Single Wafer System to Enable High Volume Production of Highly-Efficient GaN Lighting Devices

Propel® enLight™ GaN MOCVD System

Clusterable platform accelerates the adoption of GaN-based advanced light emitting diodes

- Unparalleled performance
- Exceptional productivity
- Best-in-class flexibility
- Lowest cost of ownership
Veeco’s enLight Advantage
Veeco’s new Propel enLight GaN MOCVD system is designed specifically for the high-volume high-performance, broadband superluminescent light emitting diodes industry. Featuring a single-wafer reactor platform capable of processing eight- and twelve-inch wafers, the enLight system deposits high-quality GaN films that result in highly-efficient power electronic devices.

Performance Advantages
Designed for Superior Thermal and Thickness Uniformity

TurboDisc® Single Wafer Reactor
> High Velocity Laminar Flow
> No leading / trailing edge effects

IsoFlange™ Technology
> Optimized alkyl/hydride center injection for excellent inner zone uniformity
> Improved alkyl spacing for better flow distribution across wafer carrier

SymmHeat™ Technology
> Concentric heating improves wafer bow control
> No spindle means no center cold zone
> Extends uniform temperature to the center and outer edge of the wafer carrier

Productivity Advantages
Reduces recipe time to enable the maximum throughput

Excellent wafer-to-wafer and run-to-run uniformity without tuning

Flexibility Advantages
Extendable to 12” wafer size
> Seamless process transfer to larger substrates

Cost of Ownership Advantages
8” substrate >20% lower than competition

8” Substrate
Cost of Ownership ( $/wafer)

Competitor C2
Propel C6
Propel C6 +AFI

Facilities
Labor
Capital depreciation
Consumables

20% lower CoO