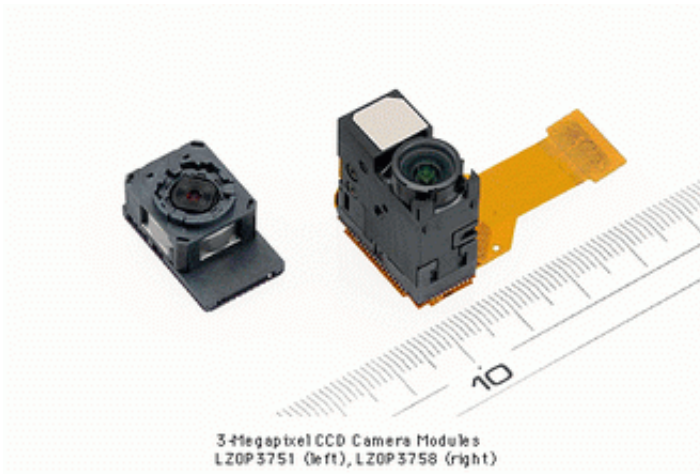


# Sharp Develops Two New 3-Megapixel CCD Camera Modules for Mobile Phones

August 29 2005

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Sharp Corporation has developed two new 3-megapixel CCD camera modules intended for use in camera-equipped mobile phones. The two camera modules feature a built-in autofocus function and the new LZ0P3758 features, in addition, an all-internal optical zoom lens that is switchable between normal and 2X zoom, an industry first(\*1). Both models will be available in quantity beginning in September 2005.

Cameras designed to be embedded in mobile phones are experiencing rapidly growing user demands for compact size, as well as greater functionality and higher image quality on a par with ordinary digital cameras.

The LZ0P3758 CCD camera module developed at this time offers sophisticated functionality, including a 3-megapixel CCD, 2X optical zoom and autofocus, and is also equipped with an all-internal zoom system in which the lens section does not protrude from the module body. Plus, Sharp's proprietary high-density surface mount technology makes possible a compact module form factor with a volume of only 4.7 cc. The modules also feature a FIT(\*2) CCD image sensor and high-performance lens, providing high resolution and high image quality with minimal distortion.

To round out the line-up, the LZ0P3751 CCD camera module with autofocus will be released at the same time.

## Major Features

1. 3-megapixel CCD camera module with 2X all-internal optical zoom and autofocus function (LZ0P3758)
2. High image quality thanks to 3-megapixel FIT\*2 CCD and high-performance lens (LZ0P3758 and LZ0P3751)
3. Compact size ideal for mobile phones (LZ0P3758 and LZ0P3751)

*\*1 As of August 29, 2005; for 3-megapixel CCD camera modules for mobile phones with all-internal zoom system (based on Sharp research).*

*\*2 Frame Interline Transfer (FIT) process: Based on the interline transfer system commonly used in CCDs, the FIT process represents an improvement in the architecture designed to prevent the "smearing" phenomenon typical of CCDs (for example, when headlights or light from the sun causes streaks of light to appear on the image). The FIT system is used in professional-quality broadcast video cameras and makes it possible to shoot optimal images, whether at night or under the light of the midday sun.*

## Features

1. 3-megapixel CCD camera module with 2X all-internal optical zoom and autofocus function (LZ0P3758)

This 3-megapixel CCD camera module for mobile phones is equipped with an all-internal optical zoom function that is switchable between normal and 2X zoom, an industry first. Plus, an autofocus function makes it possible to capture images with the subject in perfect focus—from close-ups to portraits and landscapes (focusing from 10 cm to infinity).

2. High image quality thanks to 3-megapixel FIT CCD and high-performance lens (LZ0P3758 and LZ0P3751)

The high-resolution 3-megapixel FIT CCD image sensor and a high-performance lens tailored to it make it possible to take high-quality, high-resolution images with minimal distortion. For example, printing with a 300-dpi color printer yields beautiful 2L-size prints (178 x 127 mm).

3. Compact size ideal for mobile phones (LZ0P3758 and LZ0P3751)

By taking full advantage of camera module design technology and expertise nurtured over many years, Sharp has achieved compact module sizes with volumes of only 4.7 cc for the LZ0P3758 and 3.0 cc for the LZ0P3751. In addition, the modules are resistant to shocks such as being dropped and are highly durable, ensuring continued high reliability.

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