

Quarterly AMOLED Materials and Components Market Track Sample

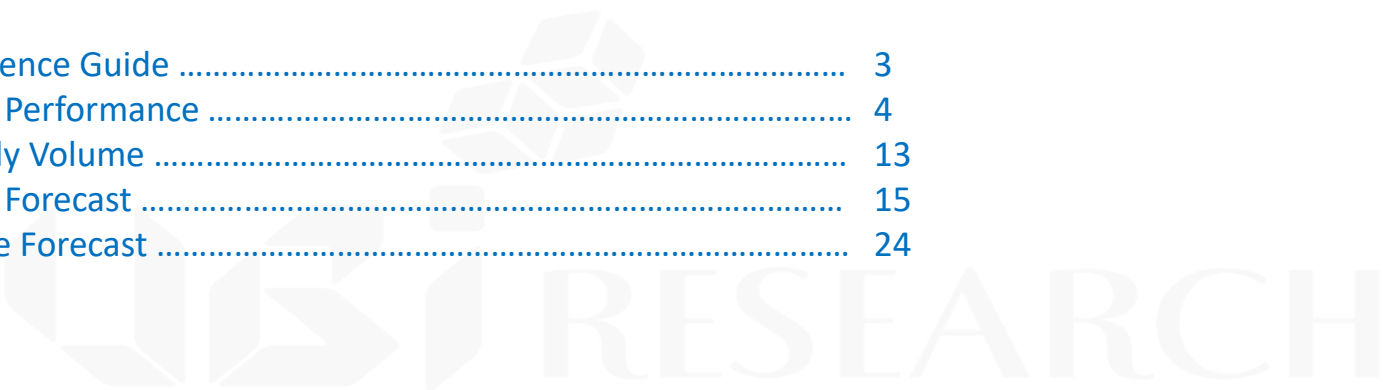
2Q, 2022

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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



AMOLED Components & Material Market Track

- 2Q22 Data Tables

> **Average Sales Price of Materials_Q**

> **Sales Performance**

[PIVOT Quarterly Sales](#)

[PIVOT Quarterly Supply Volume](#)

> **Forecast**

[PIVOT Sales Forecast](#)

[PIVOT Usage Forecast](#)

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Average Sales Price of Components & Materials

- Contents
- > Average Sales Price of Components & Materials
- * Market of Key 20 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
Substrate	Substrate glass	\$/m ²																	
	Carrier glass	\$/m ²																	
	Polyimide	\$/kg																	
TFT	PSPI	\$/kg																	
	Frit glass	\$/kg																	
	Encapsulation glass	\$/m ²																	
Encapsulation	Thin film encapsulation	\$/kg																	
	Metal Foil & FSA	\$/m ²																	
	On-cell touch	\$/m ²																	
Touch sensor	Add-on Touch	\$/ea																	
	Over coat(on-cell touch)	\$/kg																	
Polarizer	Polarizer	\$/ea																	
Adhesive	OCR	\$/kg																	
	OCA	\$/ea																	
Cover window	2D & 3D glass	\$/ea																	
	Colorless Polyimide	\$/ea																	
	Ultra thin glass	\$/ea																	
Module	Driver IC & COF	\$/ea																	
	Complex sheet	\$/m ²																	
	Process Film	\$/m ²																	

*1 US\$ = 1,100 KRW



Components & Material Market Sales Performance_Quarterly

- 8 Nation (All) ▾
- 9 Company (All) ▾
- 10 Application (All) ▾
- 11 Substrate type (All) ▾

		US\$ million																	
M&C		1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	
2D glass		125.2	128.8	138.9	138.8	133.3	135.2	136.2	135.5	135.7	131.3	131.3	131.2	131.2	131.9	131.8	131.8	131.8	131.8
3D glass		185.7	185.2	198.8	198.8	194.9	196.9	196.7	193.2	189.8	182.8	176.2	176.2	180.7	181.7	181.2	181.2	1,128.7	181.2
Add-on Touch		71.8	76.2	108.7	103.3	108.8	110.9	110.8	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
Carrier glass		9.8	9.2	10.9	11.2	11.2	9.2	11.8	11.8	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
Colorless polyimide						5.2	5.8	5.8	5.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Complex sheet		71.8	71.8	108.2	108.8	76.2	81.8	76.8	76.8	81.2	76.2	81.2	81.2	81.8	76.8	76.8	111.8	108.2	108.2
Driver IC&COF		489.7	487.8	588.2	587.7	423.9	488.2	423.8	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
Encapsulation glass		9.8	11.2	11.8	11.2	11.2	11.7	11.2	11.7	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
Frit glass		1.8	2.2	2.8	2.8	2.8	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Metal Foil & FSA		38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
OCA		11.8	12.7	13.2	13.8	13.8	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
OCR		6.8	7.8	7.8	8.8	8.8	8.2	8.8	8.2	8.7	8.8	8.2	8.2	8.8	8.7	8.8	8.2	8.2	8.8
On-cell touch		18.8	111.2	128.9	181.2	171.8	181.8	181.8	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
Over coat(on-cell touch)		2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Polarizer		181.2	171.8	181.2	181.2	181.7	181.2	181.8	171.8	171.8	171.8	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
Polyimide		5.2	5.8	6.8	5.2	6.8	6.2	5.8	5.7	6.8	6.7	5.8	6.7	6.8	5.8	5.8	5.8	5.8	5.8
Process Film		181.8	181.7	181.8	181.8	181.2	181.8	181.8	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
PSPI		181.2	181.8	181.2	181.2	181.2	171.8	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
Substrate glass		11.8	11.8	11.2	11.7	11.8	11.8	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
Thin film encapsulation		2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Ultra thin glass										11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
Grand Total		1,171.2	1,171.8	1,271.2	1,261.8	1,191.2	1,261.8	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2	1,261.2

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Components & Material Supply Volume_Quarterly

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

		Value																	
M&C	Unit	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	
2D glass	million ea	85.1	76.4	82.1	77.2	86.8	86.8	87.1	86.4	86.1	86.9	82.1	83.8	73.4	71.1	75.9	76.1	86.1	
3D glass	million ea	26.9	27.6	26.1	26.1	26.6	26.6	27.7	26.1	26.1	26.9	25.6	25.9	26.4	26.1	25.6	26.2	26.7	
Add-on Touch	million ea	114.4	114.4	113.4	109.9	104.1	104.1	111.2	104.9	114.4	111.1	94.1	91.1	96.1	101.1	101.1	101.1	101.1	
Carrier glass	1,000,000 m2	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Colorless polyimide	million ea	-	-	-	-	0.6	0.1	0.1	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Complex sheet	1,000,000 m2	1.4	1.4	1.4	1.4	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
Driver IC&COF	million ea	222.1	222.1	226.1	226.6	222.4	226.6	226.4	227.4	226.6	222.1	227.4	224.4	222.1	227.1	226.6	226.6	226.6	
Encapsulation glass	1,000,000 m2	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	
Frit glass	ton	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Metal Foil & FSA	1,000,000 m2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
OCA	million ea	26.9	27.6	26.1	26.1	26.6	26.6	27.7	26.1	26.1	26.9	25.6	25.9	26.4	26.1	25.6	26.2	26.7	
OCR	ton	87.1	86.1	86.1	81.1	81.6	101.7	101.1	101.1	86.7	81.1	86.6	104.1	101.6	104.6	101.6	101.1	86.9	
On-cell touch	1,000,000 m2	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	
Over coat(on-cell touch)	ton	27.6	26.1	26.6	27.7	26.6	26.1	26.4	27.7	26.1	26.1	26.1	26.6	26.4	26.1	26.6	26.4	26.4	
Polarizer	million ea	26.9	26.6	26.4	22.1	27.6	26.7	26.7	26.1	22.1	26.1	27.6	26.1	26.4	26.1	26.6	26.6	26.7	
Polyimide	ton	61.4	57.1	56.7	57.6	56.6	51.1	56.1	57.1	56.1	56.4	56.7	57.6	57.6	57.4	57.4	56.1	57.4	
Process Film	1,000,000 m2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
PSPI	ton	171.1	166.4	166.4	171.7	161.6	171.6	166.6	166.4	161.1	161.1	161.7	166.6	166.1	166.1	161.1	161.7	166.4	
Substrate glass	1,000,000 m2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Thin film encapsulation	ton	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Ultra thin glass	million ea	-	-	-	-	-	-	-	-	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	

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Components & Materials Market Sales Forecast

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

		US\$ million				
M&C	2022	2023	2024	2025	2026	
2D glass	2000.0	2000.0	2000.0	2000.0	2000.0	
3D glass	2000.0	2000.0	2000.0	2000.0	2000.0	
Add-on Touch	200.0	200.0	200.0	200.0	200.0	
Carrier glass	200.0	200.0	200.0	200.0	200.0	
Colorless polyimide	200.0	200.0	200.0	200.0	200.0	
Complex sheet	200.0	200.0	200.0	200.0	200.0	
Driver IC&COF	200.0	200.0	200.0	200.0	200.0	
Encapsulation glass	200.0	200.0	200.0	200.0	200.0	
Frit glass	200.0	200.0	200.0	200.0	200.0	
Metal Foil & FSA	200.0	200.0	200.0	200.0	200.0	
OCA	200.0	200.0	200.0	200.0	200.0	
OCR	200.0	200.0	200.0	200.0	200.0	
On-cell touch	200.0	200.0	200.0	200.0	200.0	
Over coat(on-cell touch)	200.0	200.0	200.0	200.0	200.0	
Polarizer	200.0	200.0	200.0	200.0	200.0	
Polyimide	200.0	200.0	200.0	200.0	200.0	
Process Film	200.0	200.0	200.0	200.0	200.0	
PSPi	200.0	200.0	200.0	200.0	200.0	
Substrate glass	200.0	200.0	200.0	200.0	200.0	
Thin film encapsulation	200.0	200.0	200.0	200.0	200.0	
Ultra thin glass	200.0	200.0	200.0	200.0	200.0	
Grand Total	20000.0	20000.0	20000.0	20000.0	20000.0	

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Components & Materials Market Usage Forecast

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

M&C	Unit	Value				
		2022	2023	2024	2025	2026
@ 2D glass	million ea	2000	2000	2000	2000	2000
@ 3D glass	million ea	1000	1000	1000	1000	1000
@ Add-on Touch	million ea	500	500	500	500	500
@ Carrier glass	1,000,000 m2	500	500	500	500	500
@ Colorless polyimide	million ea	100	100	100	100	100
@ Complex sheet	1,000,000 m2	100	100	100	100	100
@ Driver IC&COF	million ea	2000	2000	2000	2000	2000
@ Encapsulation glass	1,000,000 m2	50	50	50	50	50
@ Frit glass	ton	500	500	500	500	500
@ Metal Foil & FSA	1,000,000 m2	100	100	100	100	100
@ OCA	million ea	1000	1000	1000	1000	1000
@ OCR	ton	1000	1000	1000	1000	1000
@ On-cell touch	1,000,000 m2	50	50	50	50	50
@ Over coat(on-cell touch)	ton	1000	1000	1000	1000	1000
@ Polarizer	million ea	1000	1000	1000	1000	1000
@ Polyimide	ton	1000	1000	1000	1000	1000
@ Process Film	1,000,000 m2	500	500	500	500	500
@ PSPI	ton	1000	1000	1000	1000	1000
@ Substrate glass	1,000,000 m2	100	100	100	100	100
@ Thin film encapsulation	ton	100	100	100	100	100
@ Ultra thin glass	million ea	1000	1000	1000	1000	1000