

S2088-II F

High-End Desktop AOI



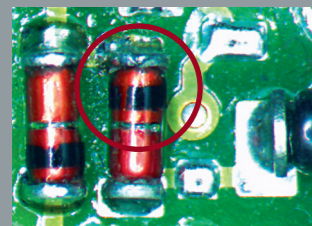
Figure: System Configuration with Options

AOI

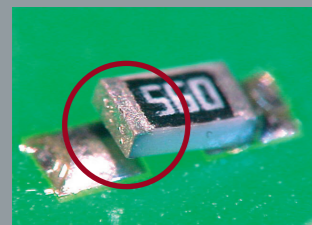
More Than an Entry into AOI

S2088-II F – desktop AOI with 8M camera technology and angular cameras

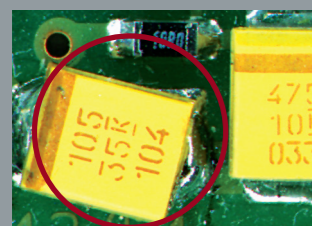
Quality assurance for medium lot sizes and prototypes, with optimal utility as programming system



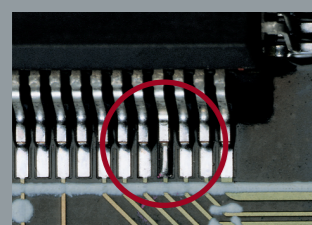
Component with incorrect polarity



Chip tombstoning



Defective placement, tantalum capacitor



Lifted lead, QFP

Highest inspection depth with 8M cameras

Selective high resolution with OnDemandHR function

Angular inspection for fine pitch components

100 % compatible with many Viscom in-line systems

Fast loading through an open PCB intake

Color evaluation

Precise linear drive

Fast program creation with vVision/EasyPro

High performance OCR software

Auxiliary modules: verification, off-line programming and SPC evaluation

Worldwide competent service on site, hotline and remote support

Viscom support website

One decisive approach to assuring production quality is automatic optical inspection. This desktop system offers an optimal entry to AOI without cutting inspection quality. The system is chiefly utilized in production of medium lot sizes, prototyping and off-line program creation, and is ideally suited to support the start-up of new assemblies. It is also the ideal solution for customers with floor space constraints and where a manageable cost investment is required.

The S2088-II F employs high performance **Viscom 8M camera technology**, which also satisfies extreme cycle time demands. **Angled cameras** secure reliable detection of critical defects such as lifted leads in the fine pitch range. With the **OnDemandHR function**, resolution of 23.5 or 11.75 $\mu\text{m}/\text{pixel}$ can be flexibly selected for each analysis, without diminishing image field size. Even the smallest defects on 01005 components are detected with precise reliability. Thus equipped, the system offers the highest inspection depth without loss of speed. In addition, the inspection system provides the option of **color evaluation**.

In practice, the S2088-II F is **100 % compatible with many Viscom in-line systems**, so users can benefit from all the Viscom advantages during programming and operation. Inspection programs are quickly and easily imported to in-line capable Viscom systems such as the S3088 *flex*, S6056 and X7056.

Inspection program generation with **vVision/EasyPro** is based on a model-oriented component library and an intuitive user interface. The operator virtually sees the component before his eyes, to make programming easy and convenient. The essential functions of EasyPro are a **user-friendly operator interface**, **intelligent data import** and the **IPC-compliant inspection library**, which enables inspection plan creation in only three steps. As a central feature, **integrated defect verification** simplifies the **reduction of pseudo defects** while securing a **zero defect strategy** for the program. So, the quality of the inspection program can be confirmed quickly and easily at any time, whether for in-house production needs or documentation during customer audits.

The **precise linear drive** of the S2088-II F, with its high-resolution measurement system, is unique in this class. Thus, **PCBs up to 420 x 457 mm – orthogonal up to 600 x 457 mm** – can be inspected with the highly accurate **combi module**. **Loading** is accomplished through a highly efficient, **open access printed circuit board intake**. This allows boards to be changed and the next inspection started in a matter of a few seconds.



Program optimization with vVision

Technical Specifications

S2088-II F

Inspection scope

Solder joints, component placement, selective solder joint inspection

Camera technology

Orthogonal module 8M (white LEDs)

Image field	57.6 mm x 43.5 mm (2.3" x 1.7")
Resolution	23.5 µm (standard), 11.75 µm (high); selective
Number of megapixel cameras	4

Angular view module 8M (white LEDs)

Resolution	16.1 µm (standard), 8 µm (high); selective
Number of megapixel cameras	4/8 (optional)

Software

User interface	Viscom vVision/EasyPro
Verification station	Viscom vVerify/HARAN
SPC	Viscom SPC (statistical process control), open interface (optional)
Remote maintenance	Viscom SRC (optional)
Off-line programming	Viscom PST34 external programming station (optional)

System computer

Operating system	Windows®
Processor	Intel® Core™ i7
Accessories	LCD monitor, keyboard and mouse

PCB handling

Printed circuit board size	Up to 600 mm x 457 mm (23.6" x 18") (L x W)
PCB support	Optional
Width adjustment	Manual
PCB clamping	Mechanical, pneumatic (optional)
Upper transit clearance	Up to 35 mm (1.4"). 50 mm (2") (optional)
Lower transit clearance	Up to 60 mm (2.4"). With PCB support option: 40 mm (1.6")

Hardware options

Work table including monitor holder (as shown)
Monitor and keyboard mounted on system
Signal lamp (as shown)

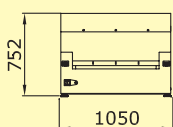
Inspection speed

Up to 20 - 40 cm ² /s

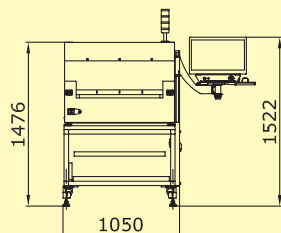
Other system data

Positioning/handling unit	Synchronous linear motors
Connection values	110 - 240 V, 1P/N/PG, 10 A, 2 - 4 bar working pressure
System dimensions	998 mm x 752 mm x 1233 mm (39.3" x 29.6" x 48.5") (W x H x D); including table, signal lamp and monitor in holder approximately 1050 mm x max. 1899 mm x 1250 mm (41.3" x max. 74.8" x 49.2")
Weight	135 kg (298 lbs); incl. table and monitor in holder approx. 300 kg (661 lbs)

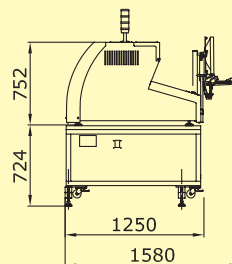
Front view without options



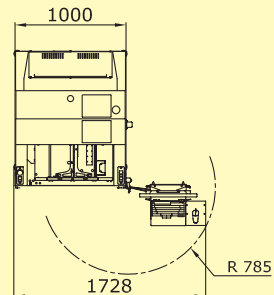
Front view with all options



Side view with all options



Top view with all options



Dimensions in mm

Additional configuration options with other dimensions are available on request, e.g. monitor/PC in a standalone version, compact setup with monitor above the system, and many more.

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