

Can I use any chip in my electronic Passport?



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ID4Africa 2019



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Infineon Corporate Presentation

2

Evolution of Border Control and Travel Document

3

The pillars of a chip

4

Wrap-up

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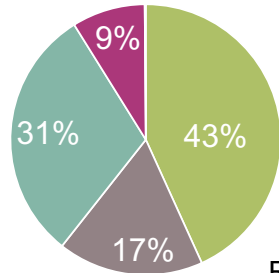
Infineon at a glance

Business Segments

Digital Security Solutions (DSS)

Power Management & Multi-market (PMM)

Industrial Power Control (IPC)

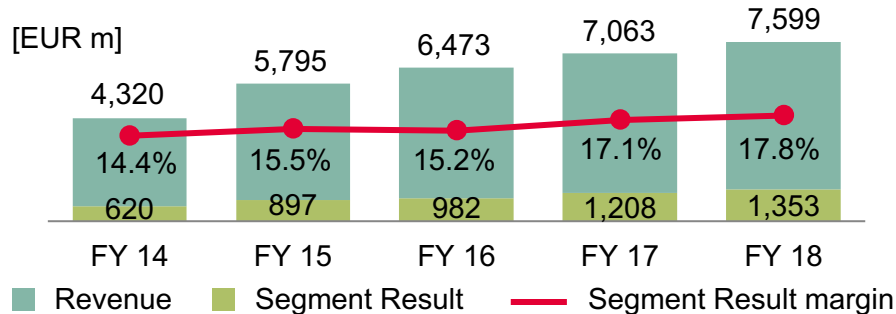


Automotive (ATV)

Revenue FY 2018

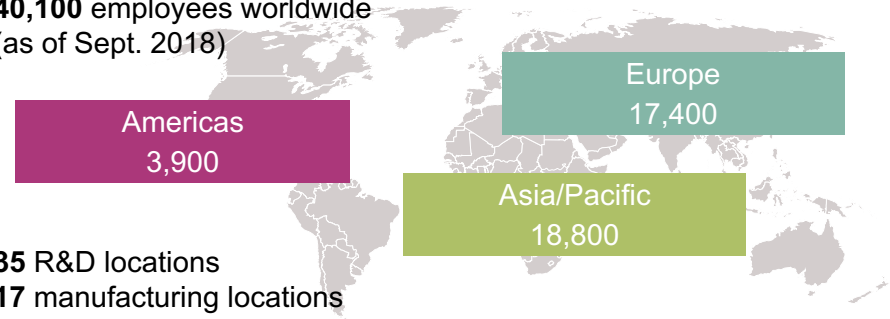
Financials

Further information in the [Annual Report 2018](#)



Employees

40,100 employees worldwide (as of Sept. 2018)



35 R&D locations
17 manufacturing locations

Market Position

Automotive



2

Strategy Analytics, April 2019

Power



1

IHS Markit, Technology Group, September 2018

Security ICs



1

ABI Research, October 2018

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Border Control and Travel Document over time

2000



2020



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Main Pillars for Chip Card Solutions



Interoperability and Robustness

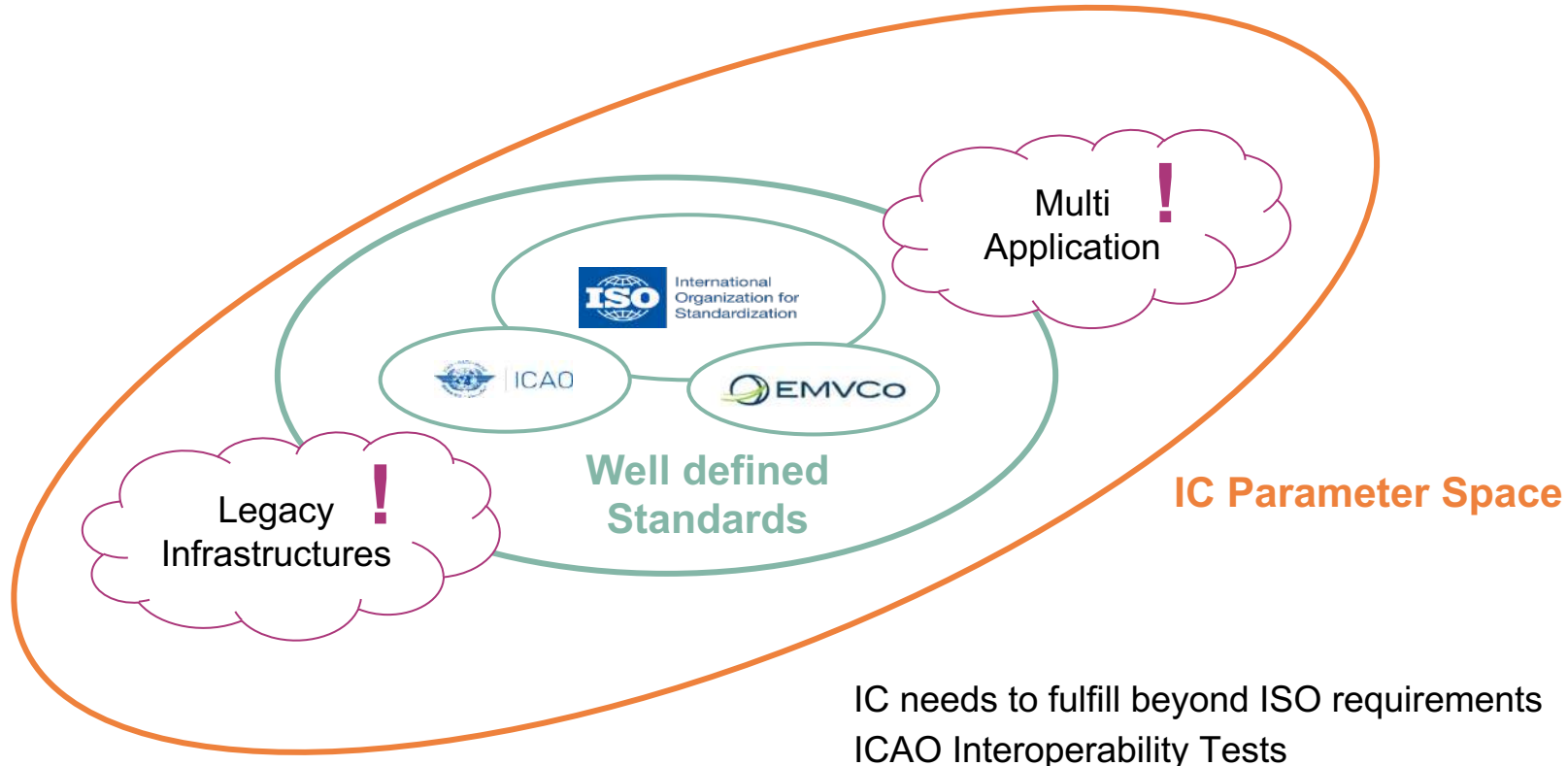


Performance

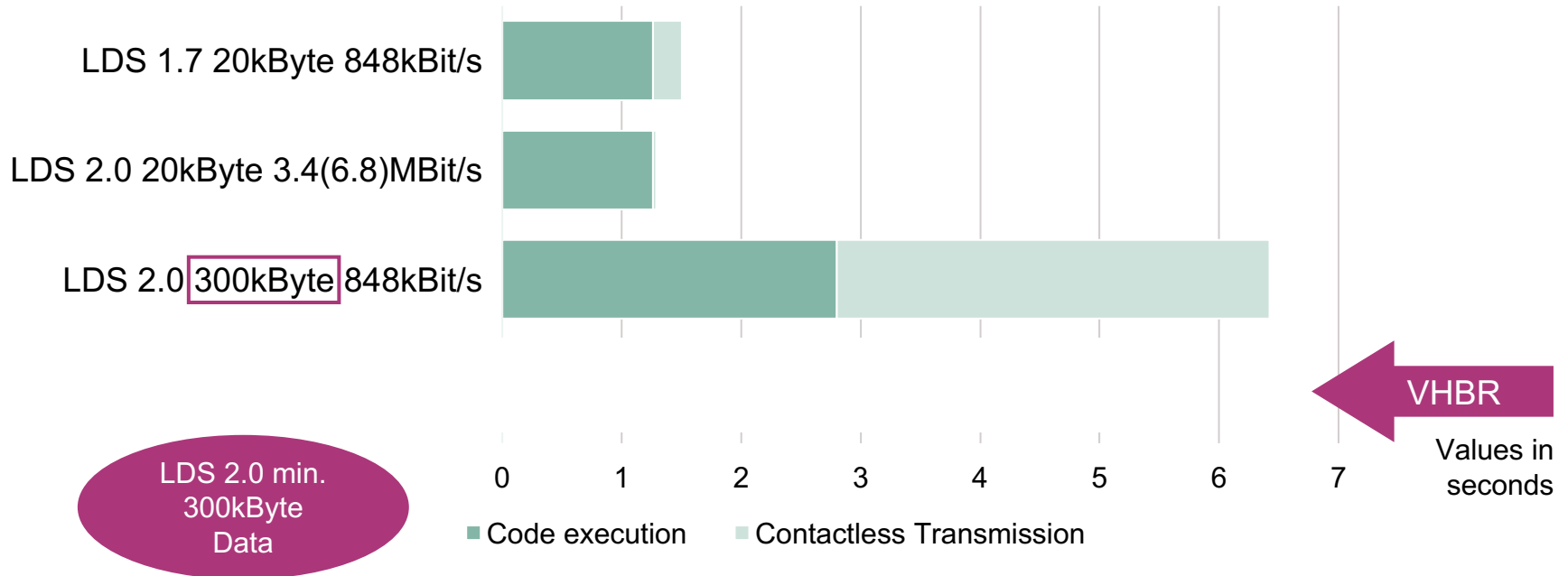


Security

Is Standard Compliancy sufficient?

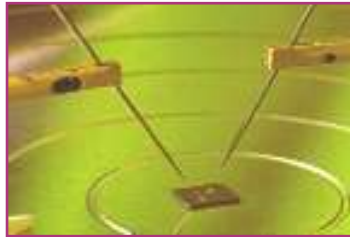


Visualization of read-out performance with and without VHBR

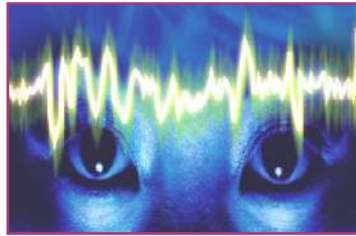


Security level based on document lifetime

Known Attacks



Probing / Forcing
Re-Engineering



Side Channel



Fault
Attacks



Brute force
PQC

Time

Common Criteria Certification & Conformity



- › Most electronic documents are CC certified
- › **Hardware:** always CC certified, usual EAL 6+
- › **OS:** mostly certified, usual EAL 5+
- › **Applets:** often CC certified, usual EAL 4+ / EAL 5+



- › Conformity Test
- › Silver Dataset
- › 2006-2009 Timeframe

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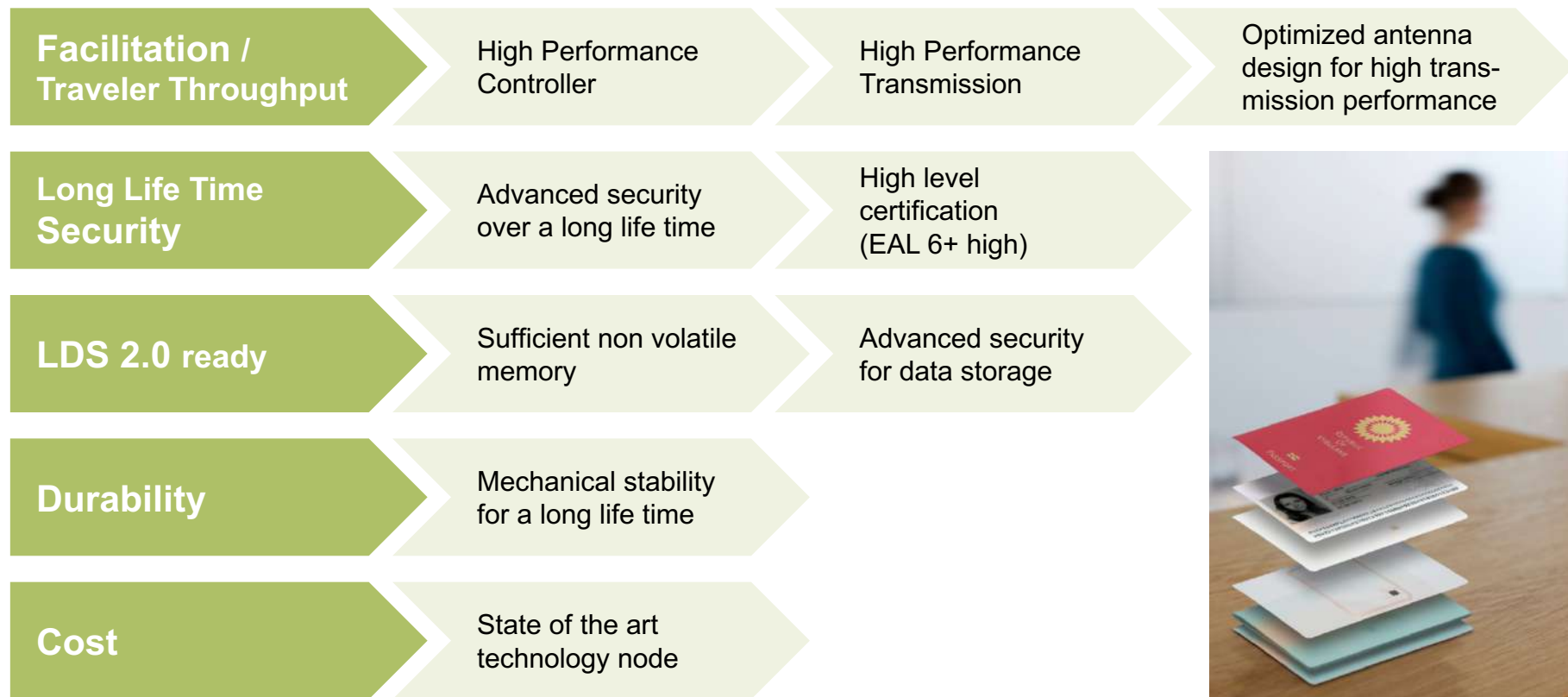
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"Best in Class" requirements for contactless Chips in ePassports





Part of your life. Part of tomorrow.