



QUASAR

Nova SMD

AI-powered soldering quality inspection

A Deep Learning-based tool revolutionizing soldering inspection for Surface Mount Devices by excelling pixel-level detection of solder voids and non-wetted areas

Key features



Full automation

Deep Learning unleashing fully automated soldering inspection: no manual operation required



High precision

Pixel-level accuracy for solder voids and non-wetted areas detection and measurement



Real time

One minute from lot inspection to standard-compliant reports generation to customers



Deploy anywhere

Deployable across machines and edge devices in factories or hosted in the cloud and accessible from anywhere

Why choose Quasar?



Full-service activation

Full-service activation tailored for your devices, including image labelling for model training



Cost-effective

Drastically reduces non-quality and labor cost



Deployed in production

Deployed in production for automotive devices, compliant with international standards



Root cause diagnosis

Dramatically accelerates root cause diagnosis thanks to lot-level analysis





QUASAR

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Soldering quality inspection in 3 clicks

Step 1

Use case
 WETTING
 VOIDING

Step 2

Device
 device1

Template

Step 3

Upload your files

Drag and drop files here
 Limit 200MB per file • JPG, JPEG

Browse files

Run

Product-level analysis

PAD ID	VOID %	STATUS
1	0	PASS
2	15.4	FAIL
3	23	FAIL
4	0	PASS

MEAN VOID % MAX VOID % STATUS

9.6 23 FAIL

Lot-level analysis

Automatic QUASAR 1.0.0 Report for device1

Overview	
Date	2024-04-22
User	Unknown
Device	device1
Number of devices	1
Number of pads	4
TotalMaxVoiding (%)	51.1
AvgVoiding all devices (%)	25.13
Failed devices (%)	100.0
Failed pads (%)	50.0
Thresholds (%)	5.5 5.5
QUASAR release version	1.0.0

Technical specifications

Characteristics	Specifications
Statistical analysis	<ul style="list-style-type: none"> Maximum and average solder voids/non-wetted areas percentage calculation at pad, product, and lot level Pass/fail verification compliant with international standards (IEC, JEDEC and IPC)
Automated report generation	<ul style="list-style-type: none"> Visualization of solder voids/non-wetted areas and pads for each device Heatmap illustrating solder voids/non-wetted areas distribution for all the devices in the lot
Device and X-ray machine agnostic	<ul style="list-style-type: none"> Compatible with and can operate seamlessly across various types of devices and X-ray machines

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