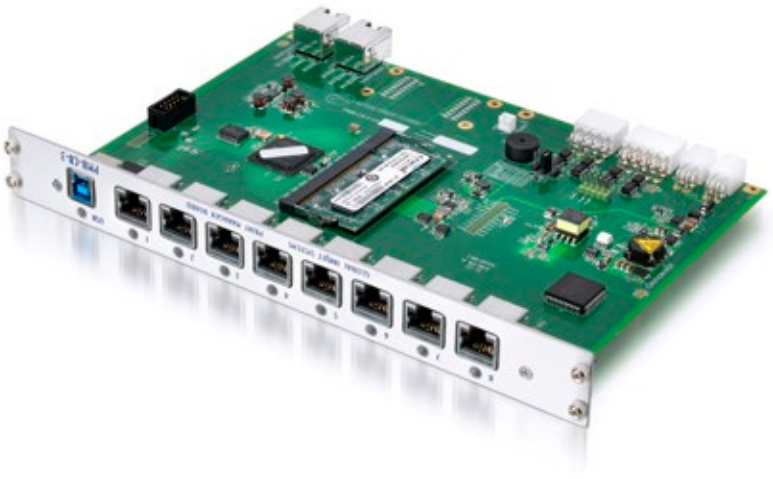
GIS GLOBAL INKJET SYSTEMS

PMB-C8-3 - Print Manager Board

GIS Inkjet Operating System

The PMB-C8-3 is a USB 3.0 version of the multi-channel Print Manager Board - a core hardware component of the GIS Inkjet Operating System. It enables a standard Windows PC to drive multiple industrial inkjet printheads via USB 3.0 in Single Pass, Scanning XY and custom systems. The PMB-C8-3 also supports drop watching.

The PMB-C8-3 provides read and write access to all available OEM printhead settings including temperature control, voltage and waveform settings, binary and grayscale calibration.



Performance

Each printhead is driven by a dedicated high speed channel capable of delivering print data on demand in the most demanding of applications.

High speed on-board RAM provides ample buffering for wide-format and single pass systems, allowing the specialised software drivers to deliver continuous static and variable data streams to the printheads.

Connectivity and Scalability

The PMB-C8-3 is a component of the GIS Inkjet Operating System. It is designed to drive manufacturers' printheads using GIS Head Personality Boards.

Drop Placement Control

The Encoder Manager System (EMS) supports industry standard encoders and Product Detect / PrintGo signals and provides per-printhead encoder divide and sub-pixel adjust, delivering complete drop placement control and repeatability.

Advanced Applications

With the power to simultaneously drive multiple printhead technologies off the same system at different resolutions, the PMB-C8 opens up a world of possibilities for printer development and manufacturing.

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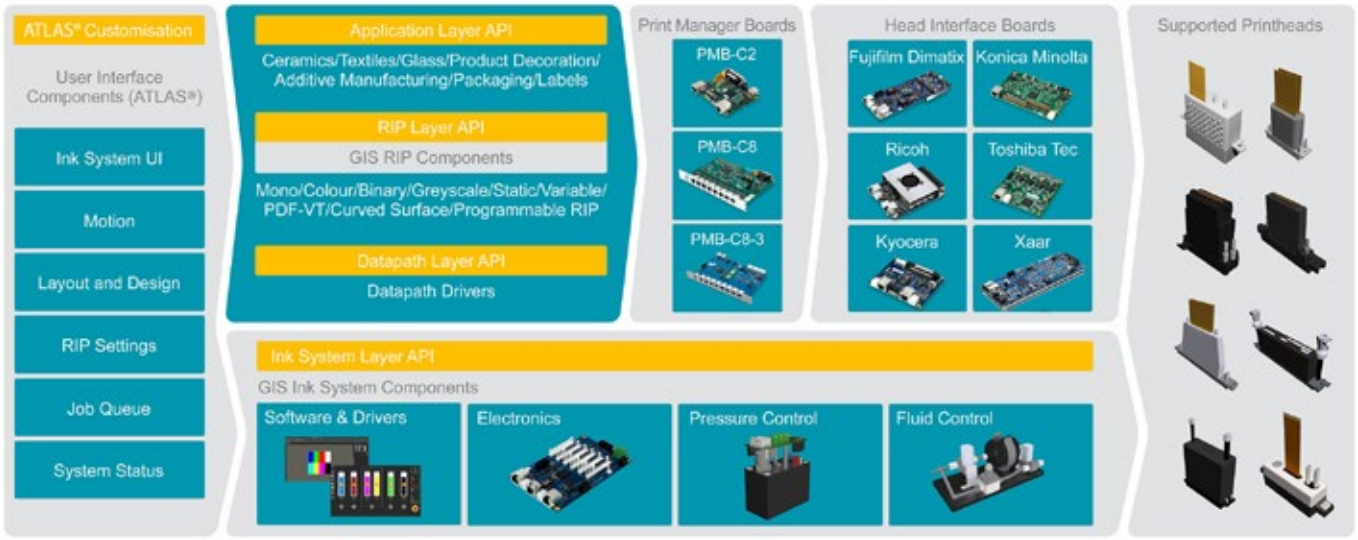
Software, Machine Control and Sub-systems for Industrial Inkjet



GIS provides a complementary suite of products that companies can easily customise and rebrand - accelerating technology design and cutting development time:

Software Support

GIS offers a full range of software with its Atlas® platform to drive the PMB-C8-3.

The Atlas suite of products includes a flexible User Interface (UI) as well as a powerful server tech nology for managing the entire printing and sub-system process, Atlas Machine Control Services (MCS).

Built using Microsoft industry standard software and approaches, Atlas can be configured for different types of users and customised with different languages.

Ink System Components

GIS also provides a comprehensive range of ink delivery system components suitable for the controlled flow requirements of manufacturers' print-heads.

Specifications

General
Up to 4GBytes of on-board RAM
Industrial electrically isolated encoder IO
USB 3.0 for broad compatibility (up to 2700MBits/s)
Dimensions (Board) H 20mm W 160mm D 233mm (6U Size B) Weight: 330g

Power Requirements
24V power supply (0.5 to 1.0A depending on EMS use)

Encoder Management System
Support for RS422 & TTL encoder inputs (Single and Dual Phase)
Rising and Falling Edge Detect
Encoder Management supports non-integer division. (The encoder resolution does not have to be an integer multiple of the print resolution)
PrintGo / Product Detect Pipelining allows multiple items to be queued to print between the Product Detect and the printhead
5V and 12V encoder power supply (up to 0.3A each)

Printhead Communications
Up to 400MBits/s simultaneously per channel
Standard CAT 6a shielded cabling (up to 10m)
Standard RJ45 connectors with LED diagnostics
Full support for binary and grayscale printheads

Scalability
Automatic in-field firmware upgrades
RJ45 Daisy Chain connector for compact multi-PMB systems
Distributed encoder and PrintGo / Product Detect for multiple PMBs

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