

*Concept car demonstrates pioneering technology in personalization and self-expression*



LAS VEGAS-- E Ink, (8069.TW), the originator, pioneer, and global commercial leader in digital paper technology, today announced BMW, Munich-based premium car manufacturer, will unveil the BMW iX Flow Featuring E Ink at CES 2022: an E Ink digital paper-wrapped concept car showcasing a transformation in the way surfaces are experienced.

Combining E Ink's innovative and rugged digital paper with BMW's intelligent design algorithms enables the exterior to change from black to white in a dynamic flow. The iX Flow is using E Ink Prism, a design film developed by E Ink for the architecture and design markets. E Ink Prism is fully programmable, giving BMW the creative freedom to customize the patterns and materials. To accomplish this, E Ink engineers worked closely with BMW engineers to create optimal functionality and perfect color switching of their complex laser cut designs which align with the curves of the car.

"E Ink's color changing technology is technically amazing. Seeing it formed on our highly curved surfaces is absolutely unexpected and seemingly magical," said Stella Clarke, Head of Project for the BMW iX Flow Featuring E Ink.

In addition to personalization, a variable exterior also contributes to the efficiency of the vehicle. By nature, a white exterior on hot days would reflect sunlight and conversely, a black exterior on cold days would absorb the sunlight. This could reduce the amount of energy the vehicle uses for heating and cooling the interior.

The process of changing the color of the car is extremely efficient because of E Ink's ultra-low power technology. E Ink's digital paper is bistable – meaning it only uses power to change color, not to maintain it. This inherent trait makes it possible to change the color of the car with minimal power, and aligns with the sustainability mission of the all-electric vehicle.

"This concept car with BMW is an amazing display of how surfaces of the future will transform to personalize, customize and provide information," said Tim O'Malley, AVP, US Regional Business Unit. "Because E Ink is incredibly low power and durable, we can put our display technology on almost any surface, transforming a once static space into something dynamic and spectacular – and sustainable."

Most displays emit light. E Ink does not – it reflects ambient light in its surroundings. This gives the display a paint-like appearance and a natural visual experience. The electronic ink is made up of millions of tiny microcapsules that are filled with white and black pigments – the same ink pigments used in the printing industry today. These pigments can be moved up or down using an electric field in a controlled manner, thereby changing the appearance at the surface of the display.