Scanning Acoustic Microscope DENEB



AcouLab

New Generation Acoustic Solution

SAM-DENEB

Ultrasonic Pulser/Receiver

- Frequency Range 1 - 500MHz
- PRF(Pulse Repetition Frequency): Upto 50KHz

A/D Converter

- Real time 1GHz, 8Bit Sampling Rate (Option : 1.8GHz, 12Bit)

Industrial Computer for Ultrasonic System

- OS : Windows 11
- Monitor : 32"

Mechanical Scanner



- Scan Axis (Linear servo motor)
  Max. Speed 1,000mm/s
  Repeatability +/-2 micron
  Encoder Resolution 0.5micron

- Index Axis
  Micro-stepping motor with lead screw
  Step Resolution 5micron

- Vertical Axis
  Micro-stepping motor with lead screw
  Max. Stroke 80mm
  Vertical Resolution 2.5micron

- C- Scanning Area with T-Scan
  : 330mm x 330mm (130mm_T-Scan)_Applied to JEDEC Tray

- Main Unit SIZE : 870mm X 900mm X 1,260mm

8, Sudo-ro 55Beongil, Ojeong-gu, Bucheon-si, Gyeonggi-do, 14516, Korea.
Tel. +82-32-676-8077/8 Fax. +82-32-676-8079 www.acoulab.co.kr

SAM-DENEB

Immersion Tank

- Dimension : 440mm x 720mm x 120mm
- Material : STS304

General

- Weight : Approx. 400kg
- Electric Power : AC220V / 1Kw(5A) / 1Phase

Safety

Certification of CE



Certificate – Сертификат – 證明書 – Certificat – 증명서 – شهادة

Certificate of Conformity

No. EC.1282.1S140523.AQS85

Certificate's Holder: AcouLab Co., Ltd.
#8 Sudoro 55, Ojeong, Bucheon, Gyeonggi, 421-810, Korea

Product: Scanning Acoustic Microscope
Model(s): DENEB

Verification to
Standard:
EN ISO 12100: Safety of machinery – General principles for design – Risk assessment and risk reduction: 2010
EN 60204-1: Safety of machinery – Electrical equipment of machines: 2006 +A1: 2009

related to:
Directive 2006/42/EC (Machinery)
Directive 2006/95/EC (Low Voltage)

Remark: This Verification of Compliance has been issued on a voluntary basis. ECM confirms that a Technical Construction File (TCF) is existent for the above listed product(s).
The TCF satisfactorily covers the essential requirements of the above listed standards related to **Directive 2006/42/EC (Machinery)**, **Directive 2006/95/EC (Low Voltage)**.
Other relevant Directives have to be observed in case they are applicable.
This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.
The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s).
This certificate can be checked for validity at www.entecerma.org

Date of issue MAY 2014
Certification Chief Manager
Tim Mahap

Expiry date MAY 2019
Certification Deputy Manager
Viola Miles

Ente Certificazione Macchine Srl
Via Ca' Bella, 243 – Loc. Castello di Serravalle – 40053 Valsamoggia (BO) - ITALY

Certification of KCE



자율안전확인 신고증명서

신청인	사업장명	(주)어코랩	사업장관리번호	119-81-340260
	사업자등록번호	119-81-34026	대표자 성명	이원흠
	소재지	(14516) 경기 부천시 수도로55번길 8,2층 (삼정동)		

자율안전인증대상 기계 · 기구명	산업용로봇		
형식(규격)	SAM-DENEB-350	용량(등급)	3 axis
자율안전확인번호	23-AE1EQ-00763		
제조자	(주)어코랩		
소재지	(14516) 경기 부천시 수도로55번길 8,2층 (삼정동)		

「산업안전보건법」 제89조제1항 및 같은 법 시행규칙 제120조제3항에 따라 자율안전확인 신고증명서를 발급합니다.

2023년 05월 25일

한국산업안전보건공단 이사장

COPY 복사본

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SAM-DENEB

ScanUp Software

- Windows 11 base software for system control and image analysis Automatic and manual setup.

- Automatic focusing, Auto-sizing & Auto-gate.

- Pulse echo and thru transmission modes of operations.

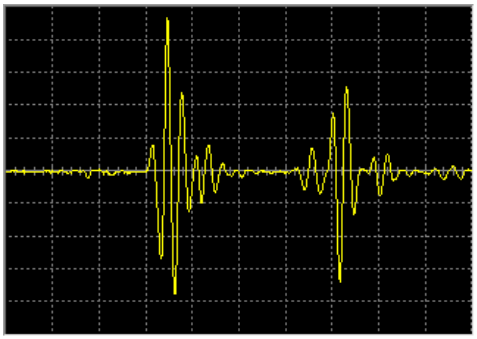
- A, B, C-Scan, FFT-Scan TOF-3D and Virtual 3D display.

- C-Scan image for amplitude, time of flight and phase inversion FFT for transducer evaluation.

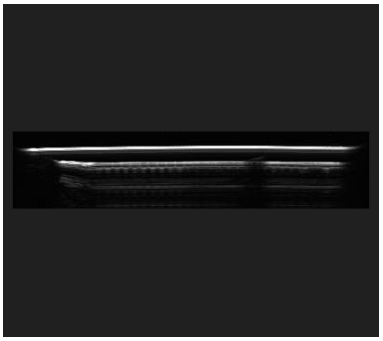
- Size measurement of defects and delamination.

- Automatic report generation.

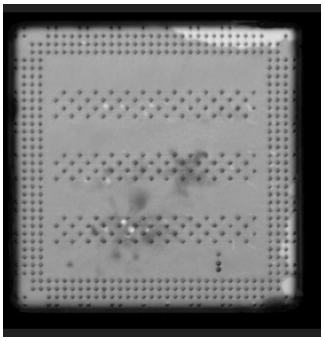
- Simultaneous Pulse Echo and Thru Scan inspection. (Optional)



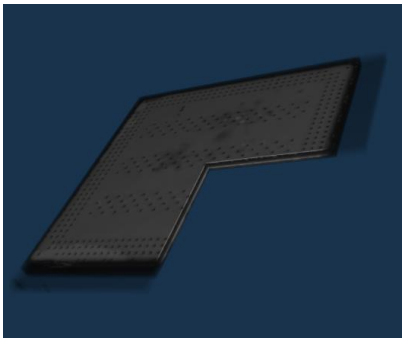
A-Scan



B-Scan



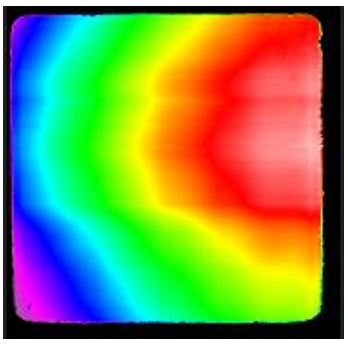
C-Scan



Virtual 3D



TOF 3D

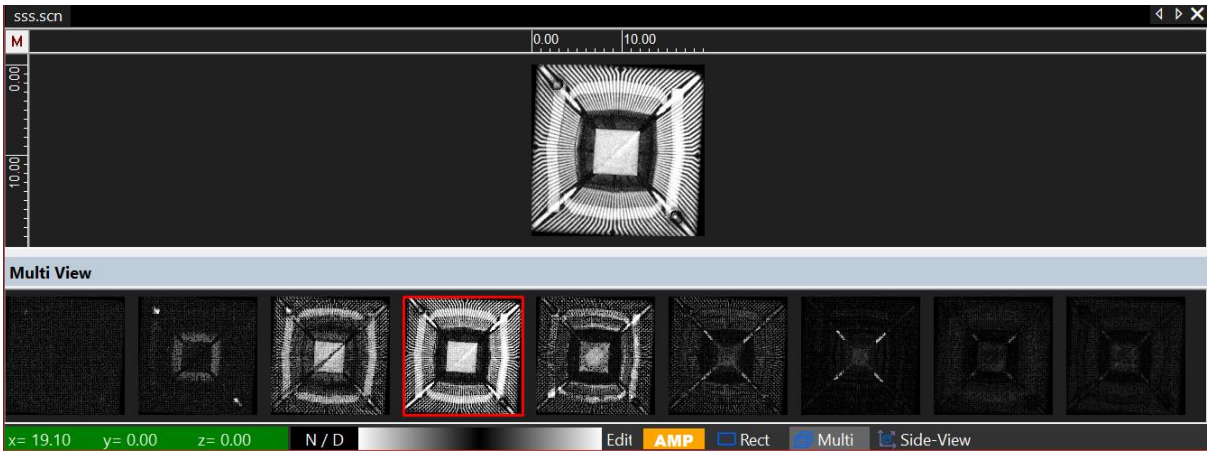


Surface

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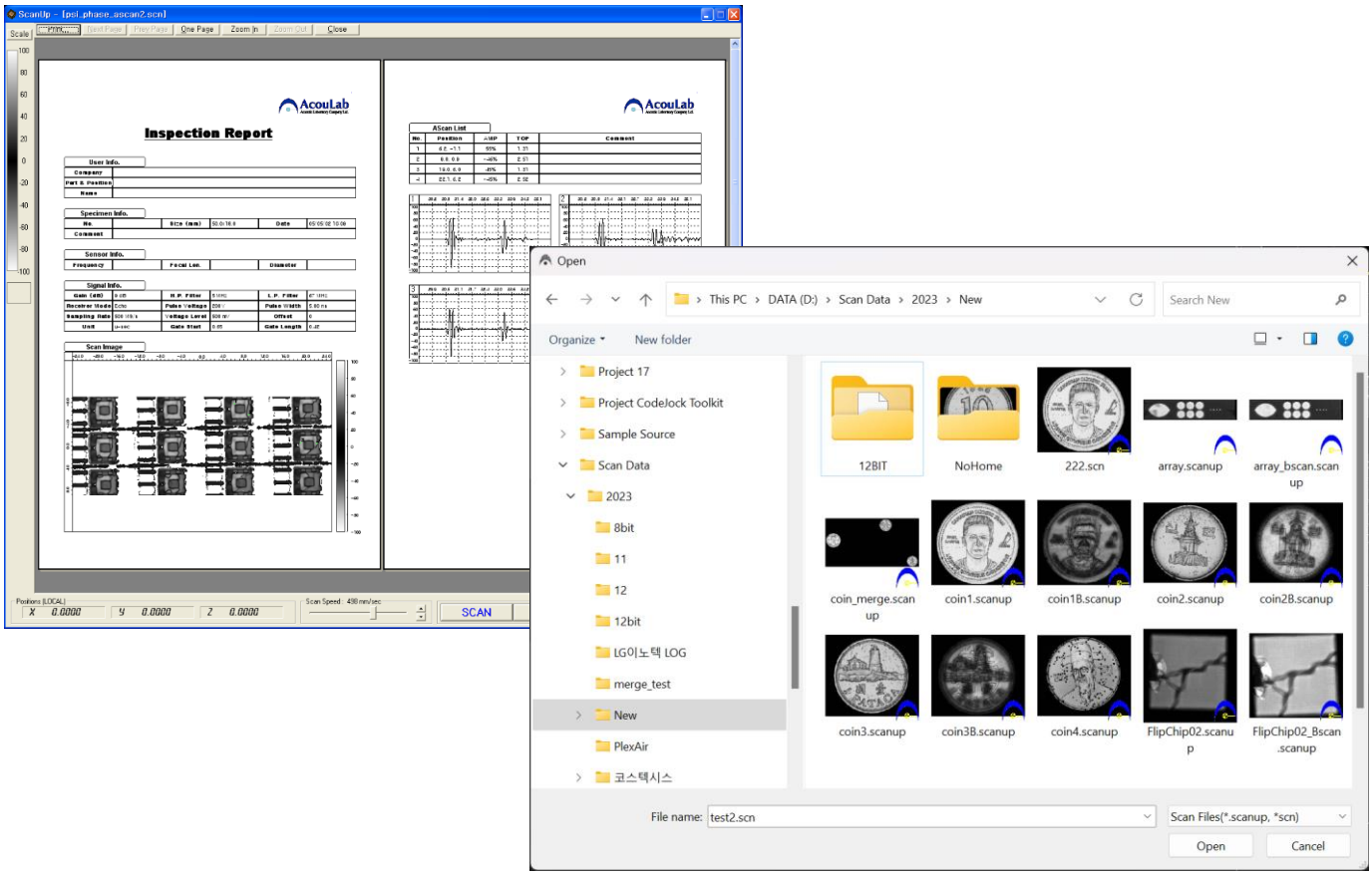
ScanUp Software

- Multi-Layer Scan (Upto 99 layers), Tray Scan and Specific Area Scan.



- Inspection Report.
  A function for pre-entering information required when creating an inspection report, for preview and printer output.

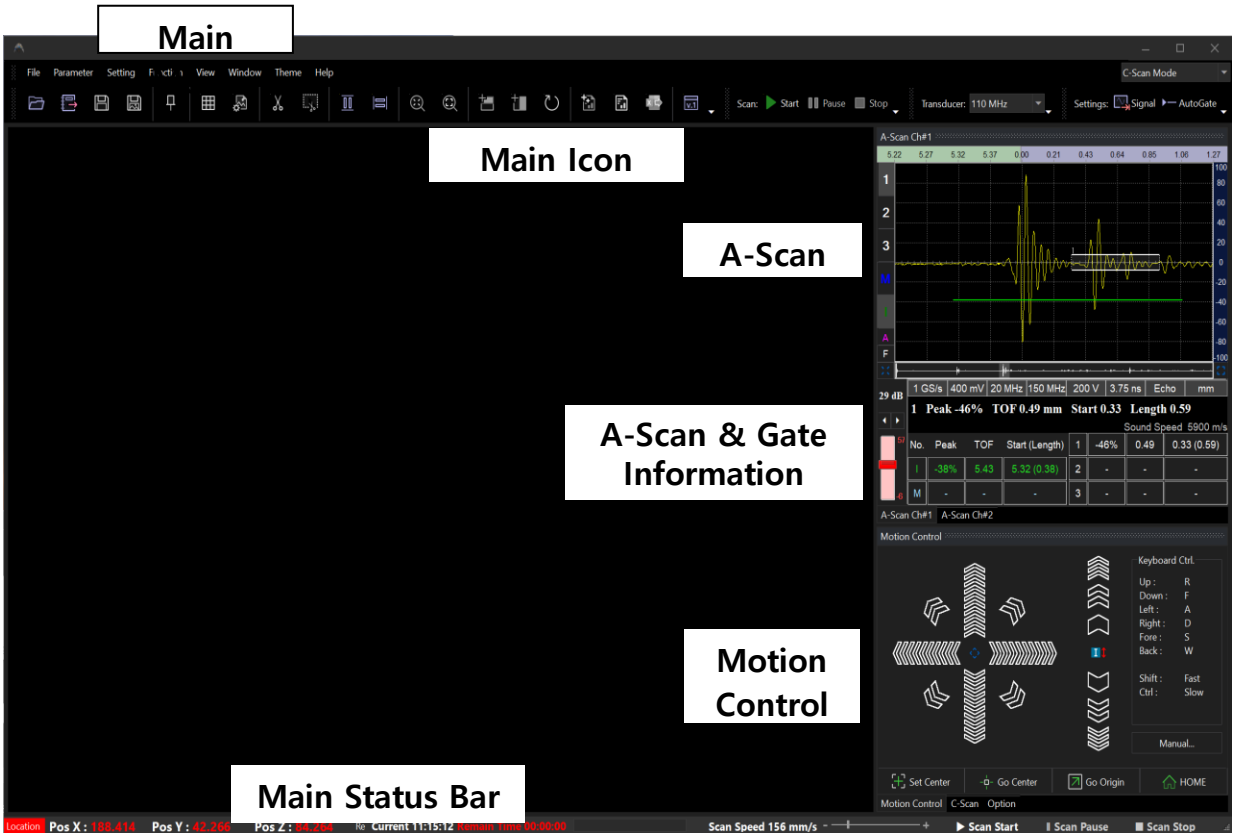
- Preview
  Can preview the inspected image through Windows Explorer.



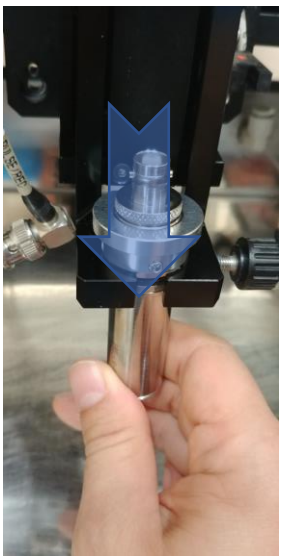
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ScanUp Software

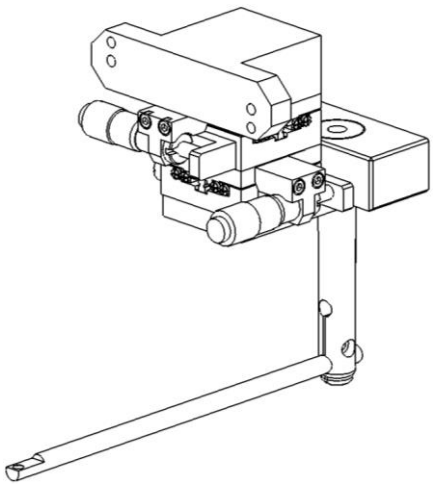
- ScanUp Program User Interface.



Convenience of works



Easy Transducer Change

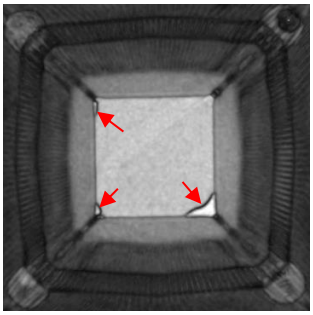


Easy Thru scan Alignment

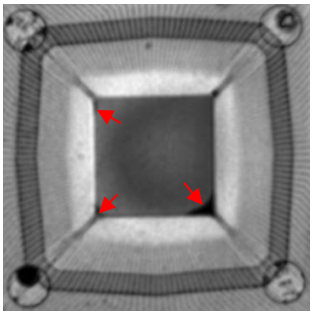
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Application

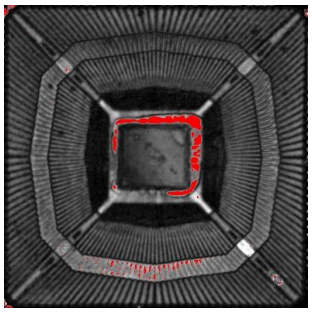
C-Scan



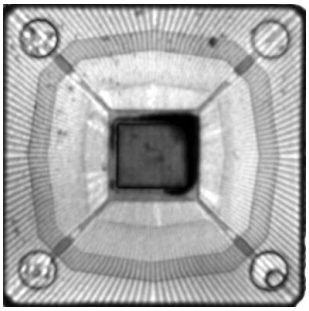
Echo Scan



Thru Scan

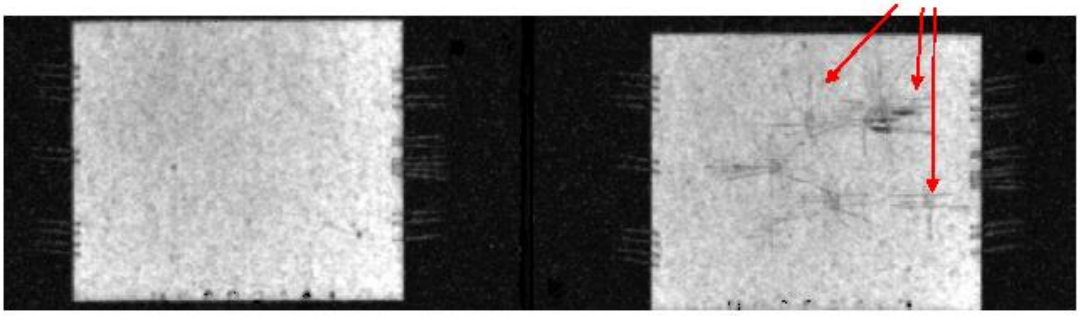


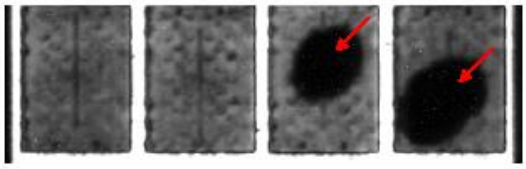
Echo Scan



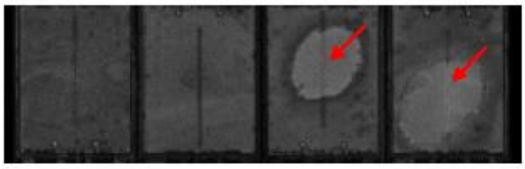
Thru Scan

Mico crack in Die



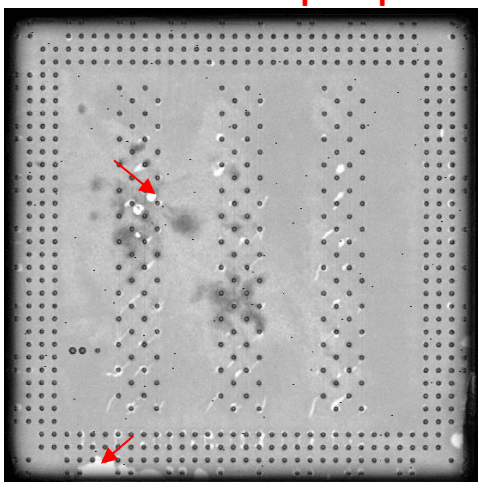


Thru Scan

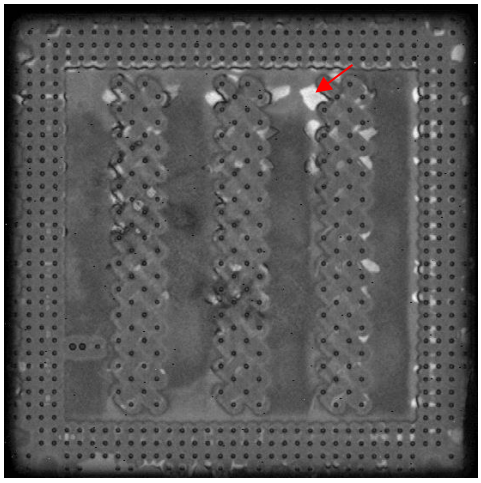


Echo Scan

Semiconductor - Flip Chip



Die to Bump



Bump to Substrate

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