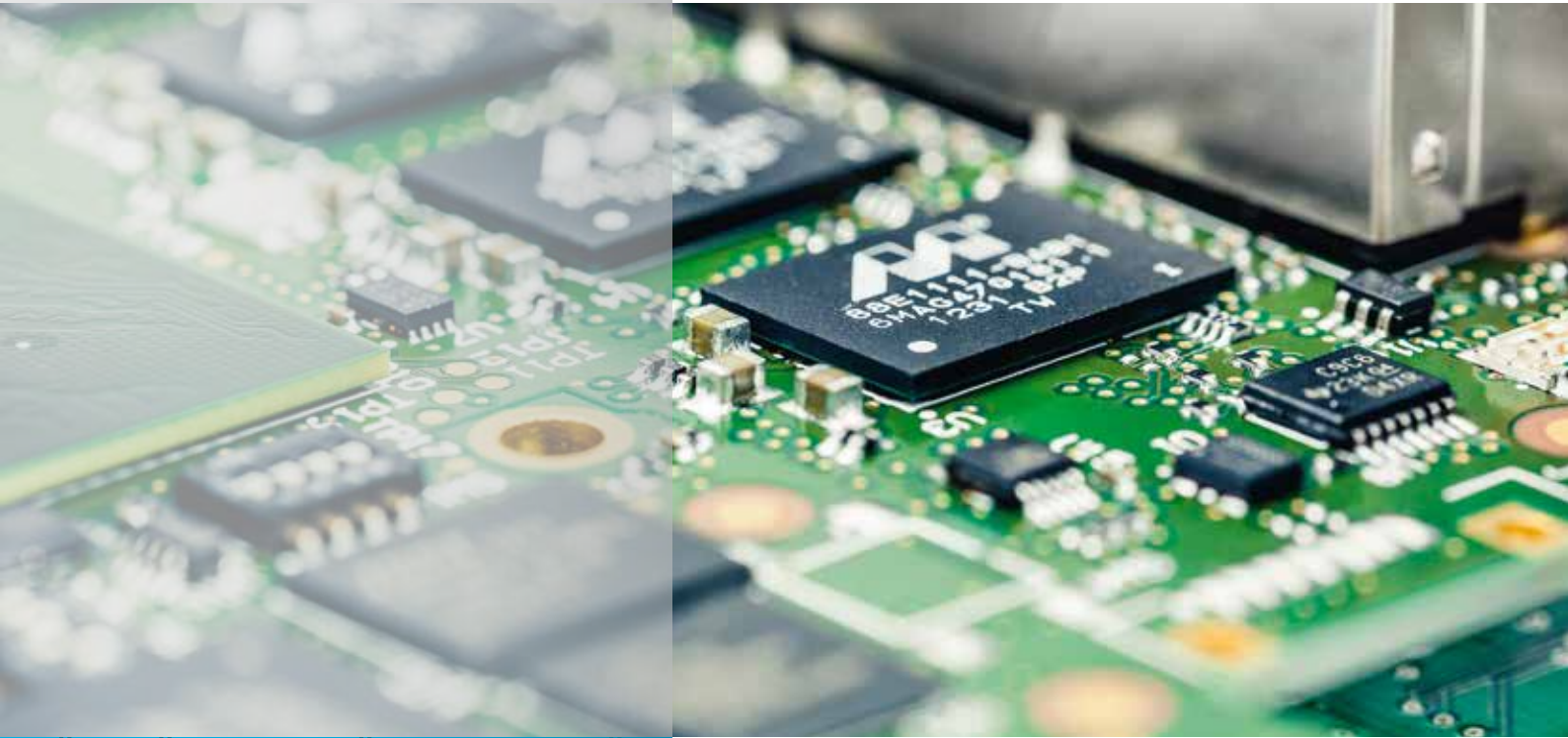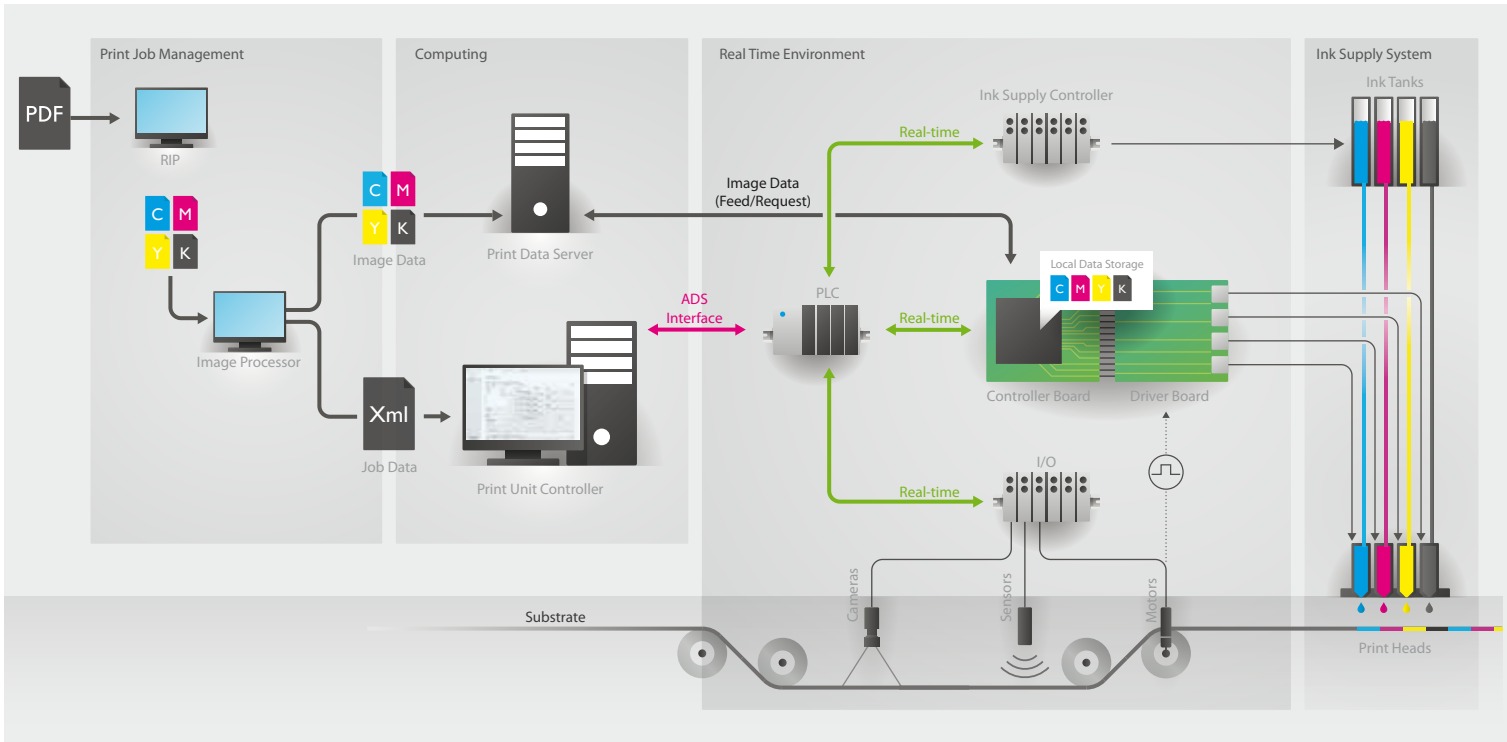# Ink jet print system
CALMAR

... Print speaks CALMAR

//polytype

// Ink jet technology easily integrated in your machine or system
// CALMAR supports the latest and future ink jet print heads
// Scalable and open structure – letting you get started at a low cost

Diagram labels:

Print Job Management
- PDF
- RIP
- C M Y K
- Image Processor
- C M Y K — Image Data
- Xml — Job Data

Computing
- Print Data Server
- Print Unit Controller
- ADS Interface
- Image Data (Feed/Request)

Real Time Environment
- Ink Supply Controller — Real-time
- PLC — Real-time
- Controller Board
- Driver Board
- Local Data Storage — C M Y K
- I/O — Real-time
- Cameras
- Sensors
- Motors
- Substrate

Ink Supply System
- Ink Tanks
- Print Heads

What do you want to print?
// Reel or plate material
// 3-dimensional Containers (cups, tubes, etc.)
// Images for 3D-structures can be pre-distorted,
   so that they appear correctly on the substrate
   after printing

The CALMAR printing system takes care
of the image corrections for you flexibly and
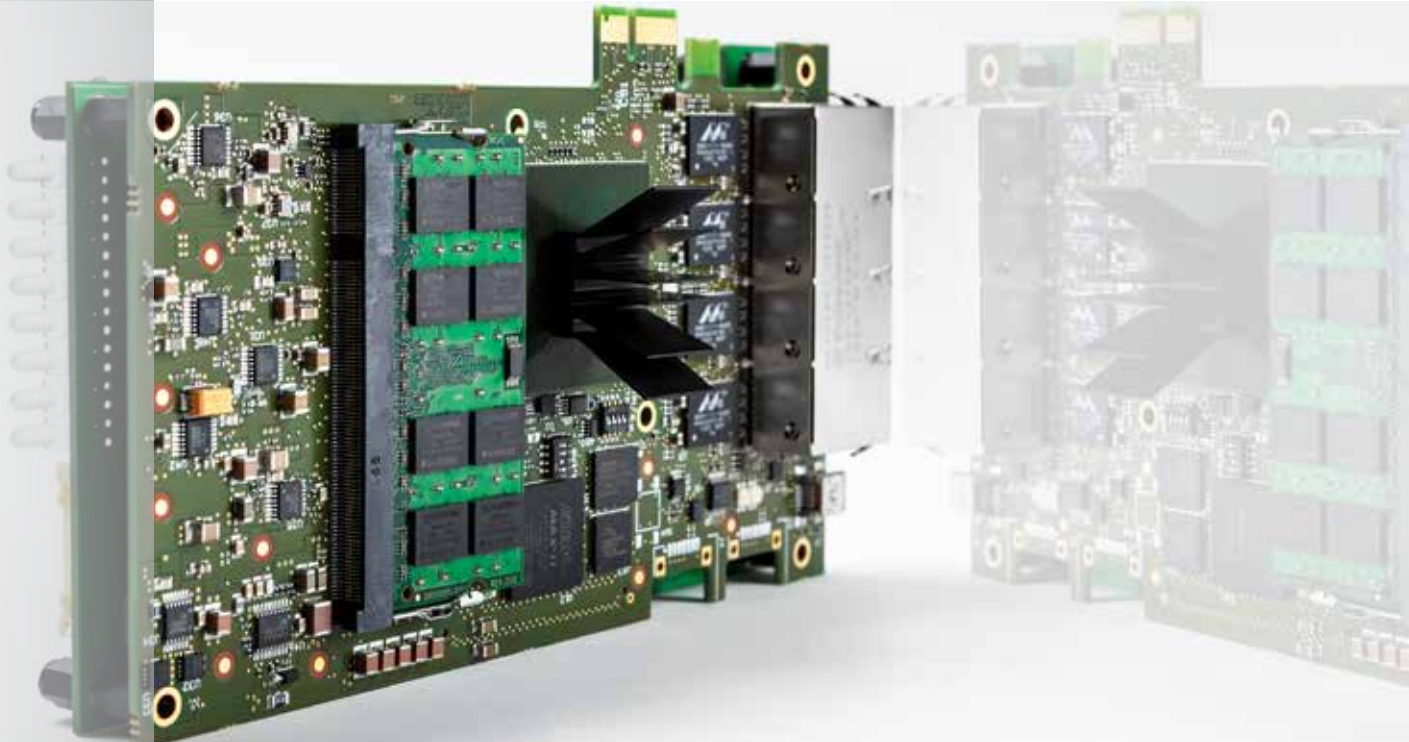automatically.

Real time network
Each printhead is a node in a real-time network
in the form of a industrial field bus. This allows a
broad range of sensor-to-print applications like
advanced print mark detection or camera based
systems.

We define ink jet standards

CALMAR is a complete solution for your ink jet printing system.

It manages the complex interaction of the software with the electronic system as well as the ink with the substrate.
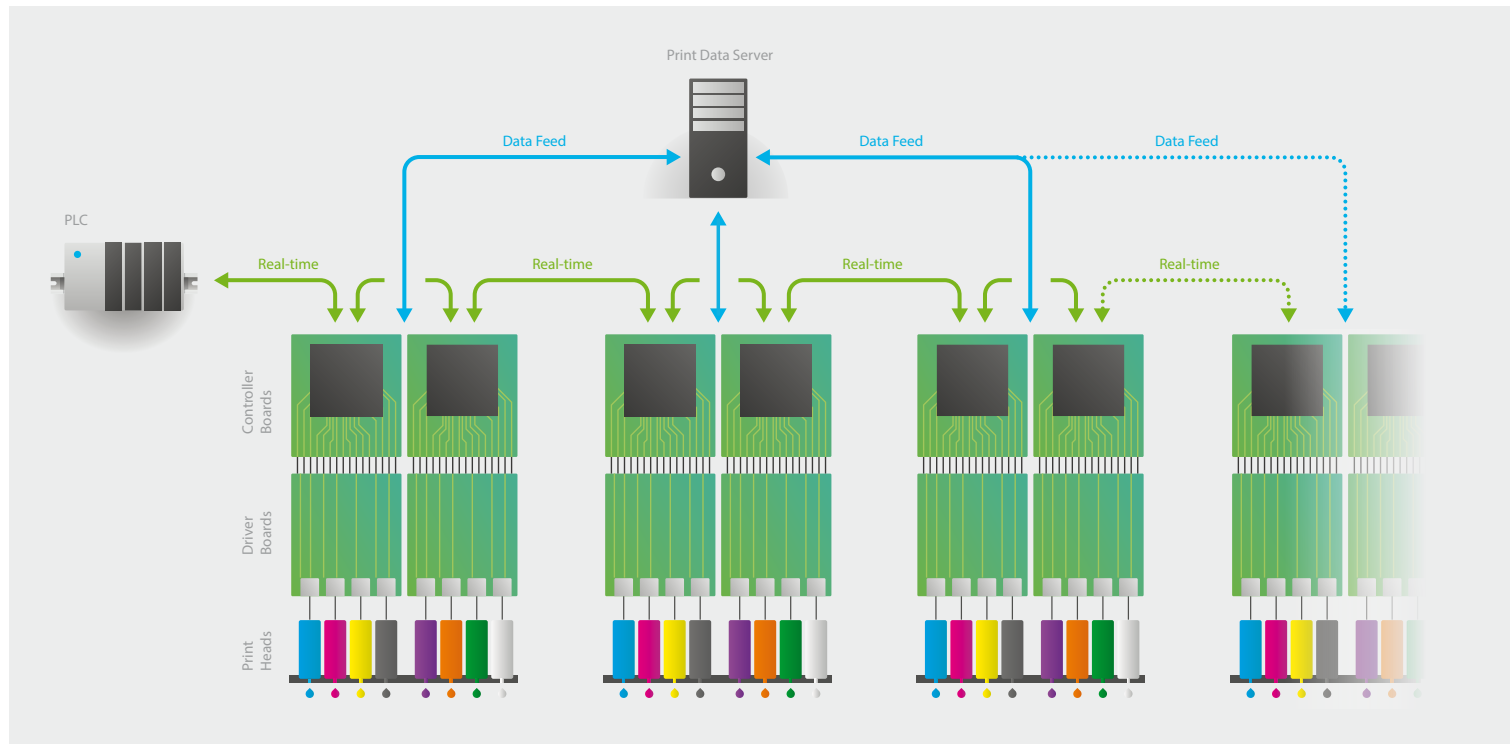
CALMAR contains software and electronic components that are needed to create a printed image on the substrate from a e.g. pdf file.

Our CALMAR ink jet printing system hereby comprises the following main components:

// Data processing software
// Network technology
// Print head electronic system and ink supply
// PLC interfaces to integrate the ink jet technology in your existing or new machines and systems

// CALMAR works with standard PLC – easy integration into your system
// Variable data – every image is different
// Scalability of the print heads and number and type of inks (CMYK-VOGW)

Scalability

The open architecture of the CALMAR ink jet printing system permits a quick addition of further print heads as well as the number and type of inks.
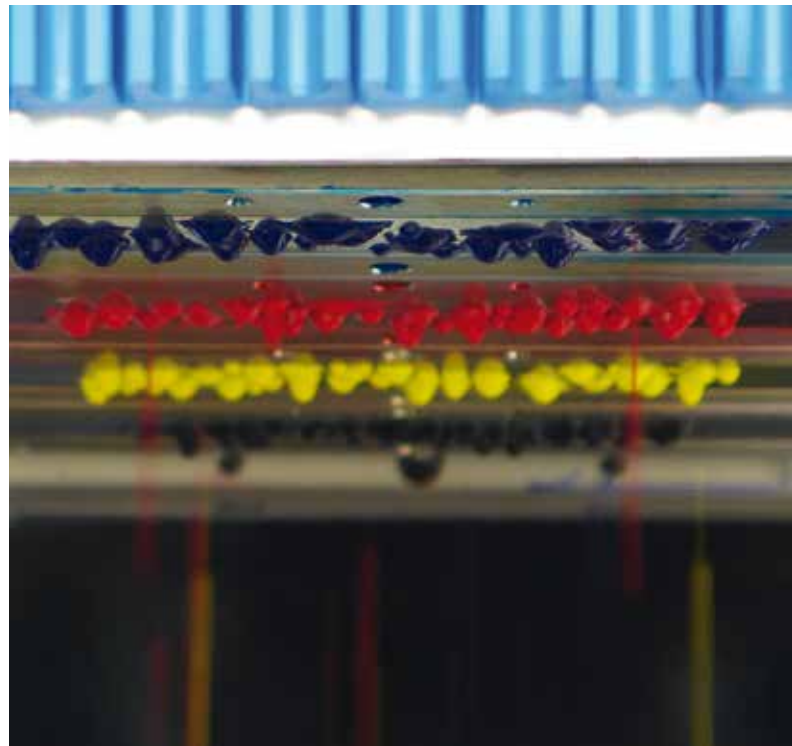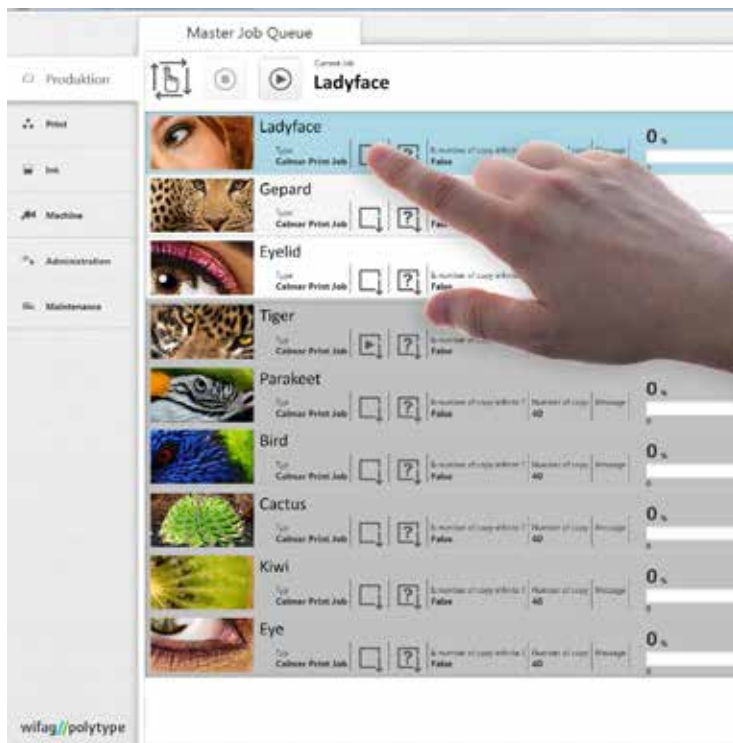
Software

CALMAR is based on an open PLC architecture which can be fully customized. The standardized user interface is tailored for an efficient and user-friendly operation of the machine.

Electronic system

Our electronics consists of controller board and various extension board to adapt the system to different print heads.

The intelligent controller boards have a local print data buffer. This permits a minimum reaction time, maximum flexibility and a low computing power on the Calmar interface.

Our driver boards are already tailored to the increasing amount of data in future.

Ink jet print heads

CALMAR supports the latest print heads from various manufacturers and is also ready to control the next generation of print heads.

Up to 4 print heads can be connected to one controller board.

Ink supply

Our CALMAR print head system also contains the complete ink supply system for the print heads.

Cleaning station

wifag//polytype employs a unique, contactless cleaning of the ink jet print heads.

The cleaning station allows fully automated maintenance cycles to ensure high reliability in an industrial environment.

wifag//polytype

SWITZERLAND

WIFAG-Polytype Holding AG
Fribourg/Switzerland

Polytype AG
Fribourg/Switzerland

ITALY

OMV Machinery srl
Verona/Italy

BULGARIA

Mechatronica S.C.
Gabrovo/Bulgaria

AMERICA

Polytype America Corp.
Lincoln Park, NJ/USA

ASIA

Polytype Asia Pacific Co., Ltd.
Chachoengsao/Thailand

**Wifag-Polytype India
Marketing Private Ltd.**
New Delhi/India

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