Thermal Management Standardization Gr.

◆ Objective and Scope

- Condition of heat dissipation in electronic equipment is being changed by high-density packaging. Conventional electronic components can dissipate heat to surrounding air. However, recent surface-mounted components have to dissipate heat through PCBs. Therefore, our group targets to develop a new infrastructure about thermal design of surface-mounted components. The infrastructure includes standards and guidelines about next generation thermal management.

◆ Summary of Activity

The following 3 subgroups are developing new infrastructure of thermal management for surface-mounted components:

- Definition of environmental temperature for surface-mounted components:

  This group discusses a new methodology of definition of environmental temperature around the surface-mounted components based on heat dissipation passes from the components to the surroundings through PCBs.

- Guidelines of heat dissipation design through PCBs:

  This group investigates a new thermal design method for surface-mounted components by using heat dissipation through PCBs.

- Temperature measurement of surface-mounted components:

  This group develops new guidelines of temperature measurement for miniaturized electrical devices that temperature cannot be measured directly by using general measurement techniques of temperature.