

DDRA8010元件動態可靠度分析儀(Device Dynamic Reliability Analyzer)

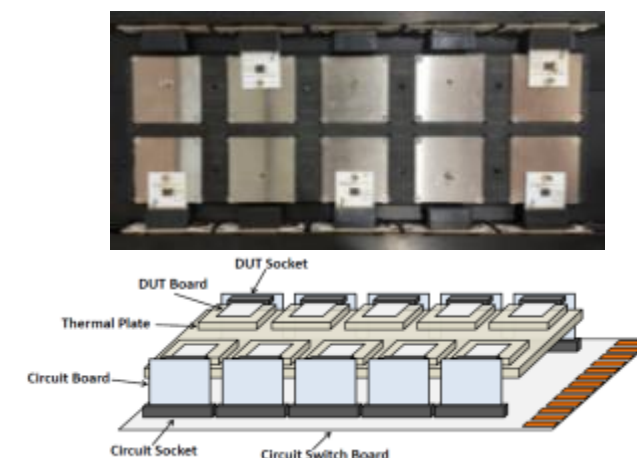
- ◆ Long-term and multi DUTs dynamic reliability of GaN devices beyond JEDEC
- ◆ Up to 800V stress, 300kHz switching frequency, and 10A current
- ◆ Provide hard switching(HSW) and soft switching(ZVS)
- ◆ Built-in inline functions including pulse IV

Model		DDRA8010	DDRA8010-EM
DUT	QTY	10	10
Functionality	Thermal Control	25°C~175°C	Extension accessories of DDRA8010
	Gate Driver Spec	±20V,ΔV = 20V	
Pulse IV	Pulse Frequency	250Hz ~ 5000Hz	
	Pulse Width	1μs ~ 50μs	
	Drain Current/Voltage	20A (0 ~ 10V), 10A (10V ~ 20V)	
	Voltage Increment	0.05V	
Dynamic Rdson/HTOL	Frequency	100kHz to 300kHz with 100kHz increment	
	Duty	10% to 90% with 10% increment	
	Drain Voltage	800V max	
	Drain Current	10A max	
In-line Monitor	In-line Monitor Ron and Vth		

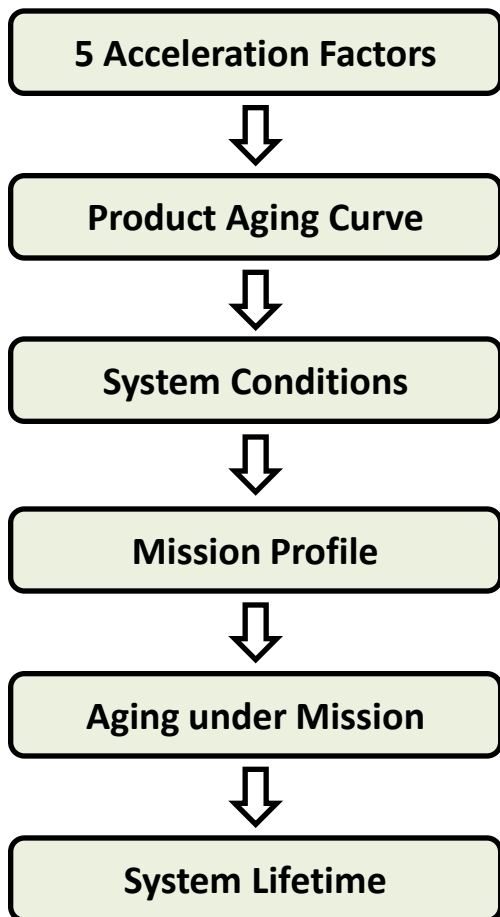
DDRA8010



10 DUT Module

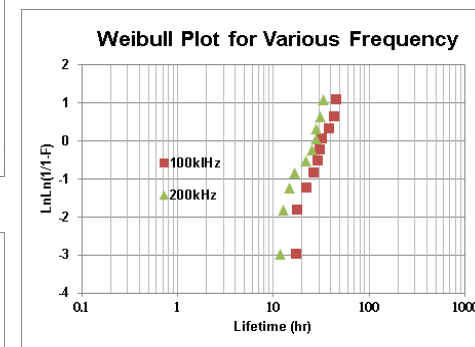
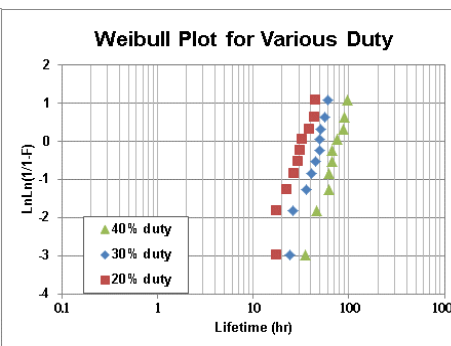
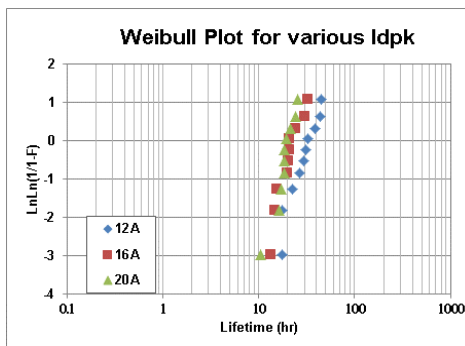
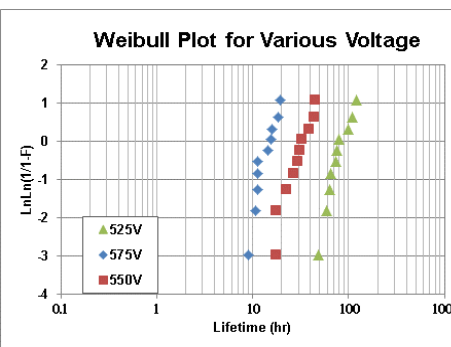
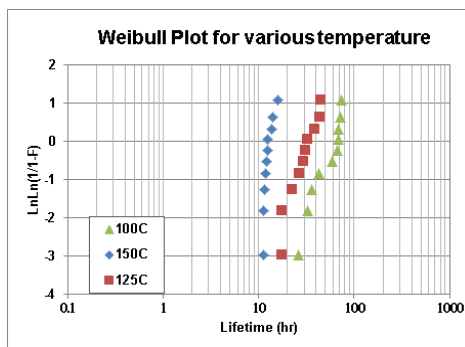


Methodology to Evaluate System Lifetime



Dynamic Reliability

Long-term dynamic $R_{ds(on)}$ is measured to monitor device reliability under high temperature, stress voltage, current, operating duty and frequency, providing a reliable evaluation of device lifetime.



Reference : “New Circuit Topology for System-Level Reliability of GaN” (ISPSD2019)

