## **COREMA**



## **Contactless Resistivity Mapping and Mobility** Measurements for Semi-Insulating Substrates



- Non-Destructive Measurements
- No Sample Preparation
- Wafer Sizes up to 150/200mm
- For Wafer Production and Process Development

- GaAs, InP, SiC, GaN, Cd(Zn)Te
- Rapid Full Wafer High Resolution Resistivity Topography
- Resistivity Range: 1x10<sup>5</sup> - 1x10<sup>12</sup> Ohm-cm
- Fast, 1% Repeatability



## **Replaces Slow, Destructive Hall Measurement**

- No Sample Preparation
- No Loss of Wafer Material
- Rapid Mobility Measurement (<1 min)</li>
- High Lateral Resolution (1mm)
- Non-Contact
- Excellent Repeatability

## **COREMA Series System Options**

Configuration	Measurement Capability
COREMA - <i>WT</i>	<ul> <li>* Measure substrate resistivity.</li> <li>* Automated full wafer resistivity topography mapping.</li> </ul>
COREMA - <i>RM</i>	<ul> <li>* Measure substrate carrier concentration, mobility, and resistivity.</li> <li>* Manual multi-point measurement.</li> </ul>
COREMA - <i>ER</i>	<ul> <li>* Measure epitaxial buffer layer resistance</li> <li>* Example: GaN layers on SiC or sapphire substrates.</li> </ul>
COREMA - <i>VT</i>	<ul> <li>* Measure substrate resisitivity at variable temperature up to 673K/400C.</li> <li>* Evaluate activation energy.</li> </ul>