

# Epson Develops Ultra-low Power 16-bit Microcontroller Capable of Vivid Display Powered by Coin Battery

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Seiko Epson today announced that it has developed and begun shipping samples of the S1C17706, a 16-bit microcontroller capable of 5120-dot high-resolution display, the largest display area of Epson's 16-bit S1C17700 microcontroller series.

Recently, there is a growing demand for displays having outstanding [user interface](#) even for such applications as high-performance watches or small portable game devices that are powered by coin batteries.

In order to achieve higher quality, more vivid images, the S1C17706 features a 5120-dot LCD driver, a 4 grayscale display that makes it

possible to display anti-aliased images, and built-in 1 MB [flash memory](#) that enables it to store large volumes of display contents. By incorporating these functions on a single chip, Epson has achieved a microcontroller that consumes only one-fifth of the power used by previous configurations, making the S1C17706 ideal for applications that run on small batteries.

The S1C17706 IC has the highest resolution and highest-capacity flash memory within the S1C17700 series, a line-up which features a low-power consumption 16-bit microcontroller with a dot matrix LCD driver. While Epson's previous MCU models use only black-and-white binary images, the S1C17706 is able to add half-tone values with its 4 grayscale control circuit, thereby greatly improving the power of expression in addition to achieving [high resolution](#).

Furthermore, its high-capacity built-in 1 MB flash memory enables it to store display data such as character sets as well as complex software without the need for [external memory](#).

**More information:** Block diagram - [global.epson.com/newsroom/2010/pdf/100408\\_spec.pdf](http://global.epson.com/newsroom/2010/pdf/100408_spec.pdf)

Source: Seiko Epson

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