Environmental testing. Every package level undergoes some form of environmental testing. Commercial products are tested for reliability and operation under environmental extremes of temperature, humidity, shock, vibration, and other parameters. Components and devices designed for military applications are subjected to extensive environmental testing to ensure their continued operation under demanding field conditions. Figure 6 shows how VHDL can express environmental data.

Electrical, physical, and environmental information is required for tests at all product packaging levels in all phases of the product's life cycle. VHDL can express the information in an ATSG needs to generate test specifications for a UUT. Using a single language—VHDL—that can express information for both test and (as discussed in other articles in this issue) design will help ensure a smooth flow of information from the design community to the test community. This communication link will help remove the barriers between design and test, thereby reducing product cost and improving product quality.

Environmental data types.

References


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