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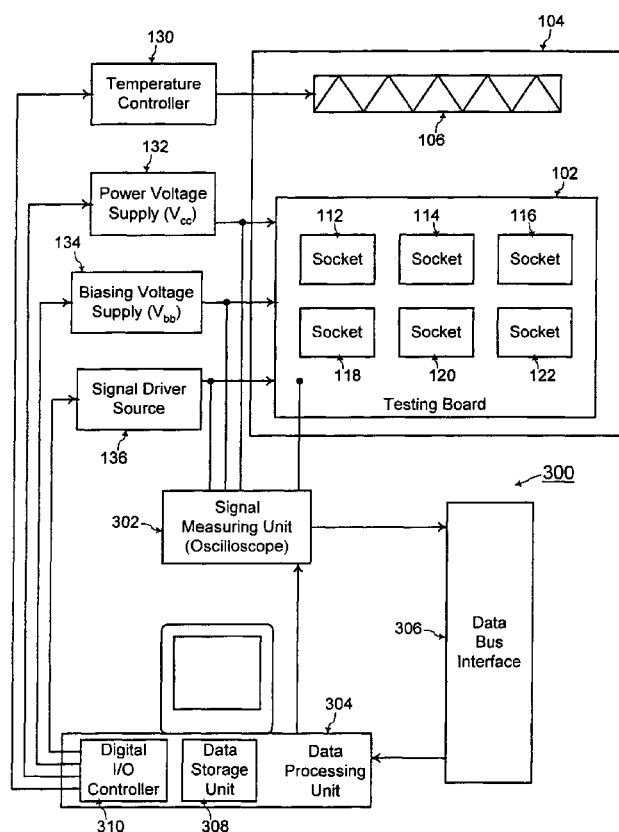
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(54) Title: AUTOMATED PROTECTION OF IC DEVICES FROM EOS (ELECTRO OVER STRESS) DAMAGE DUE TO AN UNDESIREDC DC TRANSIENT



(57) Abstract: Nodes of a test station for testing IC devices are monitored to detect for the occurrence of any undesired DC transient. The test station for testing the IC devices includes a testing board for holding the IC devices, at least one voltage supply for biasing the IC devices, and a signal driver source for providing driving signals coupled to the IC devices, during testing of the IC devices. A system for protecting the IC devices from EOS (electro over stress) damage due to the undesired DC transient includes a signal measuring unit that monitors for occurrence of an undesired DC transient at any of the at least one voltage supply, of the signal driver source, and of at least one node of the testing board. The system also includes a data processing unit and a data interface bus coupled between the signal measuring unit and the data processing unit. The signal measuring unit sends, to the data processing unit via the data interface bus, a signal of the undesired DC transient measured at any of the at least one voltage supply, of the signal driver source, and of at least one node of the testing board. The data processing unit determines whether the signal of the undesired DC transient exceeds threshold characteristics. The data processing unit includes an I/O (input/output) controller for controlling components of the test station such that the test station shuts down in a proper sequence when the signal of the undesired DC transient exceeds the threshold characteristics. The testing of the IC devices may resume after such a shutting down of the test station by resetting the test station.



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