PHOTONICS SYSTEMS GROUP

UPDATED M350 for ACTIVE IC TRIM

WT35X0_

An advanced new platform for high precision, high throughput wafer-level optimization of linear and mixed-signal IC devices.

- New Laser Sources
- New galvanometer scanner setup
- Improved laser beam mirrors
- Camera updates to GigE PoE
- Software enhancements

SPECIFICATIONS _

PHOTONICS SYSTEMS GROUP

SYSTEM SPECIFICATIONS

Closed Loop X/Y/Z, Theta stage	
X/Y resolution	_ 0.02 µm
X/Y accuracy	_ ± 2.0 µm
Z travel range	_ 10 mm (0.39")
Z resolution	_ 0.13 µm
Z accuracy	_ ± 0.5 µm
Theta travel	_ ± 5°
Theta resolution	_ 1.4 µrad
Chuck size	_ Supports 100 – 200 mm wafers
Chuck material	_ Al, Ni or Au finish or optional Hot Chuck

PROBING SYSTEM

Card size	_ 4.5 to 9" standard, _ 12" optional
Probe vision (optional)	_ High and low viewing magnification of probe pins _ Automatic Probes-to-Pads-Alignment _ ± 4 µm accuracy

BEAM POSITIONER

Type	_ Galvanometer-based _ Stationary optics
Positioning accuracy	_ <1µm (3 sigma)
Positioning resolution	_ <0.06 µm
Beam field size	_ 14mm(0.55") diameter
Minimum spot size	_ 6.5-12 µm _ 5.5 µm optional
Depth of Focus	_ 25 µm at 6 µm spot

VIEWING / ALIGNMENT

_ Dual CCD camera operation-separation hi-mag viewing integrated vision processing sub-system simplifies setup and improves reliability and throughput of automatic wafer alignment

_ Proprietary *LaserEye* technology for precise focus adjustment and in-die/reticle alignment

WAFER HANDLER (OPTIONAL)

3-axis servo-controlled robot and pre-aligner	
Capacity	_ Up to 50 wafers _ 2 cassettes
Control	_ Manual or Automatic _ For unattended opteration
Wafer support	_ 100 mm - 200 mm wafers _ With ability to process partial wafers
Mapping and effector (optional)	_ Detectspresence, absence or corss-slotted for all wafer
OCR and bar code reader (optional)	_ SEMI character fond with Checksum and barcode

TESTER

ATE-Measurement Instrumentation

_ Enhanced tester interface (ETI) and stop trim I/O integrates to industry-standard automatic test equipment (ATE)

_ Integrates easily with VXI, PXI and GPIB instrumentation and custom test solutions

_ Optional PSG measurement system V2000 (high precision force V, force C, multi measurement unit)

LASER SOURCES

	WT3510	WT3520
Type	_ DPSS Nd:YVO_4	_ DPSS Nd:YLF
Wavelength	_ 1064 nm	_ 1053 nm
Laser pulse width	_ 7 ns	_ 50 ns
Max. Laser energy @DUT	_ up to 10 µJ _ typical 3 µJ	_ up to 15 µJ _ Typical 5 µJ
Laser energy stability	_ <1.7% rms @ 1kHz	_ <1.5% rms @ 10kHz

SYSTEM CONTROL

_ Industrial PC

_ Interfaces: Ethernet, RS232, RS485, USB

_ Windows 10 Operating System

_ GUI based trim/test part set-up

SYSTEM COMPLICANCE

_ Class 1 Laser Safety

_ CE or UL Mark

BENEFITS

_ Fully integrated state-of-the-art Laser Trimmer and Wafer Prober system

_ Seamless integration to today's ATEs via Group's enhanced tester interface software and real-time tester interface hardware

_ Proven superior laser control ensures process consistency & highest yields

_ Advanced vision and motion subsystems provide dramatically improved positioning and alignment capability

_ WaferTrim™ software improves efficiency

Photonics Systems GmbH _ Pionierstraße 6 _ 82152 Krailling, Germany _ P +49 (0) 89 5020 02-0 _ E sales@ps-group.net _