

**Master's Thesis Defense Announcement**  
**Mechanical and Aerospace Engineering Department**  
**University of Texas at Arlington**

**ANALYSIS OF GLASS TRANSITION TEMPERATURE OF PCB &  
SUBSTRATE USING DYNAMIC MECHANICAL ANALYSIS AND  
THERMO-MECHANICAL ANALYSIS**

**By**

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[Microsoft Teams Link](#)

**Abstract**

Glass transition temperature plays a vital role in the field of Electronic Packaging. The Glass transition temperature is always lower than the melting temperature of a crystalline state of respective material if exist. The commonly used component in today's electronics world are PCBs and substrate which are an integral part of it.

There are few known ways of finding out the Glass transition temperature. The thesis focuses on Dynamic Mechanical Analysis and Thermo Mechanical Analysis which are considered more reliable. Among these two devices getting the results which are slightly varying from each other and which one should be considered . Analyzing the readings from the graphs generated during the test gives a perspective of understanding the behavior of the material and its nature when it reaches to glass transition temperature. And what is the importance of it.