











AirBorn's Flexible Circuits

Our flexible circuit business has provided innovative and high-quality flexible printed circuit and assembly solutions for 30+ years. AirBorn is certainly your go-to "Flexperts"!

AirBorn's early-stage technical support allows system and device designers to solve interconnect design challenges utilizing a full range of unique flex circuit attributes. With AirBorn, flexible circuits extend beyond jumpers to fully developed, rigid-flex circuit boards supporting multiple PCB components.

Product Type

- Single-sided flex 1 Layer
- Double-sided flex 2 Layers
- Multi-layer flex 3-10 Layers
- Multi-layer rigid flex 2-15 Layers
- Sculptured flex 1 Layer
- HDEC 1 Layer
- Extended length flex (up to 60', 18288mm) —
 1-2 Layers
- Liquid crystal polymer flex 1-2 Layers

Materials

- Dielectrics
 - Polyimide FR, Polyimide LF, Polyimide AP, Polyimide TK, LCP
- Copper
 - Rolled Annealed, Electro Deposited, Berilium Alloy

Surface Finishes

- Bright Tin
- Electrolytic (Hard) Gold
- Electroless Nickel Immersion Gold (ENIG)
- Hot Air Solder Leveling
- Immersion Silver
- Immersion Tin
- Photo Imagible Coverlay (PIC)
- Tin / Lead
- Soldermask

Shielding

- Cross Hatch Pattern Copper
- Silver Ink Epoxy
- Solid Copper

Plating

- Panel Plating
- Selective (Button) Plating

Model-to-Market Service

Our all inclusive "Model-to-Market®" service shepherds your product from the barest of concepts through to mass production. With our comprehensive manufacturing, testing & certification capabilities together under one roof, lead time and cost are cut considerably.

Our supply chain management makes for a truly complete, turn-key solution. Customers trust AirBorn components to perform in extreme conditions where complete reliability is vital to success.

Assembly Capabilities

- Ball Grid Array
- Crimping
- Conformal Coating
- Eccobonding
- Full Supply Chain Management (Turn-Key)
- Hand Soldering
- RoHS Capable
- Surface Mount (Machine Soldering)
- Wave Soldering

Inspection Capabilities

- Automated Optical Inspection (Inner & Outer Layers)
- Automated Optical Inspection (Assembled Components)
- First Article Inspection (including AS9100 FAI)
- Laser Coordinate Measuring Machine
- Microsection (IPC/MIL standards)

Testing Capabilities

- Interconnect Stress Testing Flex Cycling
- Continuity Testing
- Functional Testing
- Environmental Testing
- Flying Probe (Panels)
- Grid Testing (Panels)
- Impedance Testing
- Surface Ionic (Cleanliness) Testing

Certifications & Standards

- AS9100
- CGD Certified
- IPC 6013 Class 3
- IPC-A-600
- IPC-A-610
- Design Services
- Impedance Modeling
- Expedited Prototyping
- ISO 9001

- J-STD-001
- MIL-PRF-31032
- MIL-PRF-50884F
- UL 94 V0 / V1
- Production-Ready Prototypes
- Design for Manufacturing
- Low-to-High Volume Production Runs

High-Temperature DuraFlex™

At AirBorn, we continue to develop and expand our product offering to support standard and custom connector usage, harness assemblies and box builds. DuraFlex, our latest development, is a combination of unique materials and has been tested at a constant temperature of 230° C (446° F) for up to 500 continuous hours.

DuraFlex is thinner than fixed or flexible cabling yet performs at the same temperature and electrical specifications. It is available in many flex constructions using 0.5 oz (17.78 microns) and 1 oz (35.56 microns) copper weights with dielectric thicknesses of 2 mil (50.8 microns) or 4 mil (101.6 microns) and can be produced in lengths of up to 110 inches (2794mm) which is > 9 ft (2743.2mm). DuraFlex has excellent chemical resistance and is lead-free/RoHS compliant



Global Interconnect & Model-to-Market Solutions



