

PAM-XIAMEN specializes in GaN-based ultra high brightness blue and green light emitting diodes (LED) and laser diodes (LD). We offer GaN Free-standing wafer and *GaN Templates*.

GaN Templates

Product Specifications

**XIAMEN POWERWAY ADVANCED MATERIAL CO.- NO.99,HULI DEVELOPING ZONE, XIAMEN, 361000,CHINA
TEL:+86 (0)592 5601404 -FAX:+86 (0)592 5745822
E-MAIL:SALES@QUALITYMATERIAL.NET
WWW.QUALITYMATERIAL.NET**

2" Gallium Nitride Epitaxy on Sapphire Templates

Item	PAM-GaN-T-N	PAM-GaN-T-SI
Conduction Type	N-type	Semi-insulating
Dopant	Si doped or undoped	Fe doped
Size	2"(50mm) dia.	
Thickness	5um,20um,30um,50um,100um	30um,90um
Orientation	C-axis(0001)+/-1°	
Resistivity(300K)	<0.05Ω·cm	>1x10 ⁶ Ω·cm
Dislocation Density	<1x10 ⁸ cm-2	
Substrate Structure	GaN on Sapphire(0001)	
Surface Finish	Single or Double Side Polished,epi-ready	
Usable Area	≥ 90 %	

3"GaN Templates Epitaxy on Sapphire Substrates

Item	PAM-GaN-T-SI
Conduction Type	Semi-insulating
Dopant	Fe Doped
Exclusion Zone:	5mm from outer diameter
Thickness:	20um,30um,90um(20um is the best)
Dislocation density	< 1x10 ⁸ cm-2
Sheet resistance (300K):	>10 ¹⁰ ohm.cm
Substrate:	sapphire
Orientation :	C-plane
Sapphire thickness:	430um
Polishing:	Single side Polished,epi-ready, with atomic steps.
Backside coating:	high quality Titanium coating, thickness > 0.4 μm
Packing:	Individually packed under argon Atmosphere vacuum sealed in class 100 clean room.



2" AlGa_N, InGa_N, AlN Epitaxy on Sapphire Templates: custom

2" AlN Template Epitaxy on Sapphire Templates

Item	PAM-AINT-SI
Conduction Type	semi-insulating
Diameter	Φ 50.8mm ± 1mm
Thickness:	1000nm+/- 10%
Substrate:	sapphire
Orientation :	C-plane
Orientation Flat	A-plane
XRD FWHM of (0002)	<200 arcsec.
Useable Surface Area	≥80%
Polishing:	None

2" Gallium Nitride Epitaxy on Sapphire Templates: P-type

Item	PAM-GaNT-P
Conduction Type	P-type
Dopant	Mg doped
Size	2"(50mm) dia.
Thickness	5um
Orientation	C-axis(0001)+/-1°
Resistivity(300K)	<1Ω·cm or custom
Dopant Concentration	1E17(cm-3) or custom
Substrate Structure	GaN on Sapphire(0001)
Surface Finish	Single or Double Side Polished,epi-ready
Usable Area	≥ 90 %