



# **ORIENT DISPLAY**

## **MAKE THINGS POSSIBLE**

June 8<sup>th</sup>, 2026

Dear Valued Customers:

### Next-Gen Curved & Flexible Touch Solutions

As modern automotive cockpits and industrial HMIs evolve beyond flat displays, designers are increasingly adopting curved and flexible touch interfaces that deliver improved ergonomics, aesthetics, and user interaction.



Orient Display offers a complete roadmap of curved and flexible touch technologies, helping customers integrate advanced display architectures into next-generation products.

Generation	Display Area	Button / Border Area	Core Integration Solution
1st Gen	Flat	Curved Border	In-Mold Labeling (IML) + Glass Touch
2nd Gen	Flat	Flat Border, Curve in Middle	Cold Bending Lens + Glass Touch
3rd Gen	Flat	Flat Border, Curve in Middle	Hot Bending Lens + Glass/Film Touch
4th Gen	Curve	Flat Border	Flexible Touch Integration

## Key Technology Highlights

### 1. CPI Flexible Touch Sensors

Our latest Colorless Polyimide (CPI) technology enables touch panels that conform to complex curved surfaces while maintaining exceptional optical clarity and durability.

### 2. Automotive-Grade Reliability

- Bend radius down to **R6.5mm**
- Over **200,000 flex cycles**
- High-temperature storage: **95°C / 1,000 hours**
- Low-temperature storage: **-40°C / 1,000 hours**
- Thermal shock: **-40°C to 95°C**

### 3. Superior Optical Performance

- Sensor transmittance  $\geq$  **90%**
- Total film transmittance  $\geq$  **84%**
- Ultra-low haze  $\leq$  **0.5%**
- Low yellow index (YI < 1.2)
- Sheet resistance  $\leq$  **20 $\Omega$**

### 4. Applications

- Curved automotive instrument clusters
- Panoramic cockpit displays
- Smart home control panels
- Industrial control interfaces
- Foldable and free-form HMI designs

## From Concept to Mass Production

Orient Display provides complete engineering support, including:

- Optical stack-up design
- Curved touch sensor development
- OCA/OCR optical bonding
- Mechanical integration support
- Custom CPI sensor sampling

**Ready to bend the rules of standard display design?** [Contact us](#) today to request custom CPI sensor samples or to submit your physical housing CAD layout for review.

