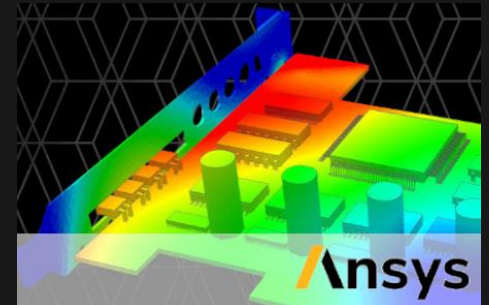


## Ansyes Sherlock

11 November 2020



### Agenda

09:00 – 09:30	Welcome
09:30 - 12:30	<p><b>Workshop 01</b> - Getting Started with Sherlock</p> <ul style="list-style-type: none"> <li>How to set-up a Sherlock project</li> </ul> <p><b>Workshop 02</b> - Sherlock and Mechanical Shock</p> <ul style="list-style-type: none"> <li>Mechanical shock is the sudden application of single or multiple, but non-periodic, physical loads due to acceleration or deceleration that results in significant displacement or deformation.</li> <li>Common events that induce mechanical shock include drops, crashes, firing, impact, or explosions.</li> <li>The strengths of components and the amount of stress transmitted to them during the shock event will determine whether failure occurs</li> </ul> <p><b>Workshop 03</b> - Sherlock and Solving Thermal-Mechanical</p> <ul style="list-style-type: none"> <li>Coupled temperature and mechanical simulation.</li> <li>- Thermal conduction analysis.</li> <li>- Mechanical stress analysis due to CTE mismatch.</li> </ul>
12:30 – 13:00	Quick Lunch
13:00 – 17:00	<p><b>Workshop 04</b> - Sherlock and Vibration</p> <ul style="list-style-type: none"> <li>Solder joints provide electrical, thermal, and mechanical connections between electronic components and a printed board.</li> <li>When the printed board is subjected to vibration, it will experience global and local changes to the board shape and curvature.</li> <li>This behavior will introduce strain into the solder joint.</li> </ul> <p><b>Workshop 05</b> - Analyzing reliability risks of PCBs with ANSYS Sherlock</p> <ul style="list-style-type: none"> <li>In this tutorial, we will learn to analyze mechanical reliability risks of PCBs with several components using ANSYS Sherlock.</li> <li>We will analyze a PCB assembly comprising a six-layer board and several components.</li> </ul>