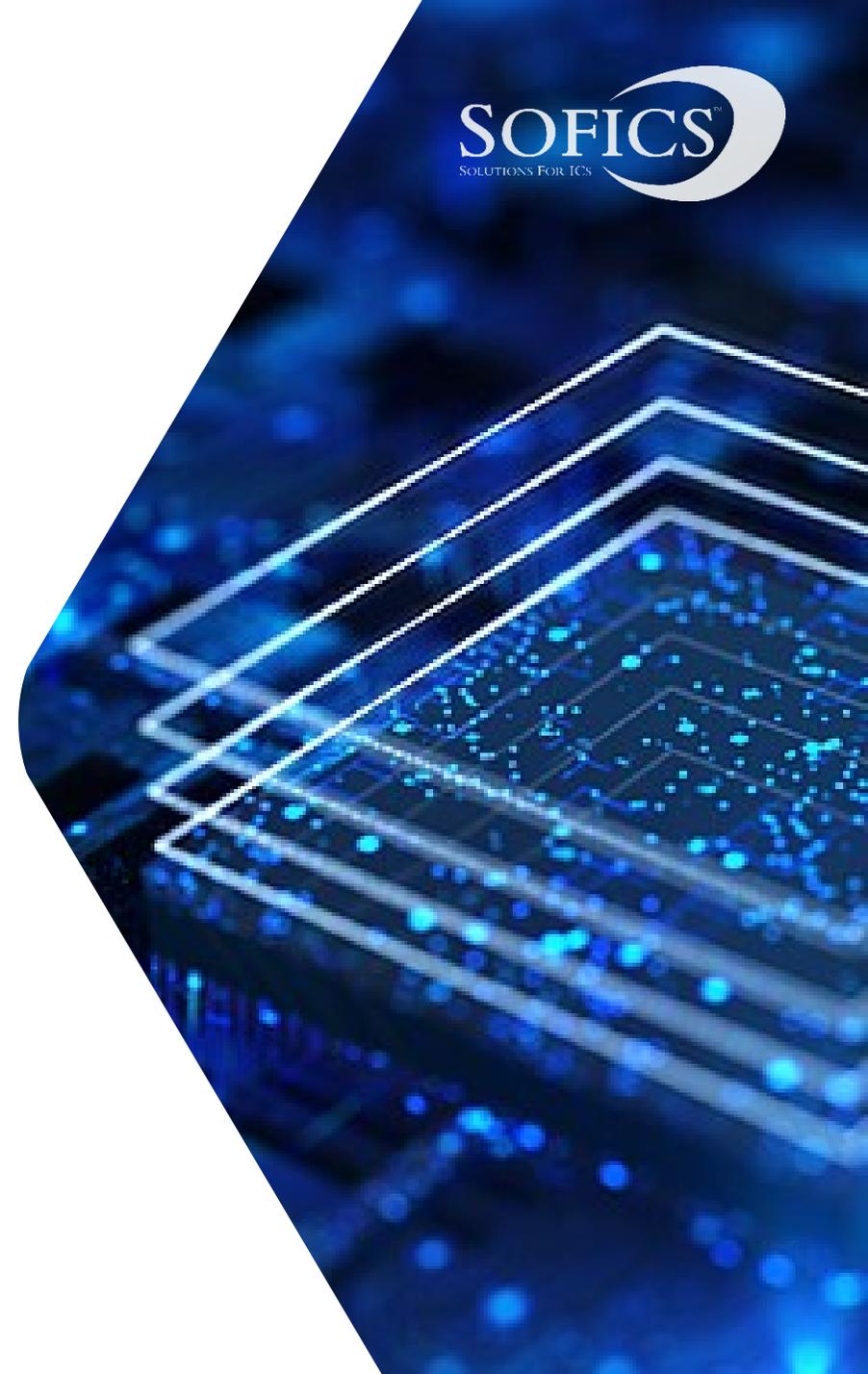


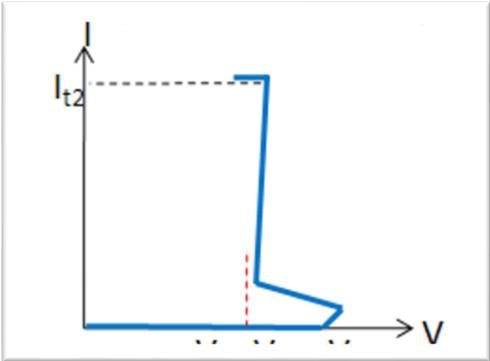
**FOUNDRY
INDEPENDENT
IP PROVIDER**

SOFICS
SOLUTIONS FOR IC'S

SOFICS – SEPTEMBER 2023



Sofics IP: on-chip ESD protection, I/O circuits and PHYs

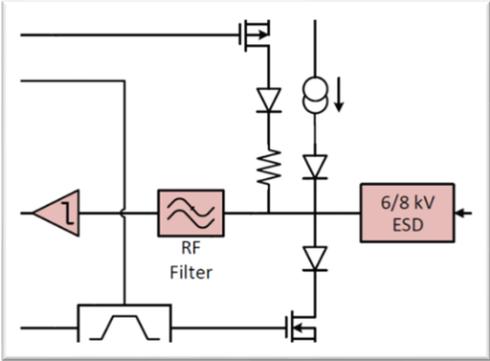
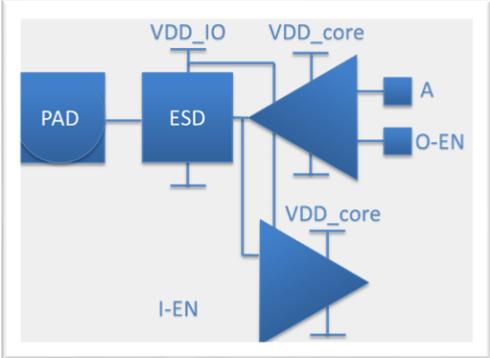


ESD clamps

CMOS, BCD, SOI, FinFET, ...

I/O circuits

beyond the foundry
GPIO library



PHY

automotive LIN
transceiver

Sofics IP: Solutions for ICs

20+

years in
business

70+

patents

100+

customers

5000+

IC designs
use Sofics IP

5M+

wafers with
Sofics IP

2B+

ICs rely on
Sofics IP

All kinds

of applications

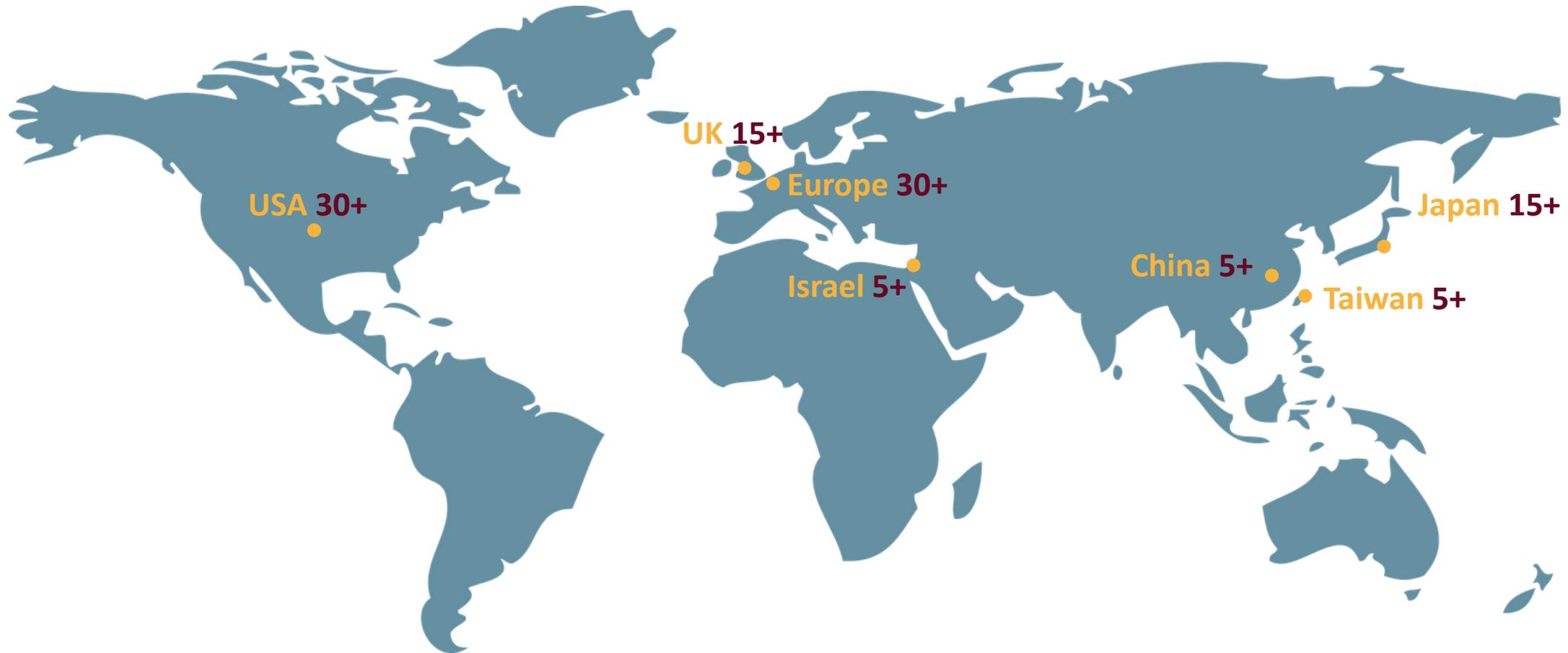
10+

foundries
covered

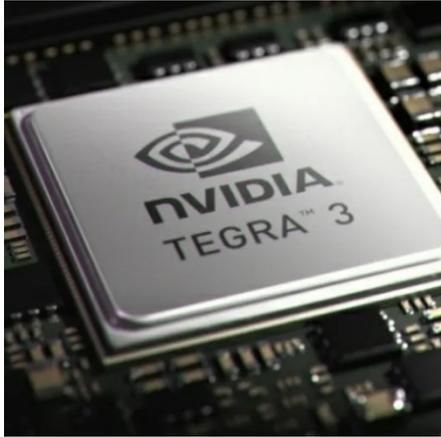
50+

processes
0.5um – 3nm

100+ customers globally



Customer success example



Nvidia – Icera

Icera 410 LTE multimode data modem
TSMC 40nm and 28nm

Pete Hughes, Vice President, Mobile, NVIDIA

“A solution that works at high voltages and provides good ESD protection. This enables us to handle off-chip interfaces of up to 3.6 volts, even for non-standard multimedia interfaces”

Customer success example



Graphcore Colossus

AI accelerator on TSMC 16nm FinFET

23.5B transistors

800mm²

Phil Horsfield, VP Silicon

"Sofics offered us flexibility with customization, a proven silicon ESD portfolio and fast time to market. Within just a few weeks we went from first contact to contract to solution delivery."

Customer success example



Nordic Semiconductor

Bluetooth Low Energy flagship SoC

Extensive range of wireless protocols

Superior processing power

According to Bluetooth SIG data, DNB Markets

“Nordic had a market share of 39 percent of new design certifications in the Bluetooth LE market in 2021. And a total of more than 1,100 new designs were certified in 2022, of which 446 had Nordic inside.”

Benefits of Sofics technology

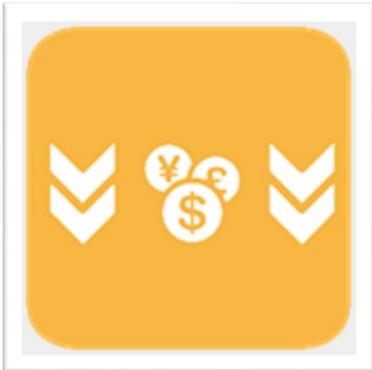
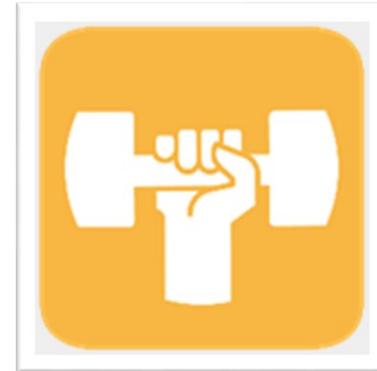


Improve IC performance

Low capacitance - Low leakage - High voltage rating - Overvoltage tolerant

Increase IC robustness

ESD (HBM/CDM/MM) - EOS Latch-up - EMC/EMI - System Level: IEC 61000-4-2



Reduce IC cost

Reduce design/mask/wafer cost
- time-to-market - Reduce risk

Sofics' strategic partnership with IMEC IC-link

Imec IC-link

Complete ASIC solutions provider

Design, chip manufacturing, assembly and test, and qualification services.

>700 successful tape-outs per year

Leading TSMC Value Chain Aggregator

Part of imec, a world-leading R&D and innovation hub in nanoelectronics and digital technologies.

www.imeciclink.com



Sofics' strategic partnership with TSMC

TSMC relationship

Sofics supports **60+ TSMC customers**

USA, Europe, Israel, Japan, China,...

Close **cooperation 10+ years**

DCA alliance member since 2008

IP alliance member since 2010

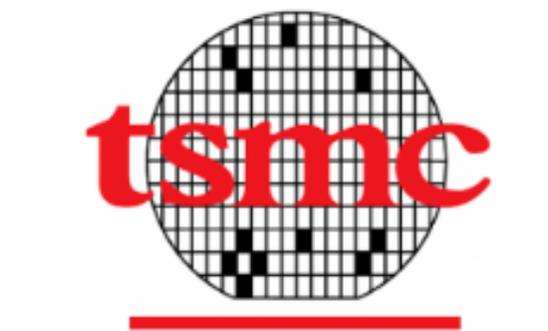
TSMC9000 assessment

Frequent MPW shuttles

BCD, CMOS, FinFET

TSMC audited **secure vault**

FinFET designs in office in Belgium



Sofics' IP is proven on 50+ processes

10+ IDM companies

10+ foundries



SAMSUNG

intel.
foundry
services



UMC

xfab



SILTERRA

Hirace 華如宏力

CMOS

Mature: 0.5um to 180nm

Mainstream: 130nm to 65nm

Advanced: 40nm to 22nm

FinFET technology

16nm to 3nm

SOI technology

130nm to 22nm

BCD technology

250nm to 55nm

BiCMOS technology

Sofics IP is used in many applications



Internet of Things, wearables

15+ customers

Focus: Low power

Artificial Intelligence

5+ customers

Focus: High performance



Space applications

5+ customers

Focus: Radiation hard solutions

Sofics IP is used in many applications



Automotive

15+ customers

Focus: Higher reliability

Medical

5+ customers

Focus: Higher reliability



Datacenter and wireless

40+ customers

Focus: Low parasitic capacitance

Meet our team



Next steps

Get more information

Sofics website: www.sofics.com

Articles: <https://monthly-pulse.com/>

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Discuss your IC project

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