



# WIRE BONDING SERVICES

Wire bonding is a key manufacturing process for microelectronics and MEMS sensor products. The core wire bonding capabilities and expertise at Spirit Electronics support process development, testing, and manufacturing of sub-assemblies designed by our customers. Wire bonding processes are flexible and robust, allowing our customers to quickly realize a microelectronic package assembly solution for their products. For additional information you can visit our website, or you can call or send us an email to discuss your wire bonding needs.

## FINE GAUGE WIRE/RIBBON BONDING

- Wire diameters: 17.5µm to 50µm (0.7 to 2.0 mil)
- Ribbon: 6x35µm to 25x250µm (0.25x1.4 mil to 1x10 mil)
- Wire and ribbon materials: aluminum, gold
- Fine pitch is available
- Bond area: 305mm x 410mm (12.3" x 16.14")
- Accuracy: 1µm at 3 sigma
- Speed: up to 6 wires/second
- Loop Length: 70 µm up to 20 mm, depending on wire diameter
- Various loop form functions:
  - Constant wire length
  - Constant loop height
  - Individual loop shapes

## HEAVY GAUGE WIRE/RIBBON BONDING

- Wire diameters: 100µm to 500µm (4 to 20 mil)
- Ribbon: 0.075x0.75mm to 0.4mm x 2mm (3x30 mil to 16x80 mil)
- Wire and ribbon materials: aluminum
- Bond area: 300mm x 500mm (13.8" x 19.7")
- Accuracy: 2µm at 3 sigma
- Speed: up to 3 wires/sec

## GOLD BALL BONDING

- Wire diameters: 15 to 50µm (0.6 to 2.0 mil)
- Wire materials: gold
- Fine pitch capability: 40µm
- Minimum loop height: 100µm (standard and worked loops)
- Bond area: 56mm x 80mm
- Accuracy: +/- 2.0µm
- Speed: up to 15 bonds/second including programmable looping
- Looping capability: standard and worked (BGA1-BGA3, Spider, J Wire, CSB)
- Stand-off Stitch bond (SSB) capable
- Stud bumping
- Wire material: gold
- Speed: Up to 30 bumps/second including programmable smoothing



ISO9001: 2015  
AS9100: 2016

SPIRIT ELECTRONICS



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CAGE: 08MH7 | UEI: WJFVKFC33X99