

Backside Wafer Laser Marking

WB-300AG

The WB-300AG stands as a fully automatic backside wafer laser marking machine, specially crafted to address the challenges of high warpage and demanded precision.

Leveraging E&R's laser expertise, the WB-300AG excels in processing a diverse range of products, encompassing both bare and FFC wafers, across various applications.



High Productivity Marking Solution

- Twin laser design for high throughput

High Warpage Handling and Precision

- Max. 8mm warpage/ Accuracy : $\pm 75\mu\text{m}$

In Line QC System

- QC system is integrated in one machine

Capability for Multiple Applications

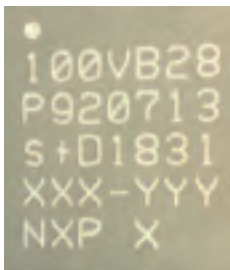
- Bare Si Wafer, Compound, Metal, BSP 2 in 1...

Marking Result

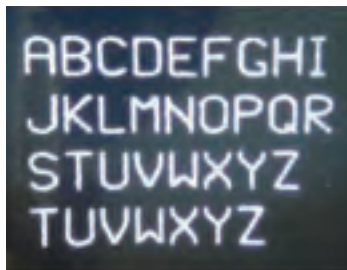
- Linewidth auto adjustment from $25\mu\text{m}$ ~ $65\mu\text{m}$ capability
- Through tape no bubble solution



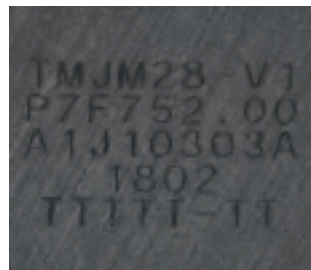
▲ LC86R40CD



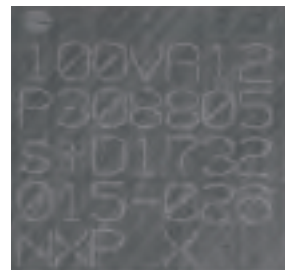
▲ LC86R25 2in1



▲ Silicon wafer



▲ D821HS

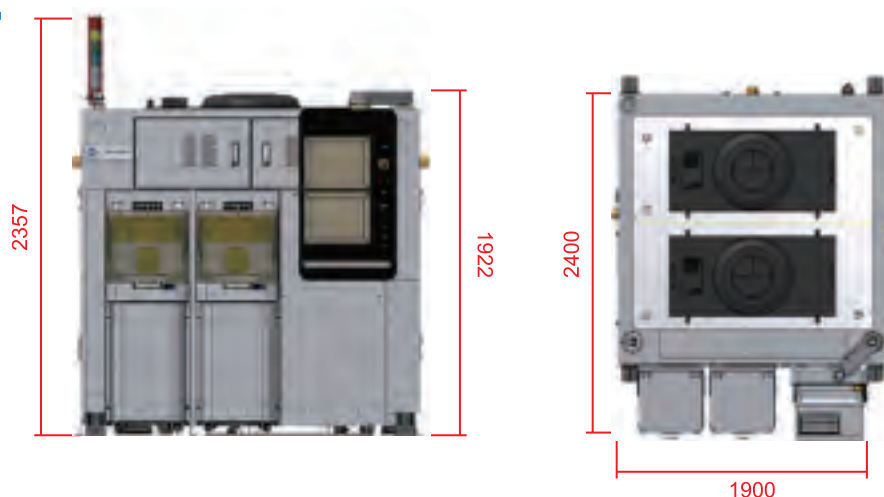


▲ UC-3157T



Machine Layout

Specification



Marking Performance

Marking Modes	Softmark (Dark Mark), Hardmark (White Mark), Dot Matrix
Fonts	SEMI OCR, Dot Matrix and Customized designs
Mini. Character Height	Bare Si 250um (Option for smaller character) Through Tape 300um
Accuracy	± 50um
Repeatability	± 10um
CPS	≥500 CPS (Character per second)
Marking Capability	Background, Polished, Oxidized, Nickel, Through Tape, BSP 2in 1
Depth of Marking	White Marking < 3 um, Dark Marking < 1um, Film Marking < 10um
Beam Size	25 ~ 65 um (optional)
UPH	12-inch Wafer (DPW 2000ea) – 13 pcs 12-inch FCC (DPW 2000ea) – 13 pcs

Wafer Handling

Wafer Size	8",12"
Wafer Thickness	≥150um (Warpage <8mm) *depends on material
Load Port	Universe x2
Alignment	Optical alignment for both flatted and notched wafers
X-Y Table Accuracy	± 5um

Laser Unit

Laser Type	6W Nd:YVO ₄ laser 532 nm Wavelength, TEM ₀₀
Cooling	Water Cooling
Effective Marking Area	Max 190 x 190mm
Diode Lifetime	Warranty 24 months (16000hr)
Auto Power Regulation	Yes

