



The MPP **iBond5000** series integrates the proven MWB mechanical design with an advanced graphic user interface.

The MPP i**Bond5000** Wire Bonder series is based on the proven 4500 Series, the market leader for nearly a decade.

The **iBond5000** series include 3 basic models, Wedge, Ball and Dual. The basic machine has a TFT touch screen control interface and has the ability to attach an analog panel for those that prefer working with analog knobs.

iBond5000 main control board is based on Cortex A9 Dual core CPU that runs at a speed of 1GHz, the operation system is Windows CE based and the system is controlled using a 7" 600X800 TFT touch screen.

The system enables you, the user, to save and load profiles; it comes with factory preconfigured profiles to ease usage The **iBond5000-Wedge** is an advanced wedge bonder used for process development, production, research or added manufacturing support, iBond5000 provides the high yield and excellent repeatability needed for every wedge bonding application including: Optoelectronic Modules, Hybrids/MCMs, Microwave Products, Discrete Devices/Lasers, Chip-on-Boards, Leads, Sensors, High Power Devices and much more.

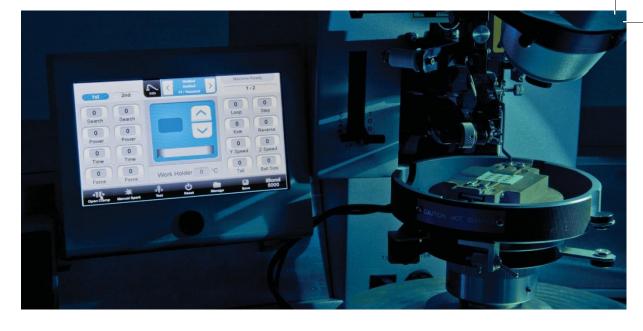
Features

- 7" TFT Touch Screen Management
- · Cortex A9 Dual Core CPU based hardware system
- · Windows CE based management software
- USB connectivity External Mouse, Keyboard, Disk on Key
- Load/Store wire bonding profiles, Disk on Key backup
- MPP Bonding profiles internal library
- 800MB Capacity
- · On-Line Manual
- Analog Pots Kit Optional
- · Internal Tools database
- Semi automatic/manual mode with Z option
- · Designed for aluminum wire, gold wire, ribbon and copper
- Large 5.3" x 5.3" bonding area
- · Consistent tail length with fine adjustment on panel
- Deep access capability (optional)
- Z axis DC servo motion with closed loop control
- Phase Locked Loop (PLL) ultrasonic generator and high-Q transducer
- · Built-in temperature controller
- Wide range of microscopes and optical accessories available
- RoHS compliance
- Chessman/Mouse & Manual Z convertible left or right
- · Bonding Types: Wedge, Tab, Stitch and Ribbon
- · Advanced Wedge Automatic Wire Re-Feed









iBond5000-Wedge Technical Specifications

- Wire feed angle 90 degrees, vertical feed / wedge 30 degrees, 45 degrees
- · Gold wire diameter
- Wedge bonding
- 0.7 mil to 3.0 mil diameter
- 17 micron to 75 micron diameter
- Copper Wire
- 0.7mil to 2mil
- -17 micron to 50 micron
- Gold ribbon
- · Wedge bonding
- Up to 1 x 10 mil
- Up to 25 x 250 micron
- · Aluminum wire diameter
- Wedge bonding
- 0.8 mil to 3.0 mil diameter
- 20 micron to 75 micron diameter
- Spool size
- Wedge bonding
- 2" x 1" double flange spool
- 1/2" spool (type TS-1)
- 2" x 1" spool holder for ribbon
- · Bonding tool specification
- Wedge bonding wedge length
- 0.750"
- -0.828"
- -1"

Machine Specifications

XY Table

- Bonding Area
 135 mm x 135 mm (5.3" x 5.3")
- Throat Depth
 143 mm (5.6")
- Gross Table Motion 140 mm (5.5")
- Fine Table Motion 14 mm (0.55")
- Mouse Ratio 6:1 (Choose Mouse Type)
- Left side mouse with right side manual 'Z' lever.
- Recommend optional 'Portable Dials Kit'
- Locates critical dials on right side
- For operator comfort (Search 1st , Search 2nd , Loop and Tail)
- Right side mouse with left side manual 'Z' lever
- Right side mouse with integrated manual 'Z' lever
- Motorized Y
- Stepback up to 4 mm (160 mil)
- Reverse up to 0.25 mm (10 mil)
- Kink height up to 0.5 mm (20 mil
- Z Axis Control
- DC Servo with closed loop tachometer feedback
- Z Axis Travel
- 0.500" (12.5 mm) 'Z' travel
- Increased travel range
- Full range of control with the 'Z' motor
- Ultrasonic System
- High Q 60kHz MPP transducer
- Phase Lock Loop self-tuning ultrasonic generator

Parameters

- Low Ultrasonic Power
 1.3 watts
- High Ultrasonic Power
 2.5 watts
- Bond Time (Selectable range)
- 10-100 milliseconds
- 10-1000 milliseconds
- · Bond Force (Static force adjust)
- 10-250 grams (requires added weights >80 grams)
- No springs
- Bond Force Coil Range -
- Added 3-80 grams (depends on Force parameter setting)
- Separate 1st bond and 2nd bond parameters
- No springs
- Wire Termination
- Clamp Tear, adjustable 'Tear' parameter and 'Tail' parameter
- · Wire tail feed
- Programmable clamp motion for wedge bonding
- Temperature Controller
- Built-ir
- Range up to 250 o C, +/- 5 oC

Facility Requirements

- Electrical: 100 240V, 50 / 60Hz
- Dimensions in mm: 680 (27") W x 700 (27.5") D x 530 (21") H
- Weight in kg: Shipping: 55 (122 lb), Net: 31 (69 lb)

For Sales and Services locations, please visit <u>www.mpptools.com</u>

For any assistance please contact us at mwb@mpptools.com



