## 10 QUESTIONS TO ASK FOR EFFECTIVE ECAD/MCAD COLLABORATION

## EFFECTIVE COMMUNICATION IS CRITICAL TO DESIGN SUCCESS.

Miscommunication can result in multiple design changes to solve preventable issues, schedule delays, and product development issues. The first step is asking the right questions throughout the process. To help, we have compiled a checklist of 10 questions you should be asking your MCAD team.

- 1) Do I have the latest design files?

  Making sure you have the latest design files will prevent the ECAD and MCAD team from going into two different directions.
- 2) What is the board size/shape?
  The board size/shape tells the board designer how much room they have to create their design within the mechanical enclosure.
- 3) What are the full enclosure dimensions? Knowing the big picture can help when designing the PCB to understand where there is or isn't room to grow.
- **4) What materials are being used in the design?** Different materials can cause various effects on a PCB, such as different conductive materials.
- 5) Are there any height restrictions? If so, what are they and on what side of the board? Height restrictions will determine what types of parts can be used and where.

- **6) What is the max thickness of the board?** Understanding the thickness of a PCB determines how many layers can be used for routing.
- 7) What are the board tolerances?
  The board tolerances are important to pass along to the manufacturer to ensure it fits inside the enclosure.
- 8) What are the locations for important connectors, stand offs, screws, etc?

  Most connectors, stand offs, and screws can't be moved, so you must have them in their correct position and place other components around them.
- 9) Where are the locations of any heat sinks? What are their dimensions?

Prevent components from interfering with heat sinks later in the design process.

10) Are there any current restrictions to stay within for heat dissipation/air flow? What are the tolerances?

Having a limit to the board's heat output is critical to how it effects the product's usability.

## STAY IN SYNC AUTOMATICALLY WITH CADENCE ECAD/MCAD CONNECTORS

Cadence ECAD/MCAD connectors provide seamless integration between ECAD and MCAD teams without any middleware or manual processes, helping you to collaborate effectively and operate efficiently throughout the entire product development lifecycle.

