A leading gaming system company had to introduce a new product in record time but with complex mechanical requirements never implemented before in a gaming system. The company needed a partner with extensive experience in mechanical engineering, along with NPI and global capabilities for volume production. They chose Sanmina.

THE CHALLENGE
The electronic casino gaming market is very competitive; innovation and time to market are key factors for success. A tier one gaming system company needed to bring a new product to market from concept to full scale production in less than one year. The new system required large welded frames with parts weighing over 200lbs and an oversize 84” display that had to be easily installed and serviced in the field by one person. The company needed to find an experienced design and global manufacturing partner that had complex mechanical system design expertise and a proven track record.

WHY SANMINA
Sanmina was selected for several key reasons:

- Extensive experience in the design and manufacturing of complex systems for the gaming and industrial markets.
- Expertise in design of mechanical systems for industries where regulatory and safety standards are of paramount importance.
- Design for Manufacturing (DFM) expertise, flexibility and experience in bringing complex mechanical systems from prototype to production in record time.
- Expertise in quality, logistics and supply chain management for electro-mechanical systems.
- Demonstrated experience with complex gaming system manufacturing, all the way to full system integration.
- Local engineering, NPI expertise, and global production capabilities to minimize total cost.
SANMINA’S APPROACH

A Sanmina mechanical development team was assembled with expertise in key areas including complex mechanical system design, structural analysis, Design for Manufacturing (DFM), large scale systems integration and logistics. The team’s approach was based on:

- Developing a design proposal that met the customer requirements for seismic and structural safety.
- Designing the mechanical system based on a proven tubular frame approach rather than a less robust and impractical traditional sheet metal design.
- Providing a solution that allows one person to install the product with an 84” monitor using an innovative assembly process with a battery operated hand drill.
- Flexible design process that enabled size and structural changes during development based on customer feedback.

The Sanmina mechanical design approach enabled the development of a second product version with a dual display without any major changes.

RESULTS

Leveraging Sanmina’s extensive experience with mechanical product design, VAVE (Value Analysis and Value Engineering), DFM, and structural analysis enabled the customer to:

- Deliver an innovative design that could be serviced in the field by one person.
- Achieve mass production in record time.
- Meet market demand with a high quality product.
- Take delivery of a (second version) prototype in 12 weeks to demonstrate at a tradeshow.