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# Broad selection

## PHOTORESISTS for Lighting



# BROAD PHOTORESIST MATERIALS FOR SUBSTRATE AND LED CHIP STRUCTURING

- Inventor and market leader with long history of developing lithographic products for LED industry
- Highest quality and reliable global supplier
- Broad photoresist portfolio from etching to metallization process
  - Positive, negative and image-reversal modes
  - g-, h-, i-line and broadband sensitivity
  - Standard and thick-film resists

## LED Processing Steps and Typical Photoresist Requirements

LED Chip Process	ITO, SiO2 (Wet Etch)	MESA (ICP Etch)	PSS (ICP Etch)	Deep Etch (Tapered)	Singulation & Deep Etch (Straight)	Metallization (Lift-Off & Plating)
<b>Mode</b>	POS	POS	POS	POS	POS or NEG	NEG, IR
<b>Typical Photoresist Requirements</b>	2-3um FT g-line, BB	3um FT g-line, BB	2-4um FT i-line	8um FT g-line, BB	6-8um FT i-line	2-8um FT i-line
<b>Lateral Chip (MESA)</b>	•	•	•			•
<b>Flip Chip</b>	•	•	•		•	•
<b>Vertical Chip</b>	•	•			•	•
<b>High Voltage (Variant)</b>				•		
<b>Photoresist</b>	AZ SLD 2530	AZ 1500 AZ SLD 5530	AZ GXR 601 AZ GXR 601M1	AZ P4000	AZ 12XT	AZ nLOF 2000 AZ LOR-28 AZ 5200 AZ 15nXT

## Technical Data

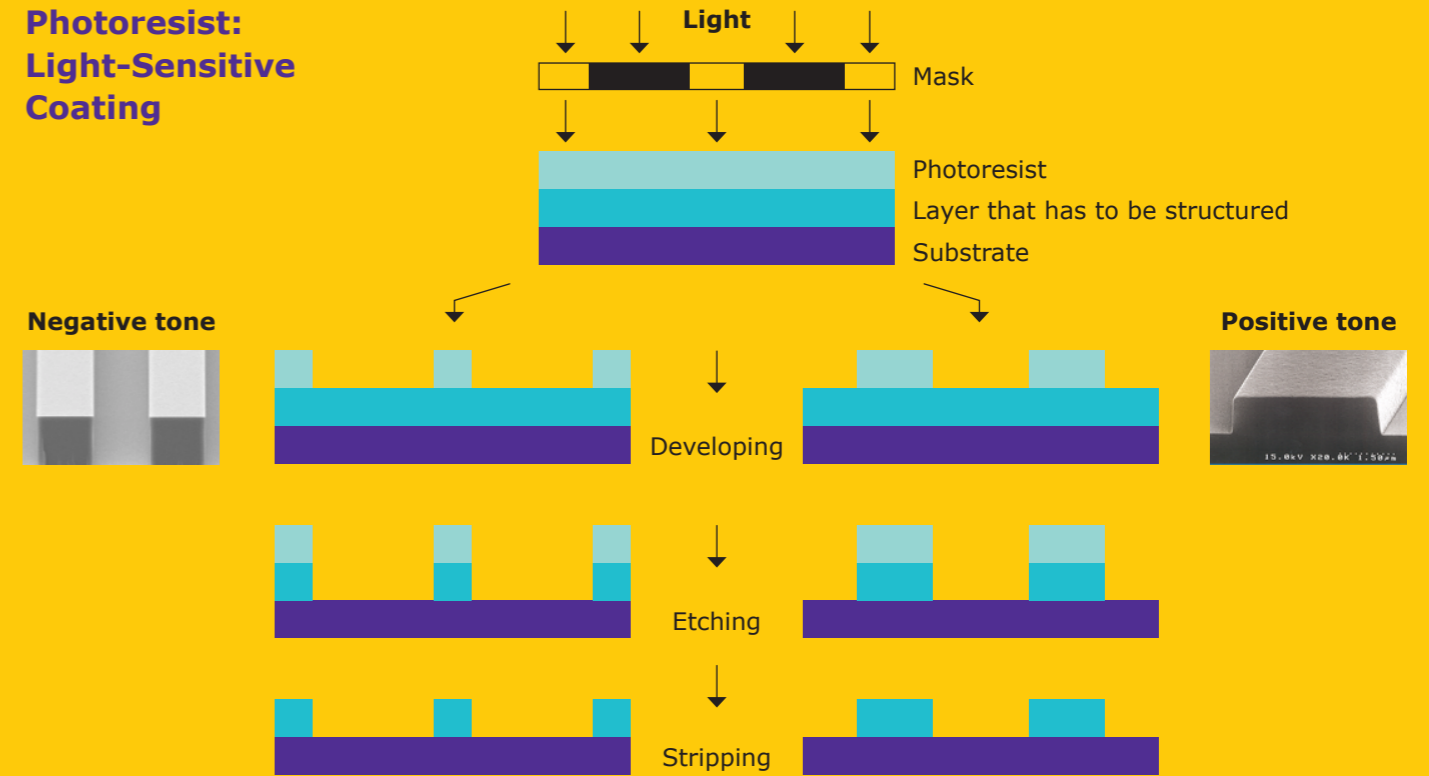
POS: **Positive tone**  
NEG: **Negative tone**

IR: **Image reversal**  
DNQ: **Novolak based**

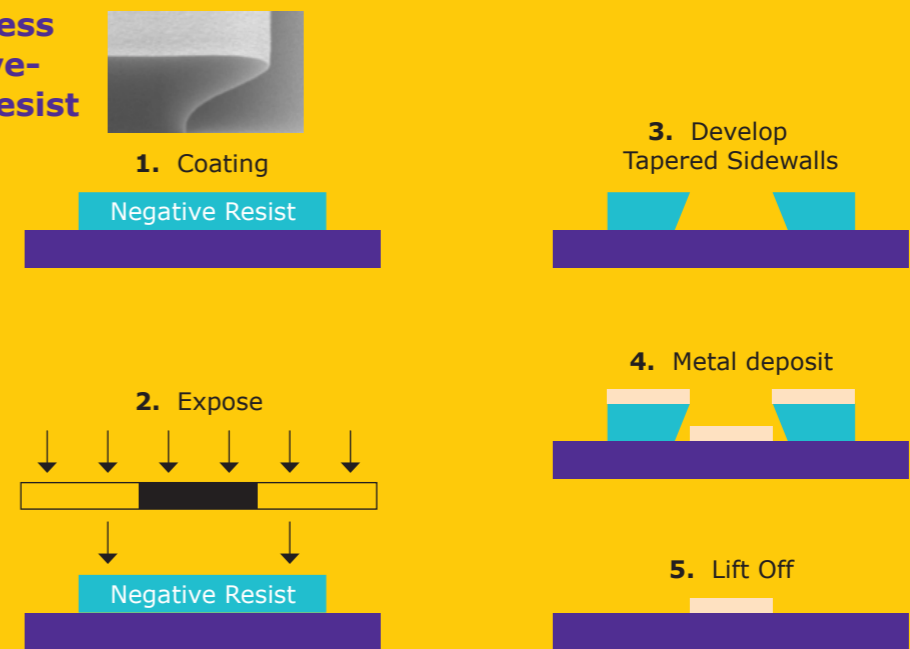
CA: **Chemically amplified**  
FT: **Film thickness**

Product	Mode	Platform	Sensitivity	FT Range (µm)	Max. FT single coat (µm)	Aspect Ratio
<b>AZ 1500</b>	POS	DNQ	g or g-h-i	1 - 4	4	2 : 1
<b>AZ SLD - 2530</b>	POS	DNQ	g or g-h-i	2 - 4	4	2 : 1
<b>AZ SLD - 5530</b>	POS	DNQ	g or g-h-i	2 - 4.5	4.5	2 : 1
<b>AZ GXR - 601</b>	POS	DNQ	g-h-i	1 - 3	3	2.5 : 1
<b>AZ GXR - 601M1</b>	POS	DNQ	g-h-i	1 - 3	3	2.5 : 1
<b>AZ P4000</b>	POS	DNQ	g-h	2 - 55	25	2 : 1
<b>AZ 12XT</b>	POS	DNQ	g-h-i	5 - 20	20	4 : 1
<b>AZ nLOF 2000</b>	NEG	CA	g-h-i	2 - 7	10	4 : 1
<b>AZ LOR - 28</b>	NEG	CA	g-h-i	6 - 10	10	2 : 1
<b>AZ 5200</b>	IR	DNQ	g-h-i	0.5 - 8	8	3 : 1
<b>AZ 15nXT</b>	NEG	CA	g-h-i	5 - 20	20	3 : 1

## Photoresist: Light-Sensitive Coating



## Lift-Off Process with Negative-Tone Photoresist



If you do not find what you are looking for, please get in touch with us so that we can help you.