

TECHNOLOGY

Our core R&D team has iNARTE certified ESD and EMC engineers with in-depth knowledge and decades of experience. We also have long-term joint development programs with some of the top academic research groups in the world.

RELIABILITY

Our products are built with detailed designs and quality parts. All products are tested under stringent reliability tests before being released.

SUPPORT

Our excellent support team guides you from selections to applications, and brings the best solutions to every customer.

SERVICE

We offer no-hassle returns, trade-ins (upgrade), and fast repair during the warranty period. We offer test consulting, rental and demonstration systems, and calibration services. All of our products come with lifetime technical support.

Contact Us:

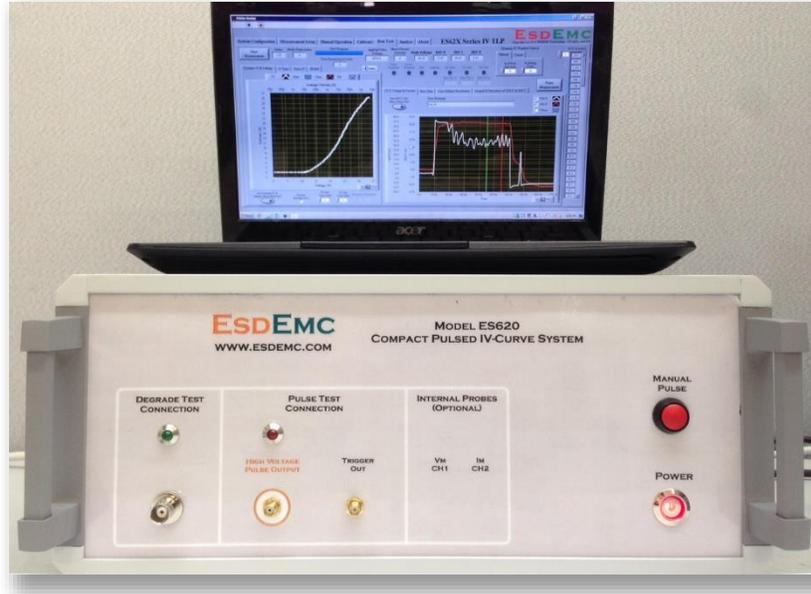
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Electrostatic Discharge Test Solutions

ES620 Series Portable Dynamic IV-Curve TLP/VF-TLP Test System (External Modules for HMM, HBM & LV Surge Available)



Demo system photo – Not Final

Applications:

- Wafer level ESD test
- PCB / package level ESD test
- System / circuit ESD test
- TLP pulse current injection meets and exceeds ANSI/ESD STM 5.5.1-2008
- VF-TLP pulse current injection meets and exceeds ANSI/ESD SP5.5.2-2007
- HMM pulse current Injection equivalent to IEC61000-4-2 waveform for low ohm device
- Safe Operation Area (SOA) test
- Charge recovery time test
- Differential ESD pulse injection
- Touchscreen ITO trace fuse test
- Touchscreen ITO trace breakdown test

Features:

- 25 A and 50 A models available
- High quality TLP / VF-TLP / HMM pulses
- Advanced automatic failure detection methods including; DC Spot Check (V or I), Static IV, Fuse, Breakdown, Bias Source Fluctuation, and customization available
- Manual pulsing: Single
- Software controlled pulsing: Burst, Repeating, IV-Curve Characterization
- Manual Rise-Time selections from 250 ps to 50 ns
- Manual Pulse-Width selections from 5 ns
- Features are customizable

Overview:

The ES620 Series Dynamic IV-Curve Test System is an advanced IV curve characterization system designed to simulate ESD events (TLP/ VF-TLP/ HMM pulse) and monitor a device (semiconductors, discrete, circuit modules, etc) in high power time domain.

The TLP (transmission line pulse) test function is designed to meet the ANSI/ESD STM5.5.1-2008 test standard and offers high quality rectangular pulses to devices and recording both voltage and current through device. This gives pulsed IV curves allowing users to characterize a device's transient response over ns time windows. Advanced automatic device failure detection methods are incorporated such as DC Spot Check (V or I), Static IV curve, Fuse, Breakdown, and Bias Source Fluctuation.

The VF-TLP test function is designed to simulate the CDM speed ESD event and captures the voltage across the DUT and current through the DUT under a very high speed (such as 100 ps rise-time) ESD transient moment. This allows user to study the response speed and peak clamping voltage of a device.

The HMM (Human Metal Model) test function is an alternative test method to IEC61000-4-2 system level ESD. It gives the equivalent waveform to an ideal standard waveform for low ohm devices and eliminates many IEC gun test problems for components or wafer level tests, such as repeatability, imprecision gun tip, impedance mismatches, EMI interferences from unshielded relays and special setup with large ground plane and coupling plane etc.

TLP Specifications:

- Standard Rise Time ≤ 200 ps
- Maximum injection current
25 A into short / 12.5 A into 50 Ohm
50 A into short / 25 A into 50 Ohm
- Pulse Width options from 100 ns
- Pulse voltage control in 0.1 V steps

Optional VF-TLP Specifications:

- Rise Time ≤ 100 ps
- Manual Pulse Width options from 5 ns

Optional HMM Specification:

- Up to 12 kV IEC model current injection for low ohm device
- 45 A first peak, 24 A at 30 ns, 12 A at 60 ns
- First peak rise-time 700 ~ 1000 ps

Optional HBM and LV Surge Specifications:

- To be announced

Operation Conditions:

- Temperature: -10 to +50 °C
- Humidity: 20 to 80% RH
- Pressure: 68 to 106 kPa

Dimension and Weight:

- Stand-alone with handles or 3U rack-mount chassis (14W x 6H x 13.5D inch)
- 5 kg (10 lb.)

Support and Service:

- 2 year factory warranty (extendable)
- Free lifetime technical support
- Software upgrades available
- Hardware upgrades available

Optional Accessories:

- A6212 Transmission Line Extension Unit
- A621-HMMA HMM Pulse Model Option
- A621-LT Leakage Measurement Options
- ES651 Differential ESD Injection and V/I Measurement Probing System
- External Rise Time filter options from 250 ps to 50 ns