



**High accuracy, high quality, ultrasonic flip-chip device bonding.**

## MD-P200 Die Bonder

Unit Level Manufacturing by the synchro-motion of dispensing and bondingThe MD-P200's die bonding is carried out immediately after epoxy dispensing, thereby making it possible to finish the bonding operation before the epoxy has deteriorated. This realizes stable and high quality bonding at all bond positions on a substrate. In addition, the bonding stage camera enables pre-bonding inspection immediately after epoxy dispensing and post-bonding control immediately after the bonding of a die. This process enables manufacturing with real-time quality inspection. User-friendly operationA large touch panel and interactive software realize an easy and reliable operating environment for all users from beginners to experts.

### Key Features

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High accuracy

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Ultrasonic flip-chip device bonding

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High quality bonding process

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Easy and reliable operating environment

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Manufacturing with real-time quality inspection.

## MD-P200 Die Bonder

<https://ap.connect.panasonic.com/th/en/products/microelectronics/md-p200-die-bonder>

<b>Model Number</b>	NM-EFD1B
<b>Productivity</b>	0.56s/IC (Under the fastest conditions) 0.75s/IC for thermosonic bonding(Including process time of 0.2 seconds. Under the fastest conditions)
<b>Placement Accuracy</b>	XY (3 $\sigma$ at PFSC conditions): $\pm 7\mu\text{m}$ (Flip bonding), $\pm 15\mu\text{m}$ (With pre-centering), $\pm 25\mu\text{m}$ (Direct bonding)
<b>Substrate dimensions</b>	L 50 x W 30 to L 280 x W 140 (For thermosonic: L 200mm x W 150mm)
<b>Die dimensions (mm)</b>	L 0.25 x W 0.25 to L 6 x W 6
<b>Number of die types</b>	Up to 12 types (For AWC)/ Up to 10 types (Tray with the palette changer)/ Up to 5 types (Wafer frame with the palette changer)
<b>Configuration of die feeder</b>	Wafer frame, Pre-expanded ring, Tray
<b>Adhesive dispenser</b>	Air-powered writing, Stamping pin
<b>Bonding Load</b>	Pneumatic head: 0.5N to 10N (Option: 1N to 50N) VCM head for thermosonic process: 1N to 50N (Option: 2N to 100N)
<b>Head Heating</b>	Constant heating, Up to 250°C for the pneumatic head, Up to 300°C for the VCM head
<b>Substrate Heating</b>	Constant heating, Up to 300°C
<b>Number of nozzles</b>	Up to 24 nozzles (Pickup nozzle, Bonding nozzle, Stamping tool) (Not available for the thermosonic nozzle)
<b>Power Source</b>	3-phase AC 200V $\pm 10\text{V}$ , 50 / 60Hz, Up to 4kVA (Up to 7kVA for heating specification)
<b>Pneumatic Source</b>	0.5MPa, 30L/min (A.N.R.) (Up to 150L/min for full-featured machine including cooling air)
<b>Dimensions (mm)</b>	Standard specification (Up to 200mm substrate length. including loader/unloader) W 1950mm x D 1370mm x H 1720mm (Machine body: W 1190 mm x D 1190mm x H 1720mm)
<b>Mass</b>	2200kg (including loader / unloader)