

NEW

Inverted emission microscope C10506-07

iPHEMOS™-MPX

The iPHEMOS™, Now Future Proofed

The iPHEMOS™-MPX is a high-resolution emission microscope that pinpoints failure locations in semiconductor devices by detecting the weak light emissions and heat emissions caused by defects.

New laser scan system supports from static to dynamic analysis

Possible to support multiple analyses with one unit.

Applicable light sources; 1.3 μm , 1.1 μm , 532 nm



High accuracy stage designed for 5 nm SoC electrical failure analysis

Optical stage with linear scales improves position accuracy.

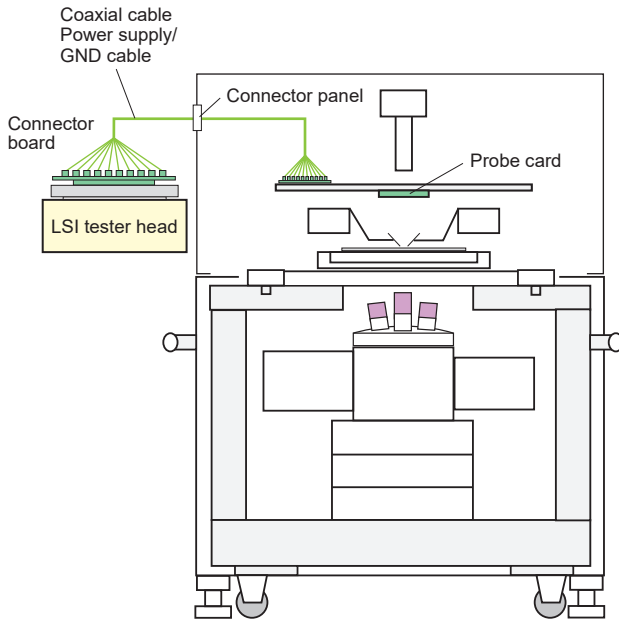
	iPHEMOS™-MP	iPHEMOS™-MPX
Resolution	XY axis 0.1 μm Z axis 0.16 μm	XYZ axis 0.05 μm
Repeat accuracy	$\pm 4 \mu\text{m}$	XY axis $\pm 2 \mu\text{m}$ Z axis $\pm 1 \mu\text{m}$

Semi-auto prober

Die to die index movement and probing are available by a semi-auto prober with wafer mapping software, which improves analysis efficiency, and save time.



Example of connection to the LSI tester



Dimensions / Weight / Utility

Dimensions / Weight

Main unit	Dimensions (mm) *1	1654 (W) × 1541 (H) × 1200 (D)
	Weight *2	Approx. 1100 kg
System rack	Dimensions (mm) *1	880 (W) × 1841.5 (H) × 715 (D)
	Weight	Approx. 300 kg
Operation desk *3	Dimensions (mm) *1	1200 (W) × 700 (H) × 700 (D)
	Weight	Approx. 45 kg

*1 Excluding projecting parts
*2 Include a sample stage
*3 Option

Utility

Line voltage	Single phase 200 V to 240 V
Power consumption	Approx. 3300 VA
Vacuum	80 kPa or more
Compressed air *1	0.5 MPa to 0.7 MPa

*1 Include a regulator

LASER SAFETY

The iPHEMOS™-MPX is Class 1 laser product. Hamamatsu Photonics classifies laser diodes, and provides appropriate safety measures and labels according to the classification as required for manufacturers according to IEC 60825-1. When using this product, follow all safety measures according to the IEC.

CLASS 1 LASER PRODUCT

Description Label (Sample)



Caution Label

Our failure analysis systems keep evolving to deliver more accurate and comfortable analysis.

We keep on developing the performance of failure analysis system PHEMOS®-X, iPHEMOS™-MPX.

We move forward on enhancing products with customers even after releasing the system.

Failure analysis system continues to evolve with the aim of making analysis more sensitive and comfortable.



PHEMOS®-X
Emission microscope



iPHEMOS™-MPX
Inverted emission microscope

- PHEMOS is registered trademark of Hamamatsu Photonics K.K. (China, EU, Japan, Korea, Taiwan, U.K., U.S.A.)
- Product and software package names noted in this documentation are trademarks or registered trademarks of their respective manufacturers.
- Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult your local sales representative.
- Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications and external appearance are subject to change without notice.

© 2021 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Systems Division

812 Joko-cho, Higashi-ku, Hamamatsu City, 431-3196, Japan, Telephone: (81)53-431-0124, Fax: (81)53-433-8031, E-mail: export@sys.hpk.co.jp

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH.: Arzbergerstr. 10, 82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Twinn Road, Welwyn Garden City, Hertfordshire AL7 1BW, UK, Telephone: (44)1707-294888, Fax: (44)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Torshamnsgatan 35 16440 Kista, Sweden, Telephone: (46)8-509 031 00, Fax: (46)8-509 031 01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia S.r.l.: Strada della Moia, 1 int. 6, 20044 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.it

China: Hamamatsu Photonics (China) Co., Ltd.: 1201 Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Chaoyang District, 100020 Beijing, P.R. China, Telephone: (86)10-6586-8006, Fax: (86)10-6586-2866 E-mail: hpc@hamamatsu.com.cn

Taiwan: Hamamatsu Photonics Taiwan Co., Ltd.: 8F-3, No.158, Section 2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: info@hamamatsu.com.tw

Cat.No.SSMS0063E02
OCT/2021 HPK
Created in Japan