



Introducing Performance-Engineered Films™

Flexible Electronics



UNIPIXEL™

HIGH PERFORMANCE, LOW COST

flexible electronics

UniPixel offers high-performance flexible electronics that can dramatically reduce the complexity of touch-panels and other applications.

Touchscreens without ITO

Many electronics require expensive and rare indium-tin oxide (ITO). The scarcity of indium creates significant supply chain risk, delays and higher costs for manufacturers. UniPixel Performance-Engineered flexible electronics can replace ITO with ordinary copper. This reduces supply chain risk and cost.

Compared to ITO, our copper-based flexible electronics for touchscreens:

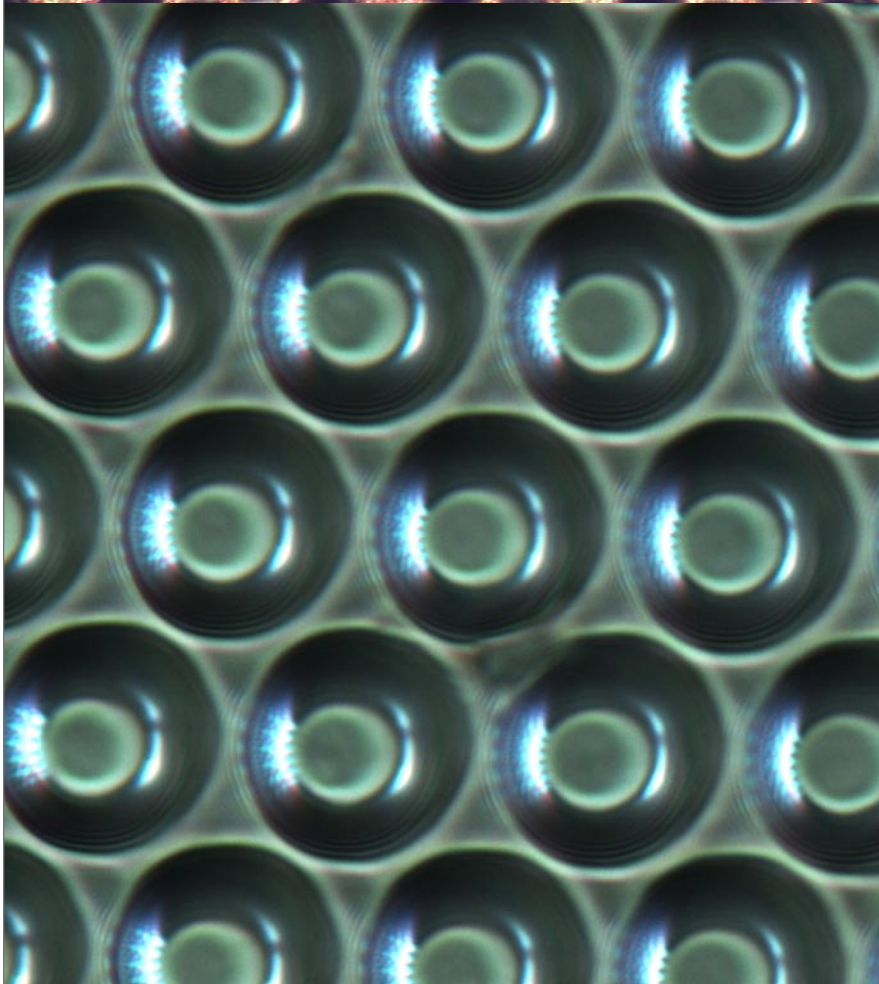
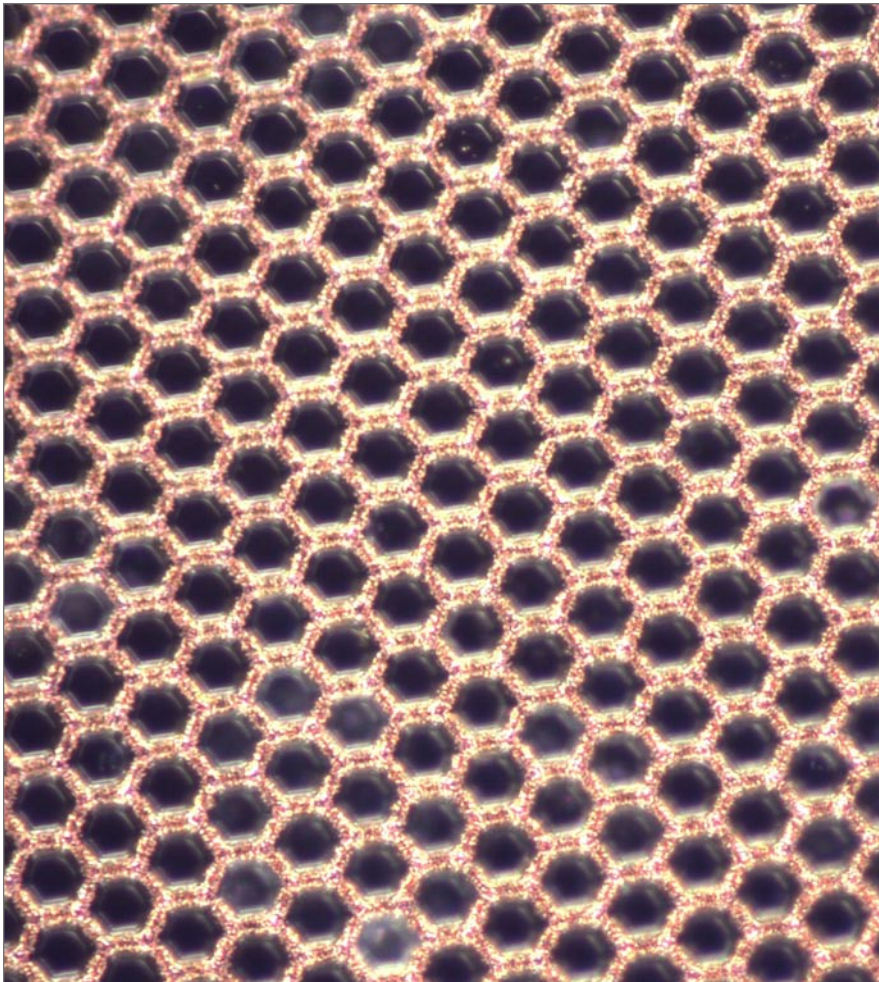
Use
99%
less material

Consume
75%
less power

Reduce
resistance by
2,000x

Increase
scan rates by
10,000x

- Improve transparency
- Weigh 10x less
- Are more RoHS compliant and environmentally friendly
- Enable construction of screens up to 25x larger
- Improve flexibility
 - Replace expensive batch processing with fast roll-to-roll printing
 - Include totally integrated circuits for both touch-panel and flex cable
 - Can reduce assembly costs due to component integration



Low Cost, High Volume Process

UniPixel flexible electronics contain ultra-fine line conductors less than five microns wide. They can be produced in a single pass, roll-to-roll process at room temperature in extremely high volumes without expensive vacuums.

Flexible and Transparent Substrates

UniPixel flexible electronics are compatible with both transparent flexible and rigid substrates.

Save Weight, Time, Money

Flexible electronics enable lighter, faster, less expensive:

- Smart Phones
- Cameras
- Laptops
- Tablets
- All-in-ones
- Monitors
- Printers
- Televisions

Flexible Electronics Enable:

Flexible Antennas

- Benefits: transparent antennas, low cost
- Applications: toll-tags, products

EMI-RF Shielding

- Benefits: lightweight, flexible
- Applications: wallets, window covers

MOEMS and OLED Displays

- Benefits: small, lightweight, low-power, inexpensive, bright, flexible
- Applications: TVs, computers, laptops, cell phones

