Connectors Engineered for SMT Assembly Processes

Mass production, high volume assembly processes such as those used by Electronic Contract Manufacturers (ECMs) and Original Equipment Manufacturers (OEMs) to produce thermostats, industrial automation controls and power supplies, require PCB designs that drive cost-efficiencies throughout the component assembly process.

Today’s competitive markets demand connectors that leverage advanced surface mount technology processes and offer co-planar adaptable contact elements and retaining anchors to deliver seamless solderability to PCB boards.

Leveraging more than 30 years of experience in designing world-class connector solutions, WECO’s award-winning SMARTCONN® surface mount technology (SMT) connector series offers unparalleled flexibility to meet specific performance, material, mounting, packaging, reliability and cost savings production specifications.

Reduce cost
• Eliminate high costs associated with wave solder assembly processes
• Simplify and streamline processes

Optimize productivity
• Reduce manufacturing lead times
• Replace intensive manual assembly with “pick-and-place” automated assembly processes
• Minimize plug-in/plug-out stresses with robust, reliable mechanical assemblies
• Remove assembly bottlenecks

Increase PCB density
• Minimize component size
• Mount components on both sides of the PCB
• Optimize PCB real estate with unique spacing sizes

Improve quality
• Enhance soldering and connection to PCB
• Improve yield
• Increase mean-time-between-failure (MTBF) rates with superior field-reliability
YOUR PARTNER IN OPTIMIZING CONNECTOR DESIGN

Whether you require genuine SMT or through hole reflow, the SMARTCONN series leverages best-in-class manufacturing automation techniques that drive down costs throughout the assembly process.

Entering its fourth-generation, SMARTCONN is a portfolio of patented, field-tested and robust connectors, terminal blocks, pins and anchoring systems specifically designed and engineered for advanced SMT processes.

Leveraging innovative connector designs that incorporate co-planar adaptable contact elements (pins, terminal bodies and anchors), SMARTCONN embeds special characteristics that:

• Significantly increase adaptability to PCB planarity
• Improve on-board robustness against peel-off and pull-out stresses
• Eliminate CTE (Coefficient of Thermal Expansion) mismatch

Perfect solderability through patented contact and anchoring techniques:

• Eliminate CTE mismatch and ensure self-adjustment to the board surface.
• Increase retention robustness with self-adaptive anchors.

NEED TO EXTEND THE ROI OF LEGACY PCB BOARDS? EXPERIENCE THE BENEFITS OF OPTIMIZED THROUGH HOLE REFLOW

Open up a path to SMT:

• Easily adapt to PCB / robotic assembly processes with pick-and-place components.
• Remove wave soldering and associated costs.
• Facilitate integration with automated feeders and dispensers via product transfer tubes or carrier tapes.

Improve component reliability:

• Engineered standoffs increase heat circulation for better soldering and easy visual inspection.
• Reliable mechanical strength, high reflow temperature and self-extinguishing thermoplastic materials withstand harsh environments or strong vibrations.

Competitive pricing

• Reduce costs with state-of-the-art short cycle designs and engineering processes.
• Increase component and packaging density with double-sided designs.
• Leverage proximity manufacturing facilities across North America to decrease transportation costs and carbon footprint with innovative production and logistics programs.

Accelerated lead times

• Accelerate time-to-market with North American design and manufacturing teams.
• Simplify quick turn designs, special runs and custom orders with best-in-class manufacturing processes.

Customer service

• Leverage localized service from order to install with worldwide network of sales and service personnel.