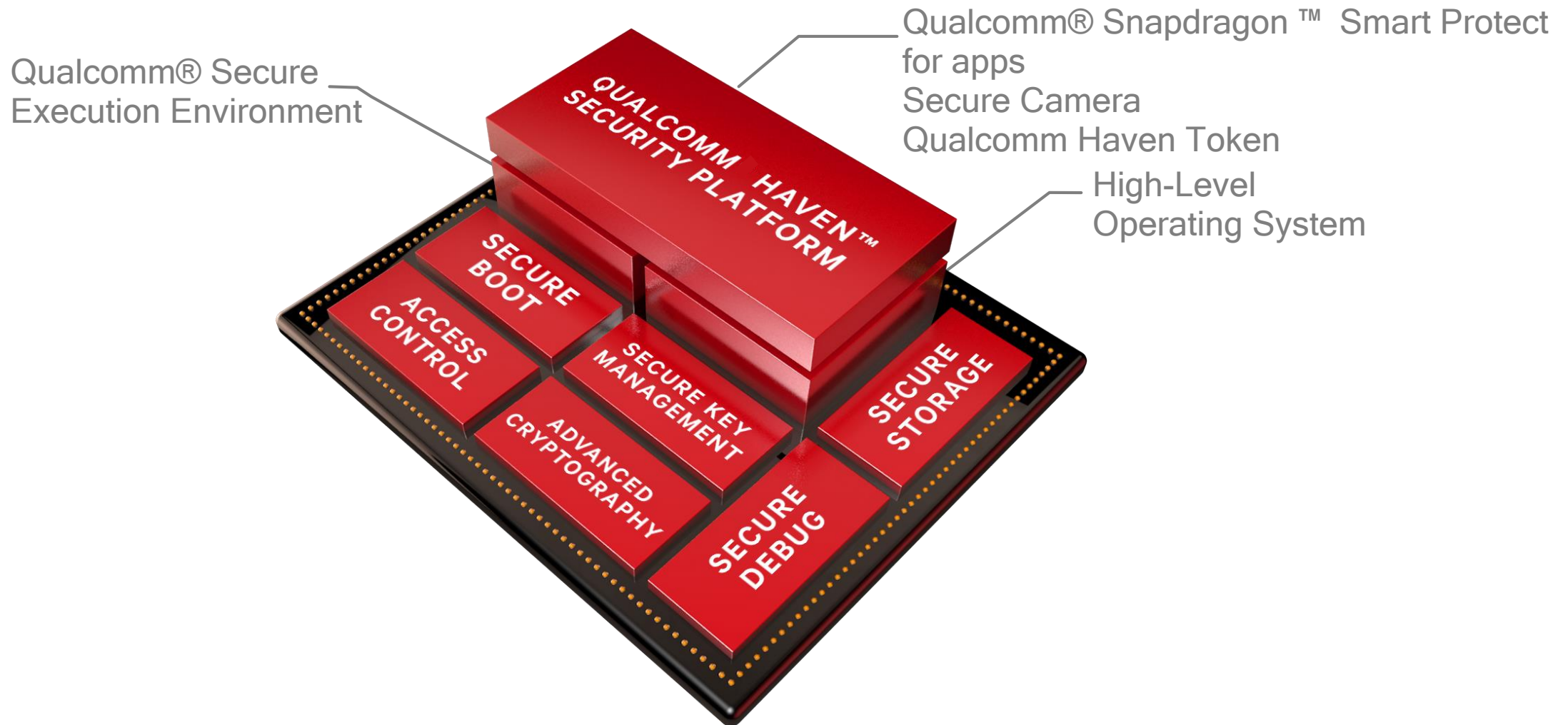
Hardware-based protection, user authentication,
and device attestation

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Qualcomm Haven Security Platform

Hardware-based protection, user authentication & device attestation



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User Authentication

1 Pin and Fingerprint

Secure UI
Secure Fingerprint



2 Eye based

Secure Camera



Premium Security

Device Attestation

1 Software Authentication

Secure Boot



2 Malware Detection

Smart Protect



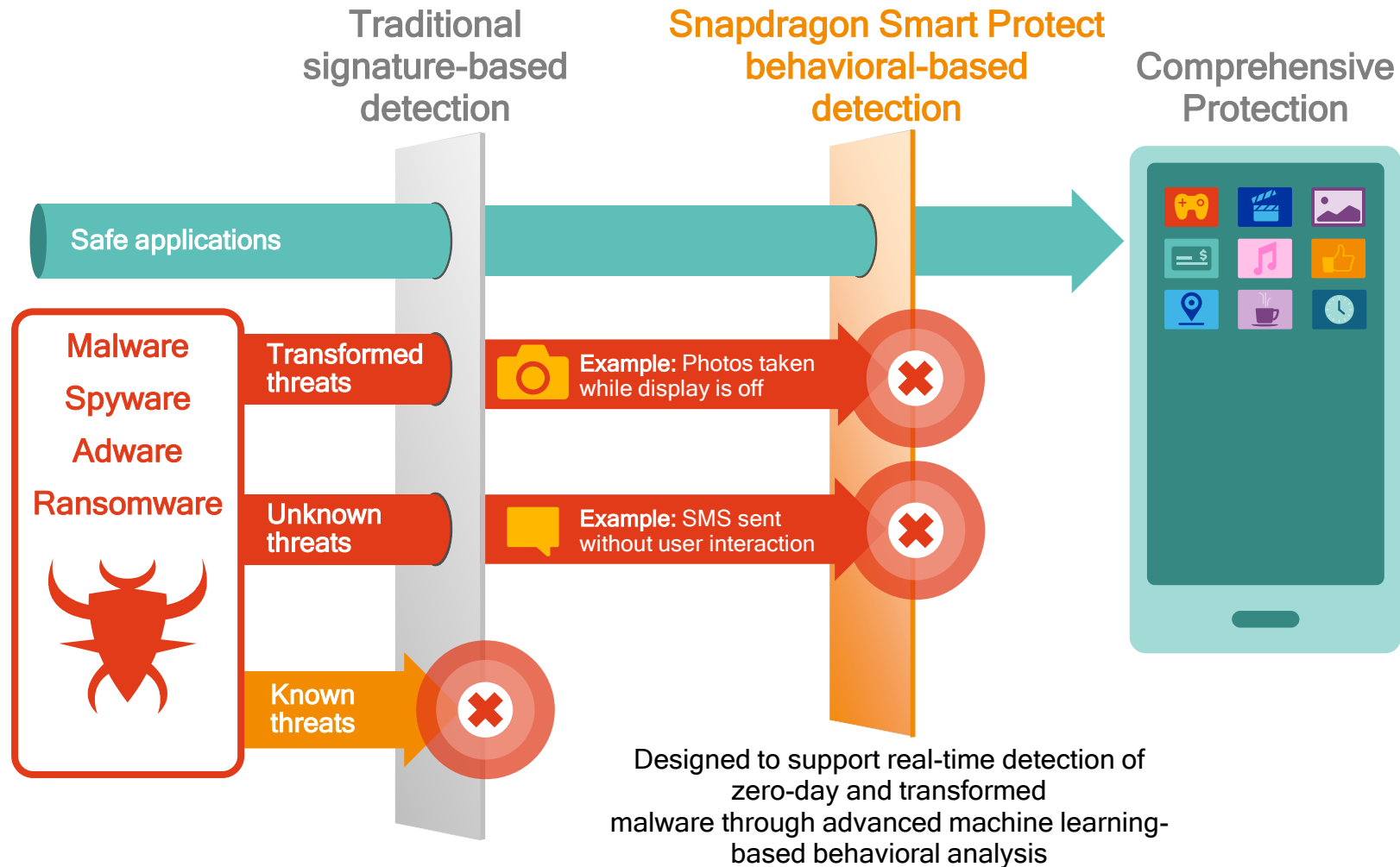
3 Hardware Authentication

Hardware Token

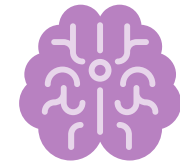


Snapdragon Smart Protect

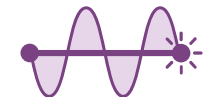
On-device intelligent threat detection in virtually real-time



Privacy protection

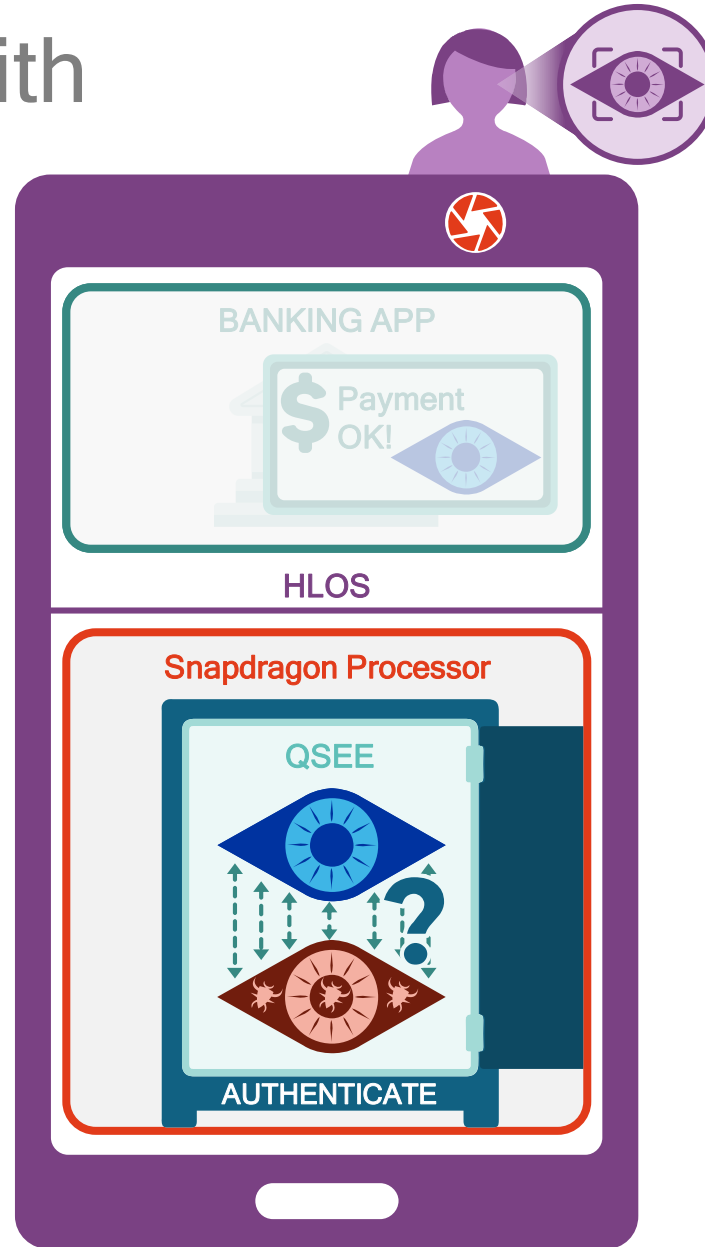
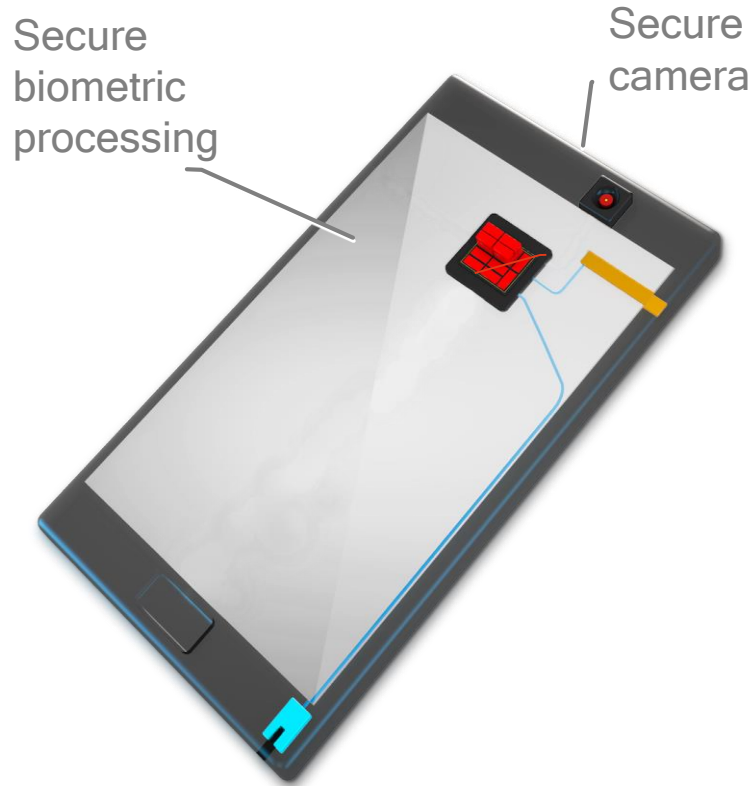


Superior detection of zero-day and transformational malware



Power efficiency (optimized for mobile)

Eye authentication with Secure Camera



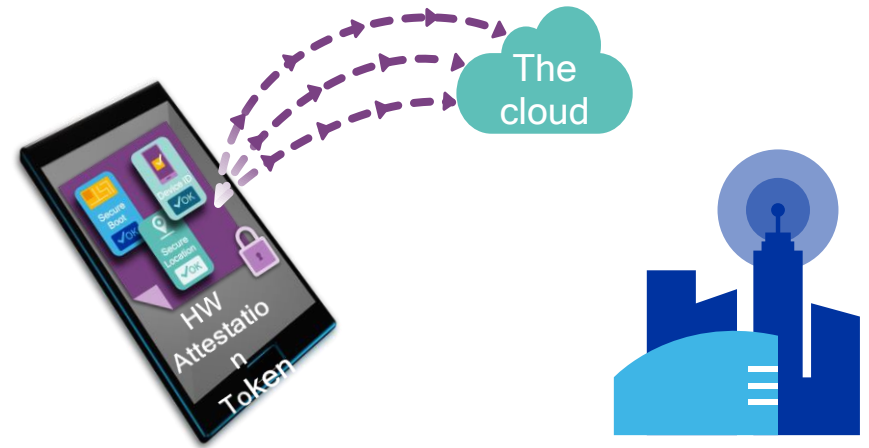
 **1** Eye Biometric Capture

 **2** Eye Biometric Processing and Storage

 **3** Eye Biometric Display

Hardware Token

Secure hardware-based device attestation



User-based Authentication



Password goes from user through device to backend



Relying Party / Payment Server

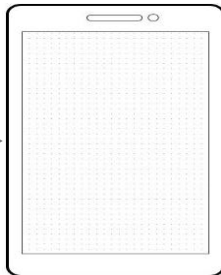
- Password database
- Simple comparison

Haven-based Authentication



User authenticates to device

- Biometrics like fingerprint or iris
- PIN



Device authenticates to backend

- Uses strong key material
- Attestation: preconfigured keys in the device

Device signals to risk engine

- Unique device identifiers
- Unique context data
- Malware detection

Relying Party / Payment Server

- Key database
 - Public keys (e.g. FIDO)
- Check device attestation
- Risk engine
 - Heuristic / algorithmic processing of risk signals

Qualcomm Haven platform provides a comprehensive security solution for user authentication and device attestation

Security solutions for your data and your device.



Thank you

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