

MODEL 58154

ESD TEST SYSTEM

Key Features

- Two Models ESD Pulse Generation: Human body model and machine model
- Programmable Auto Test
- : Pulse period, cycle and property is user

defindable

- High Scan Precision: Machine model scan precision minimum to 5V per-step, human body model precision minimum to 20 V per-step
- Diversity Control Interface: Can be controlled by keypad or wafer prober
- Up to 4000V



ESD Test System (PCI Board)

| | | | D | 1 | SS | |
|----------------------|--------|------|------------|---------|----------|--------------|
| Results @ | | | Г | A | 22 | |
| Test Volta | 0 | v | Use Pass | MM | HBM | ED Paralta |
| lm1 (m₩) | 0 | | Voltage | 100 | 1000 | BID_Reruht |
| ln2 (m₩) | 0 | | Test Count | 0 | 0 | |
| Vf1 (V) | 0 | | Fail Count | 0 | 0 | Save Setting |
| Vf2 (V) | 0 | | PASS Count | 0 | 0 | Load Default |
| Vf3 (V) | 0 | - 11 | Count Pas | s % for | Voltages | |
| Vrb (V) | 0 | -101 | 100,1000 | 0 | 0 | |
| Irl (uA) | | -122 | 200,2000 | 0 | 0 | P 9 |
| IfI (nA) | | -16 | 300,3000 | 0 | 12 | 1433 20 |
| | | - 10 | 400,4000 | 0 | 0 | |
| | | | м | М | П | BM |
| Irl (uA) Ifl (uA) | 0 0 | 3 | | | 0 | Pass % |
| | | | | 14 | П | |

Chroma 58154 ESD Test System is a PXI controlled module or PCI board for simulating ESD discharge pulses during electronic device testing to either ESD STM5.1-2001-Human Body Model or ESD STM5.2-1999-Machine Model. The unit comprises a PXI module to provide the control signals and an external box containing the high voltage PSU and pulse shaping circuits. ESD testing is typically performed on a sample basis.

The Chroma 58154 can be integrated with a wafer prober to test devices in a defined sample pattern. Typically a die is tested, ESD pulse(s) are applied and the device is retested. The level of ESD pulse is gradually increased until device failure is detected by the second test.

| SPECIFICATIONS | | | | | |
|--|---|--|--|--|--|
| Model | 58154 | | | | |
| Parameter | Value | | | | |
| ESD Mode | Machine model / Human body model | | | | |
| Pulse voltage | Machine model: 50V to 400V \pm 5V Human body model: 500V to 4kV \pm 20V | | | | |
| ESD Specification (without measure port) | Machin model reference on STM5.2-1999 *Note 1 Human body model reference on STM5.1-2001 *Note 1 | | | | |
| Pulse period | 20ms to 1s-user definable | | | | |
| Pulse repetition | Single or multiple | | | | |
| Pulse polarity | Positive or negative-software control | | | | |
| AC input | 90V to 260 VAC, 47 to 63Hz | | | | |
| Dimensions | 434.6mm(W) x 97.7mm(H) x 306.8mm(D) | | | | |
| Weight | 10kg | | | | |

Note1: If ESD pulse out port is combined with measure port, the machine model ESD pulse period t_{pm} would increase from 90ns to 100 ns. And Human body model pulse rise time t_r would increase from 10 ns to 12.5 ns, pulse decay percentage would increase from 15% to 20 % .

Pattern No.: 95137265 Pattern Name : Discharge and remote feedback integrated testing system

Ordering Information

PXI-58154 : ESD Test System PCI-58154 : ESD Test System