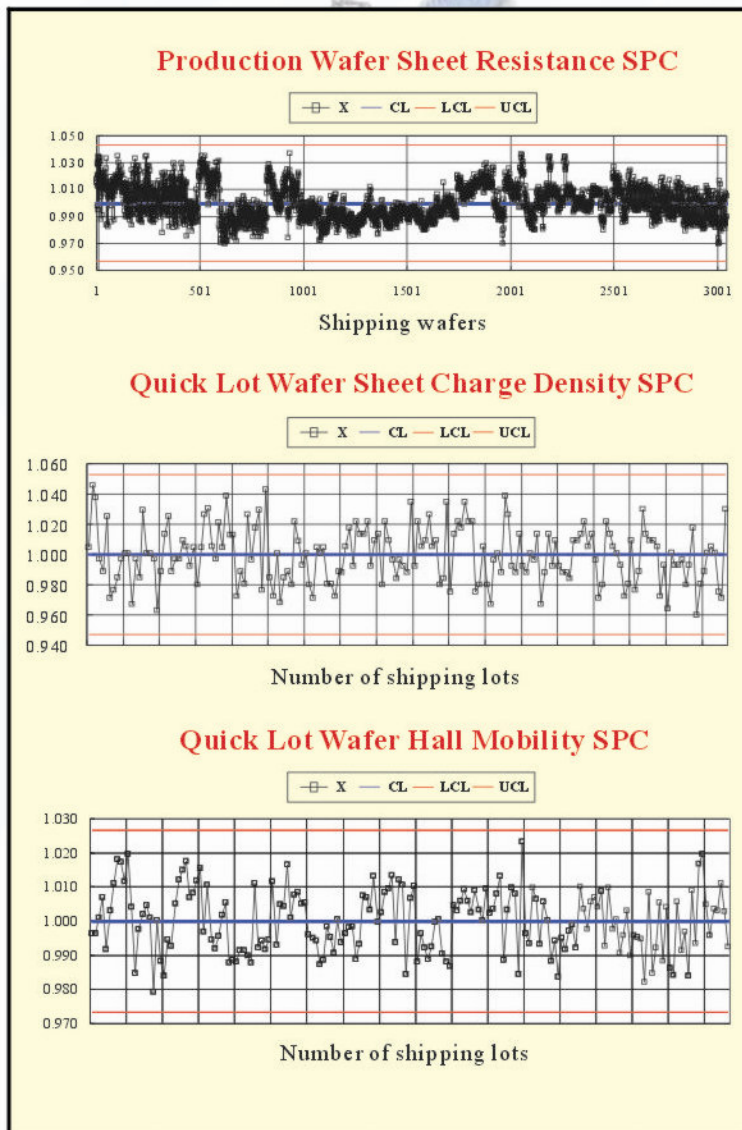


VPEC pHEMT Epi-Wafer

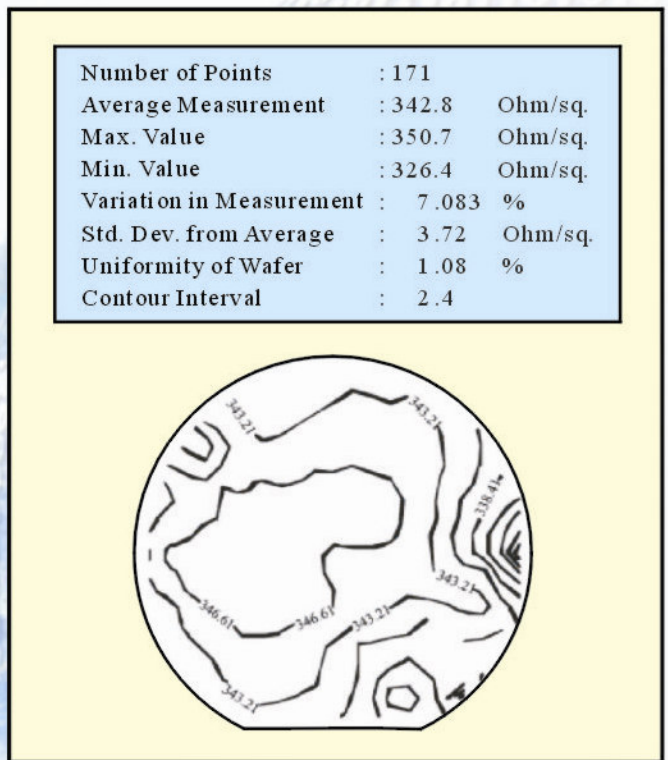
Features:

1. Excellent electrical performance and uniformity (STD<2%).
2. Thin AlAs and InGaP etch stop layer available.
3. Very low buffer and interface leakage current (<10nA @ 20V).
4. Provide quick lot FET device performance.
5. Long term MOCVD pHEMT production experience.
6. Provide epi growth DOE to accelerate customers' R&D projects.
7. Integrate high ESD structure available.
8. Cost effective.

One of Production Switch pHEMT Wafer SPC



6" Capless pHEMT Wafer Sheet Resistance Mapping



6" pHEMT Wafer Performance

Item	Average	Uniformity
Full Structure Sheet Resistance, Ω / \square	69	0.4%
Capless Structure Sheet Resistance (2DEG), Ω / \square	343	1.1%
Sheet Charge Density, ns ($1/\text{cm}^2$)	$2.2E12$	1.6%
Hall Mobility (RT), $\mu(\text{cm}^2/\text{v.s})$	6650	0.6%
Hall Mobility (77K), $\mu(\text{cm}^2/\text{v.s})$	16000	
Pinch-off Voltage, V_p (V)	-1.0	1.0%
Buffer and Interface Leakage Current @20V	<10nA	
Layer Thickness		<1.0%



Visual Photonics Epitaxy Co., Ltd.

No. 16, Kung Yeh 1st Rd., Ping-Jen Industrial Zone, Ping-Jen City, 324 Taoyuan, Taiwan, R.O.C.
 Tel:886-3-4192969 Fax:886-3-4192968 E-mail: sales@vpec.com.tw <http://www.vpec.com.tw>