

Sharp's Memory LCD Enables Secret Labs' Ultra-Low-Power "AGENT" Smart Watch

Watch operates week-long without recharge, runs 3rd-party apps, Bluetooth, and more

CAMAS, Wash. – May 20, 2013 – Today, Sharp Microelectronics of the Americas (SMA) announced that its 1.28-inch diagonal Memory LCD is featured in “AGENT,” the new smartwatch to be released by Secret Labs, based in New York, NY. The watch will enable 3rd-party apps, Bluetooth 4.0 (allowing connection to iPhone, Android or Windows phone), wireless charging, notifications, smartphone music control, and more – with battery life of up to a week in full operation and up to a month in standby mode.

The Sharp Memory LCD embeds 1-bit memory in every pixel, which enables each pixel to hold state while requiring very little current. This aids the AGENT’s advanced power management system in delivering an “always on” display that uses little power (only a single supply voltage is required), even when updating images. The display’s technology also eliminates key issues such as flicker and image retention. The Memory LCD’s response time makes it fast enough to display video, and crisp, monochrome images are delivered in high-resolution.

“A truly smart watch needs an outdoor-readable, always-on display,” said Chris Walker, Secret Labs. “E-paper displays met our ultra-low power requirements, but they lacked the animation and backlight capabilities of traditional LCDs. Sharp’s Memory LCDs provided the perfect solution, combining the best features of both technologies. Using the 1.28-inch Memory LCD, our users experience a beautiful and responsive interface—with battery runtime measured in weeks instead of hours.”

AGENT’s dual-processor design includes the latest Atmel Cortex-M4 microcontroller, running apps powered by Microsoft’s .NET Micro Framework. The smartwatch’s elegant design is a collaboration with NYC’s House of Horology. The AGENT watch was introduced today on Kickstarter, with full production planned for December 2013. For more information, visit: www.AgentWatches.com.

1.28-inch Memory LCD (LS013B7DH03)

Sharp’s new 1.28-inch (diagonal) Memory LCD is ideal for digital wristwatches and other small-screen applications, with a 3V input voltage that makes it compatible for operation with a single cell Lithium ion battery. A lightweight, two-glass design plus an integrated driver in the panel allows for slim product profiles. Incorporating the Memory LCD into a design is simple with its 3-wire SPI serial interface (SI, SCS, SCK).

The Memory LCD suite also currently includes .99-inch, 1.17-inch, 1.26-inch, 2.7-inch, and 4.4-inch (diagonal) sizes. For more information, contact your Sharp Representative or Distributor or visit www.SharpMemoryLCD.com.

About Sharp Microelectronics of the Americas

Sharp Microelectronics of the Americas (SMA) drives innovative LCD, optoelectronics, imager, and RF components to market. The world’s leading manufacturers of consumer and business technologies look to SMA for the products, expertise, and worldwide support they need to make their visions a reality. SMA, in Camas, Washington, is the microelectronics sales and marketing division of Sharp Electronics Corporation, a wholly owned subsidiary of Sharp Corporation. For more information, visit us at www.SHARPsma.com.

- The Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2002/95/EC). This directive took effect July 1, 2006. All measurements are diagonal. All Specification values quoted are Typical values. LCD: Liquid Crystal Display. Sharp is a registered trademark of Sharp Corporation. All trademarks are and remain the sole property of their respective owners.