

英飞凌OPTIGA™ Trust 产品应用案例---设备认证



Chip Card & Security Application Portfolio

Smart Cards



Payment



National eID



SIM



ePassport



Multi-application



eDriver's License



Transport Ticketing



eHealth Card



Access control

Embedded Security



Trusted Computing



Connected Car



Industry 4.0



Authentication



ICT*



Smart Home



eSIM



Mobile Payment



Mobile Ticketing



Entertainment



Mobile ID

IoT Security

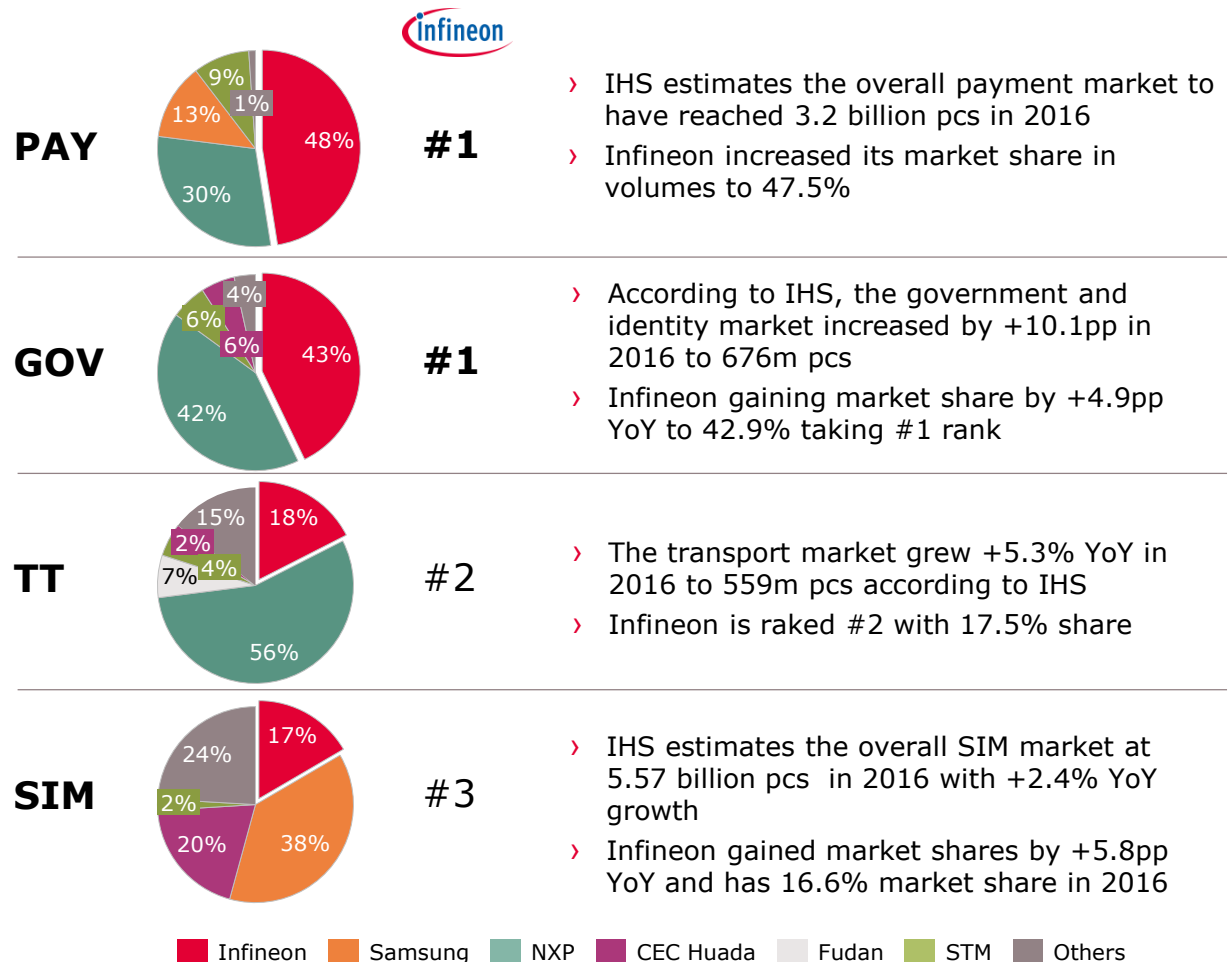
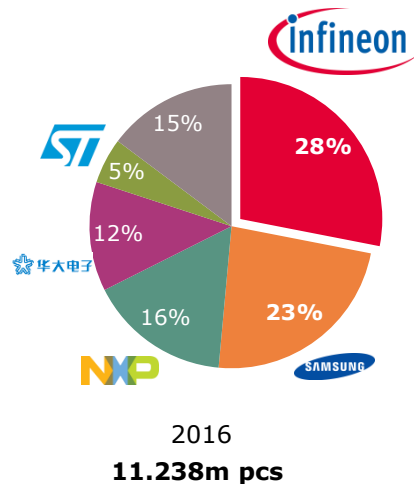
Mobile Security

*ICT = Information & Communication Technology

As per IHS, IFX holds the #1 position in volume market shares with 48% in Payment and 43% in Government

IHS Market Share Estimation for the Full Year 2016 – [m pcs]

Total Smart Card ICs
(MCUs + Memories)



Source: Based on or includes content supplied by IHS Markit, Technology Group, Smart Cards Semiconductors Report – 2016, July 2017

IP Protection & Device Authentication/ IP保护和设备认证

OPTIGA™ Trust应用和出货统计

Application and shipment



笔记本电池防伪
Laptop Battery
authentication

全球最大PC厂
World #1 PC Vendor



打印机墨盒认证防伪
Cartridge authentication

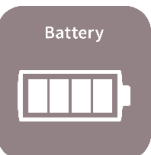
国际大厂
Major OEM High Volume Production



充电器/蓝牙耳机
Charger/ BT headset
authentication

全球著名手机品牌
Tier-1 Mobile Phone OEM

数码相机电池防伪
Digital Camera Battery
authentication



日系大品牌
Japan Famous Brand

出货量已经超过30亿颗！！
> 3 Billion Pcs shipment



工控板卡防抄板
Industry Control Board

Since 2012



绣花机主控板防抄
Sewing machine IP
Protection

国内第一品牌
China #1 sewing machine vendor



无人机电池认证 Drone battery authentication
World #1



净水器滤芯
Water Purifier Filter

品牌大厂 Tier-1 Vendor

OPTIGA™ Family



	OPTIGA™ Trust B	OPTIGA™ Trust E	OPTIGA™ Trust M	OPTIGA™ Trust X	OPTIGA™ Trust P	OPTIGA™ TPM
Security Level	Basic	CC EAL 6+	CC EAL 6+ *	CC EAL 6+ *	CC EAL 5+ *	CC EAL 4+
Functionality	Authentication	Authentication	Connected device security - Toolbox based	Connected device security	Programmable	TCG standard
NVM (Data)	64 Byte	3 kByte	10 kByte	10 kByte	150 kByte **	6 kByte
Cryptography Private key stored in secure HW	ECC131	ECC256	ECC256 RSA2K	ECC256	ECC521 RSA2K	ECC256 RSA2K
Type of Host System	MCU without OS / proprietary OS / RTOS					
			Embedded Linux			
						Windows / Linux
Interface	SWI	I2C	I2C	I2C	UART	I2C, SPI, LPC
System integration	✓	✓	✓	✓	✓	Platform vendor

✓ Done by IFX

✓ Customer Implementation, support by IFX

* Based on certified HW

** Code & Data

Security and Complexity



Part of your life. Part of tomorrow.

