Nippon Chemi-Con Corporation

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Nippon Chemi-Con Develops New “NCM20-XA” Module to Expand Possibilities in Image Inspection.

— Designed for AI, High-Speed Processing, and Easy Integration —

Nippon Chemi-Con Corporation has developed a new camera module with color image sensor in response to increasing demands for higher accuracy in image analysis and high-speed, high-precision inspection in manufacturing environments.

This product features distortion-free imaging using a global shutter method, high-speed output (100fps), and low power consumption design. With MIPI-CSI output, it can be easily connected to general-purpose platforms such as Raspberry Pi, enabling easy construction of development and evaluation environments and enabling deployment in a wide range of inspection applications, including color-based analysis.

Additionally, a USB communication board was developed for evaluating images on a PC, achieving output of over 90fps, closely matching the sensor’s native frame rate. This enables the camera module to be utilized across a wide range of development stages, from PoC (Proof of Concept) to mass production.

This product is scheduled to be exhibited at the 'International Technical Exhibition on Image Technology and Equipment 2025' (Pacifico Yokohama) in December 2025, along with the USB communication board.
The product is also planned to be available through online distributors. Nippon Chemi-Con will continue to promote product development that responds to technological innovation and market needs in the field of image processing.

《Product Summary》

	Contents	Remarks
Product Name	NCM20-XA	
Effective pixels	1920 x 1080	Max.
Output interface	MIPI-CSI	RAW 8bit
Frame rate	100 fps	Sensor spec.

《Production Bases》

Camera module : NCM20-XA

Evaluate Board with Camera module

《Production Bases》

This product is manufactured under a domestic production system at the Chemi-Con Devices Corporation Nagaoka Plant (a wholly owned subsidiary) in Nagaoka City, Niigata Prefecture.

《Term》

Global Shutter Method :
This method involves the simultaneous exposure and read-out of all pixels on the imaging sensor. It minimizes image distortion when capturing moving subjects, making it suitable for AI-based image analysis and high-speed inspection.
MIPI-CSI Output:
This is an industry-standard interface specification used for connecting cameras and processors. It facilitates easy connection to general-purpose platforms like Raspberry Pi, streamlining the setup of development and evaluation environments.
PoC (Proof of Concept): A preliminary approach used to validate the feasibility of new technologies or products prior to full-scale development