

Quarterly AMOLED Materials and Components Market tracker Sample

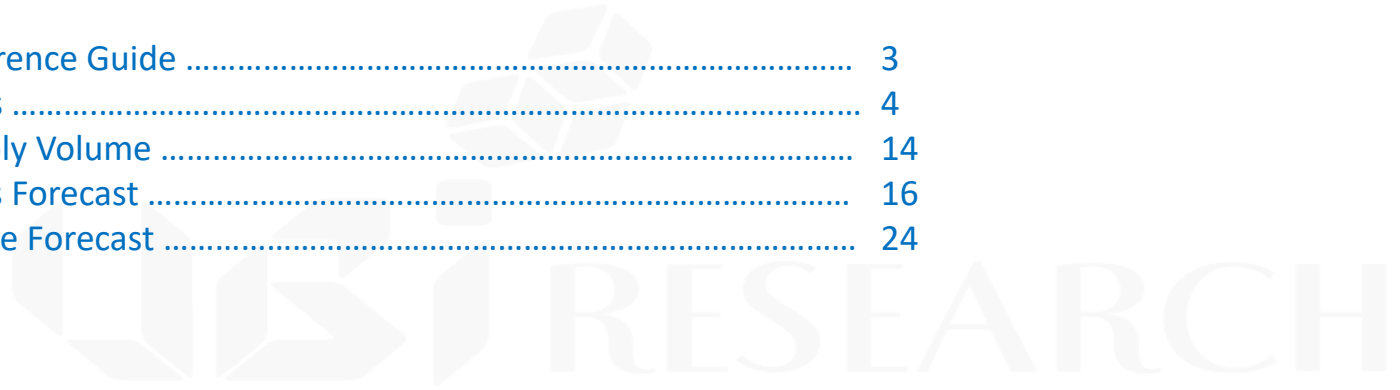
4Q, 2023

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Reference Guide

Application Covered

- Smartphone
- TV

Nation Covered

- Korea
- China

Purpose Covered

- Cover window: 2D, 3D, CPI, UTG
- Touch: Add-on, On-cell
- Polarizer
- OCA, OCR
- Encapsulation: Glass, Frit glass, TFE, Metal foil
- Substrate: Glass, Carrier glass, Polyimide
- PSPI
- Process Film
- Complex sheet
- Driver IC

Actual and Forecast

- Quarterly update
- History : 3-year, Forecast : 5-year

Unit

- Revenue : US\$ millions
- Volume : kg, ea, m²

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Sales Performance

- Total
- By Nation
- By Company
- By Application
- By Substrate Type
- By Material

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Clipboard: Paste, Cut, Copy, Format Painter

Font: Arial, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Wrap Text, Merge & Center

Number: General, Percent, Decimals, Rounding

Styles: Conditional Formatting, Format as Table

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

Add-ins: Add-ins, Analyze Data

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| 1 | UBI RESEARCH | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | AMOLED Components & Material Market Track | | | | | | | | | |
| 6 | - 4Q23 Data Tables | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | > Remarks | | | | | | | | | |
| 9 | > Average Sales Price of Materials_Q | | | | | | | | | |
| 10 | > Sales Performance | | | | | | | | | |
| 11 | PIVOT Quarterly Sales | | | | | | | | | |
| 12 | PIVOT Quarterly Supply Volume | | | | | | | | | |
| 13 | > Forecast | | | | | | | | | |
| 14 | PIVOT Sales Forecast | | | | | | | | | |
| 15 | PIVOT Usage Forecast | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | > www.ubiresearch.com | | | | | | | | | |
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AutoSave [On] 4Q23_Quarterly AMOLED Materials and Components Market tr... • Saved to this PC Search

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UBI RESEARCH Main

Average Sales Price of Components & Materials

- Contents
- > Average Sales Price of Components & Materials
- * Market of Key 21 components for OLED
- * No process cost on colorless polyimide's cost based on 8 inch
- * Cost of ultra thin glass includes process cost based on 7.6 inch

> Average Sales Price of Components & Materials

| Components & Material | Unit | 1Q18 | 2Q18 | 3Q18 | 4Q18 | 1Q19 | 2Q19 | 3Q19 | 4Q19 | 1Q20 | 2Q20 | 3Q20 | 4Q20 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q23 |
|-----------------------|--------------------------|------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Substrate | Substrate glass | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| | Carrier glass | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| | Polyimide | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| TFT | PSPI | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| | Frit glass | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| Encapsulation | Encapsulation glass | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| | Thin film encapsulation | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| | Metal Foil & FSA | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| Touch sensor | On-cell touch | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| | Add-on Touch | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| | Over coat(on-cell touch) | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| Polarizer | Polarizer | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| Adhesive | OCR | S/kg | | | | | | | | | | | | | | | | | | | | | | |
| | OCA | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| Cover window | 2D glass | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5D & 3D glass | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| | Colorless Polyimide | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| Module | Ultra thin glass | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| | Driver IC & COF | S/ea | | | | | | | | | | | | | | | | | | | | | | |
| | Complex sheet | S/m ² | | | | | | | | | | | | | | | | | | | | | | |
| | Process Film | S/m ² | | | | | | | | | | | | | | | | | | | | | | |

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Components & Material Market Sales Performance_Quarterly

- Nation (All)
- Company (All)
- Application (All)
- Substrate type (All)

| | | US\$ million | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| M&C | 1Q18 | 2Q18 | 3Q18 | 4Q18 | 1Q19 | 2Q19 | 3Q19 | 4Q19 | 1Q20 | 2Q20 | 3Q20 | 4Q20 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q23 | |
| 2.5D & 3D glass | | | | | | | | | | | | | | | | | | | | | | | | |
| 2D glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Add-on Touch | | | | | | | | | | | | | | | | | | | | | | | | |
| Carrier glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Colorless polyimide | | | | | | | | | | | | | | | | | | | | | | | | |
| Complex sheet | | | | | | | | | | | | | | | | | | | | | | | | |
| Driver IC&COF | | | | | | | | | | | | | | | | | | | | | | | | |
| Encapsulation glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Frit glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Metal Foil & FSA | | | | | | | | | | | | | | | | | | | | | | | | |
| OCA | | | | | | | | | | | | | | | | | | | | | | | | |
| OCR | | | | | | | | | | | | | | | | | | | | | | | | |
| On-cell touch | | | | | | | | | | | | | | | | | | | | | | | | |
| Over coat(on-cell touch) | | | | | | | | | | | | | | | | | | | | | | | | |
| Polarizer | | | | | | | | | | | | | | | | | | | | | | | | |
| Polyimide | | | | | | | | | | | | | | | | | | | | | | | | |
| Process Film | | | | | | | | | | | | | | | | | | | | | | | | |
| PSPI | | | | | | | | | | | | | | | | | | | | | | | | |
| Substrate glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Thin film encapsulation | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultra thin glass | | | | | | | | | | | | | | | | | | | | | | | | |
| Grand Total | | | | | | | | | | | | | | | | | | | | | | | | |

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Components & Material Supply Volume_Quarterly

- Nation (All)
- Company (All)
- Application (All)
- Substrate type (All)

| M&C | Unit | Value | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|
| | | 1Q18 | 2Q18 | 3Q18 | 4Q18 | 1Q19 | 2Q19 | 3Q19 | 4Q19 | 1Q20 | 2Q20 | 3Q20 | 4Q20 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q23 | | | | | |
| 2.5D & 3D glass | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2D glass | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Add-on Touch | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carrier glass | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Colorless polyimide | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Complex sheet | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Driver IC&COF | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Encapsulation glass | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frit glass | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metal Foil & FSA | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OCA | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OCR | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| On-cell touch | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Over coat(on-cell touch) | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polarizer | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polyimide | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process Film | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PSPi | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Substrate glass | 1,000,000 m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thin film encapsulation | ton | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultra thin glass | million ea | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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A1

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Components & Materials Market Sales Forecast

- Nation (All)
- Company (All)
- Application (All)
- Substrate type (All)

| | | US\$ million | | | | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| M&C | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | |
| 2.5D & 3D glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| 2D glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Add-on Touch | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Carrier glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Colorless polyimide | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Complex sheet | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Driver IC&COF | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Encapsulation glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Frit glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Metal Foil & FSA | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| OCA | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| OCR | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| On-cell touch | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Over coat(on-cell touch) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Polarizer | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Polyimide | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Process Film | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| PSPI | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Substrate glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Thin film encapsulation | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Ultra thin glass | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | |
| Grand Total | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | |

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Components & Materials Market Usage Forecast

- Nation (All)
- Company (All)
- Application (All)
- Substrate type (All)

| M&C | Unit | Value | | | | | |
|----------------------------|--------------|-------|------|------|------|------|------|
| | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
| @ 2.5D & 3D glass | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ 2D glass | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Add-on Touch | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Carrier glass | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Colorless polyimide | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Complex sheet | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Driver IC&COF | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Encapsulation glass | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Frit glass | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Metal Foil & FSA | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ OCA | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ OCR | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ On-cell touch | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Over coat(on-cell touch) | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Polarizer | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Polyimide | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Process Film | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ PSPI | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Substrate glass | 1,000,000 m2 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Thin film encapsulation | ton | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| @ Ultra thin glass | million ea | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |



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