



THE METAVERSE AND THE DISPLAY INDUSTRY

Cautionary Note Regarding Forward Looking Statements

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These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "believe," "estimate," "potential," "predict," "project," "should," "would," and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the Securities and Exchange Commission. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this presentation. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.



Reshaping the World of Electronics | OTCQB: SMTK

Disruptive TRUFLEX® Technology

A revolutionary semiconductor platform for Organic Thin Film Transistors (OTFTs).

TRUFLEX® is a full transistor stack design and process platform that produces transistors that are flexible, bendable, wearable, and lightweight.

Materials are solution deposited on low-cost plastic and glass at a **low temperature (80°C)** to make transistor circuits with performance significantly beyond amorphous Silicon (aSi).

TRUFLEX® materials are compatible with existing industry standard manufacturing infrastructure and next generation printing processes.

The platform can be used in several applications including AMOLED displays, Quantum Dot displays, mini / microLED displays, and integrated logic circuits.

World Class Technology Team

42 full time employees with 200+ combined years industrial and R&D pedigree at ICI, Merck, Philips, Kodak, CDT, Motorola.

Extensive, Broad and Defendable IP Portfolio

137 patents across 16 patent families – 122 granted and 15 pending

37 codified trade secrets

Collaborations

2021 JDA with RiTdisplay for the production of a full color demonstration AMOLED display.

2022 JDA with Nanosys for new generation solution printed microLED and quantum dot materials for advanced displays.

Design & Prototyping Capability

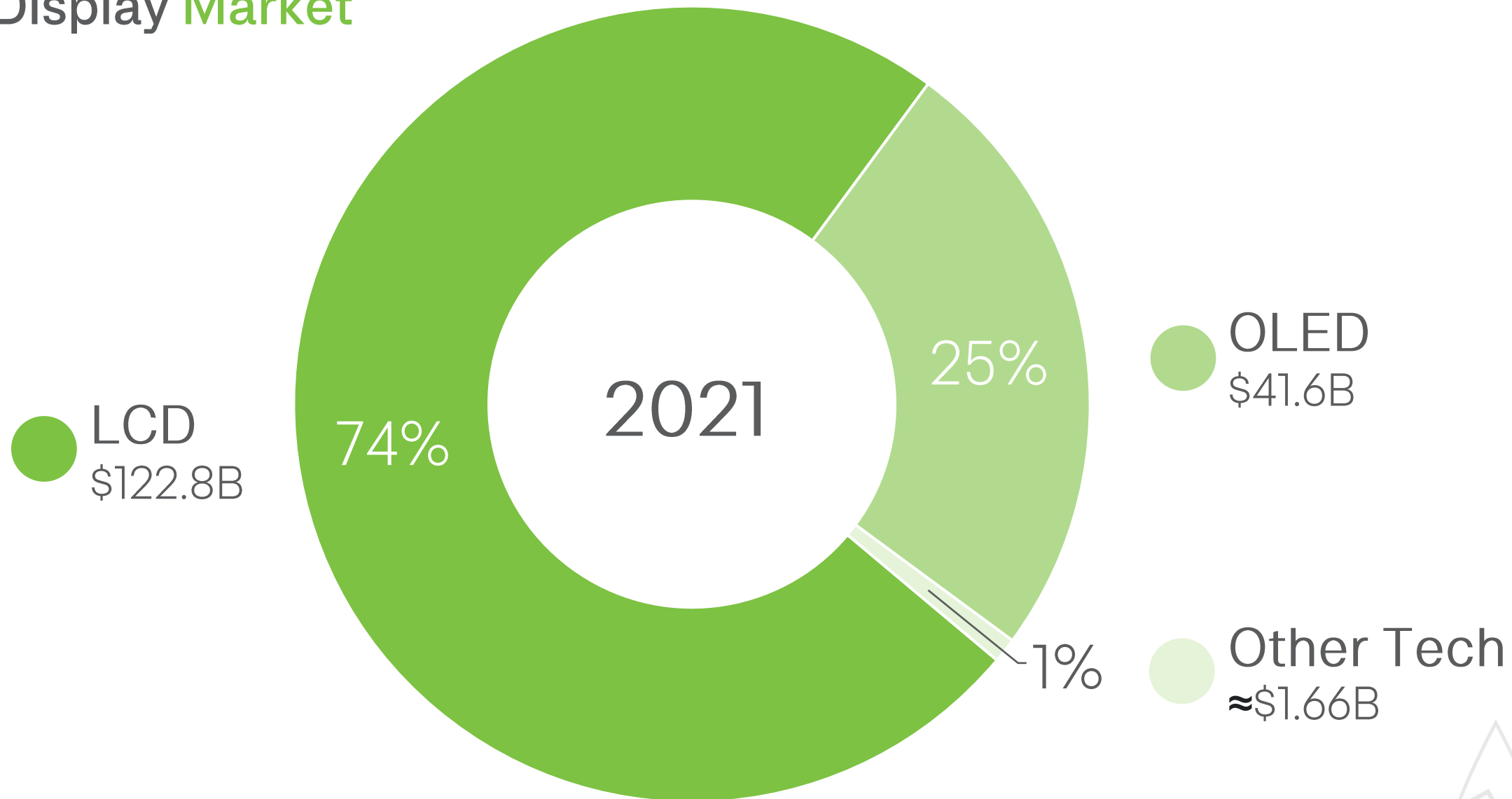
Material supply scaled up at toll manufacturers.

EDA design tools available to enable customers to synthesize circuits.

Prototyping available on 4in, 8in, 12in and Gen 2 processes.



The Display Market





Today, there is no display solution available (large or small), at a low enough cost, to enable the ubiquitous adoption of the metaverse



Displays have **two things in common**

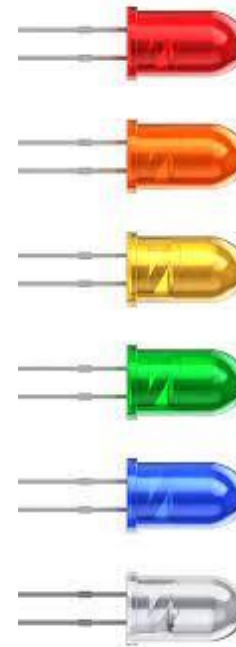
Backplane, passive or active matrix

LTPS, IGZO, a-Si, PCBs

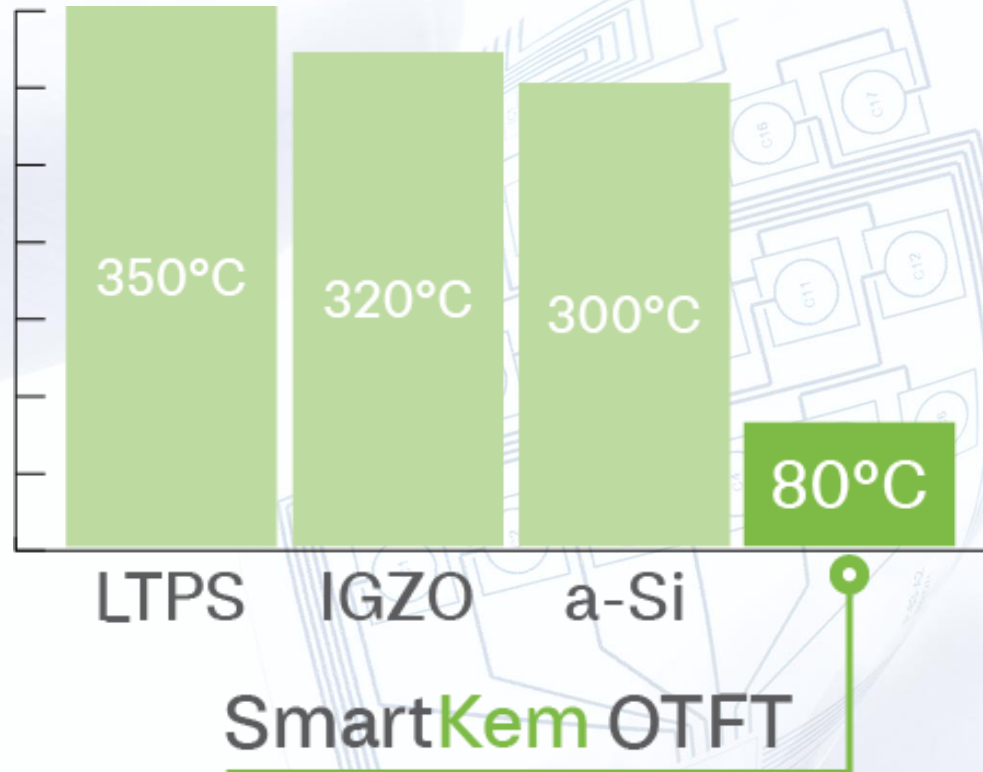


Electro Optic Conversion

LEDs, MiniLEDs, MicroLEDs, OLEDs, Quantum Dots. (add more pictures)



What is **needed**?



Solution-coated (**Printable**)
frontplanes, OLED and EQD



Solution-coated (**Printable**)
backplanes that are
monolithically integrated with
solution-coated (**Printable**)
frontplanes.

(SmartKem)

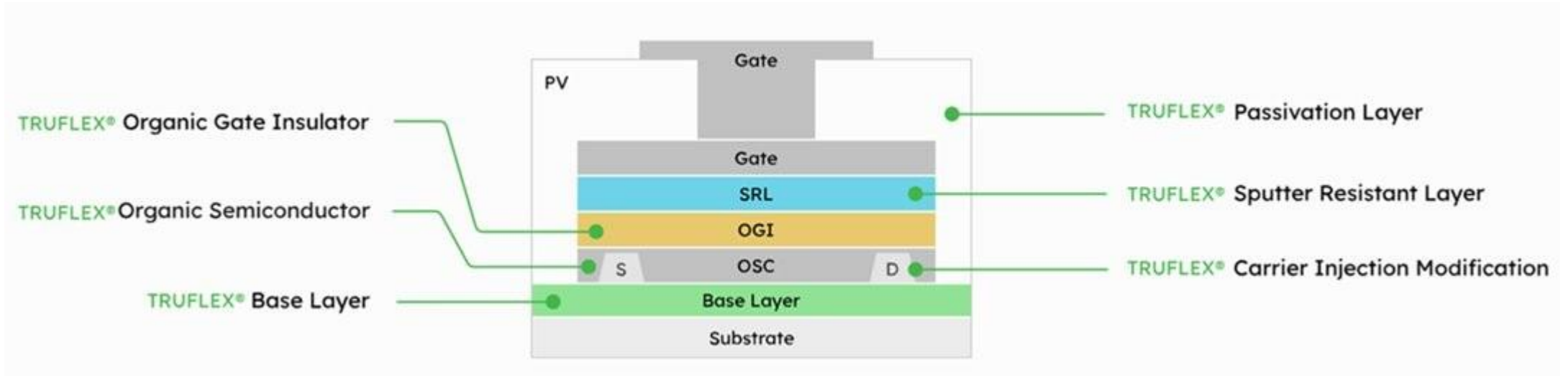


Low temperature processing.

(SmartKem 80°C)



1. SmartKem's TRUFLEX® Materials



Ease of
Technology Transfer

Chemistry, process and stack owned

World leading
electronic performance

Solution processed
At 80C

Formed on low-cost glass & plastic

Meets industry critical
test standards

Drop in technology
for today's fab lines

(and ready for next gen printing)

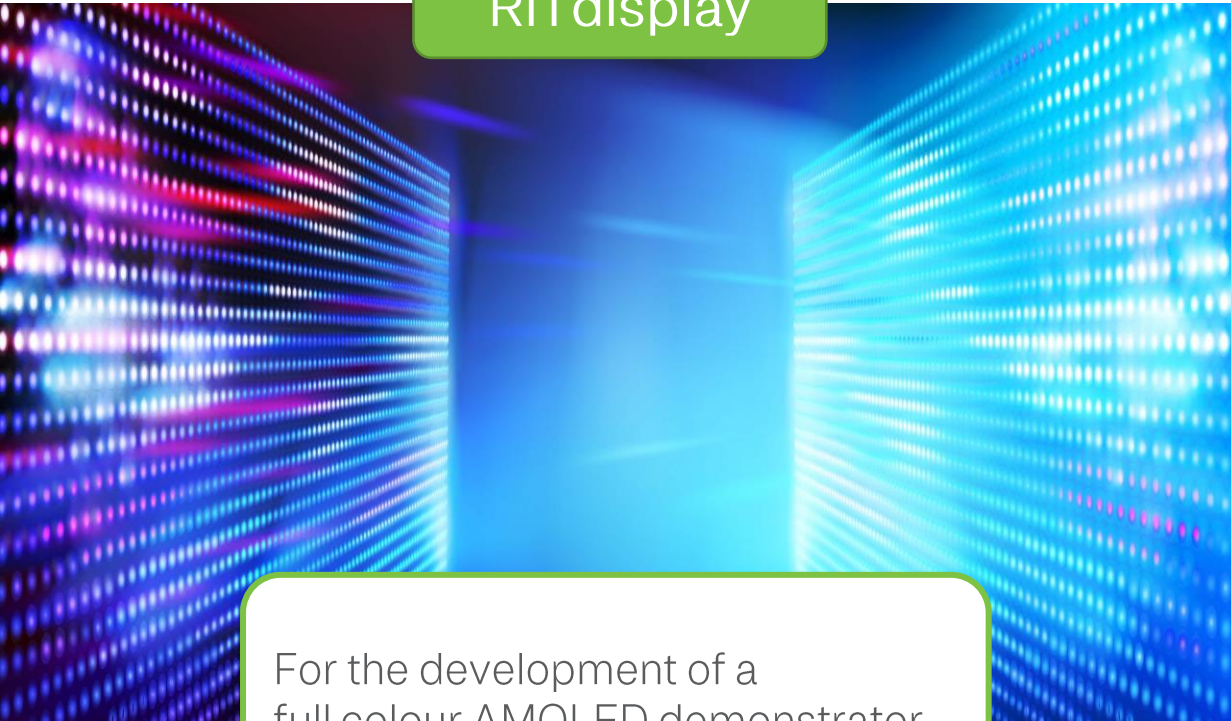
Outperforms market leader a-Si



SmartKem's Market Traction

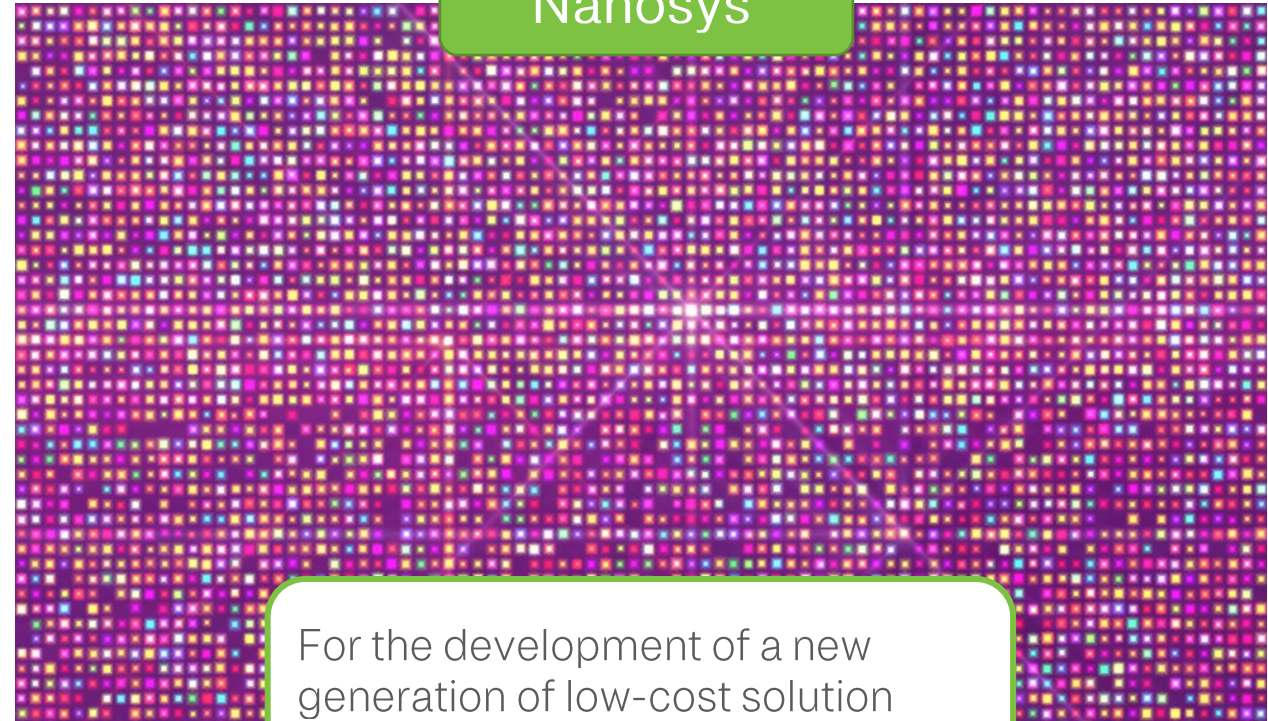
JOINT DEVELOPMENT AGREEMENTS

RiTdisplay



For the development of a full colour AMOLED demonstrator on a Gen 2 line

Nanosys



For the development of a new generation of low-cost solution printed quantum dot materials for advanced displays.



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THANK YOU

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