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

The **iBond5000** 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
## Technical Specifications

### Machine Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>XY Table</strong></td>
<td></td>
</tr>
<tr>
<td>Bonding Area</td>
<td>135 mm x 135 mm (5.3” x 5.3”)</td>
</tr>
<tr>
<td>Throat Depth</td>
<td>143 mm (5.6”)</td>
</tr>
<tr>
<td>Gross Table Motion</td>
<td>140 mm (5.5”)</td>
</tr>
<tr>
<td>Fine Table Motion</td>
<td>14 mm (0.55”)</td>
</tr>
<tr>
<td><strong>Z Axis Control</strong></td>
<td></td>
</tr>
<tr>
<td>DC Servo with closed loop tachometer feedback</td>
<td></td>
</tr>
</tbody>
</table>

### 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
- **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)
- **Temperature Controller**
  - Built-In
  - Range up to 250 oC, +/- 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)

### Options and Accessories

- Single-Point TAB Kit w/Programmable Z Axis
- Ultrasonic System
  - High Q 60kHz MPP transducer
  - Phase Lock Loop self-tuning ultrasonic generator

---

For Sales and Services locations, please visit [www.mpptools.com](http://www.mpptools.com)

For any assistance please contact us at [mwb@mpptools.com](mailto:mwb@mpptools.com)