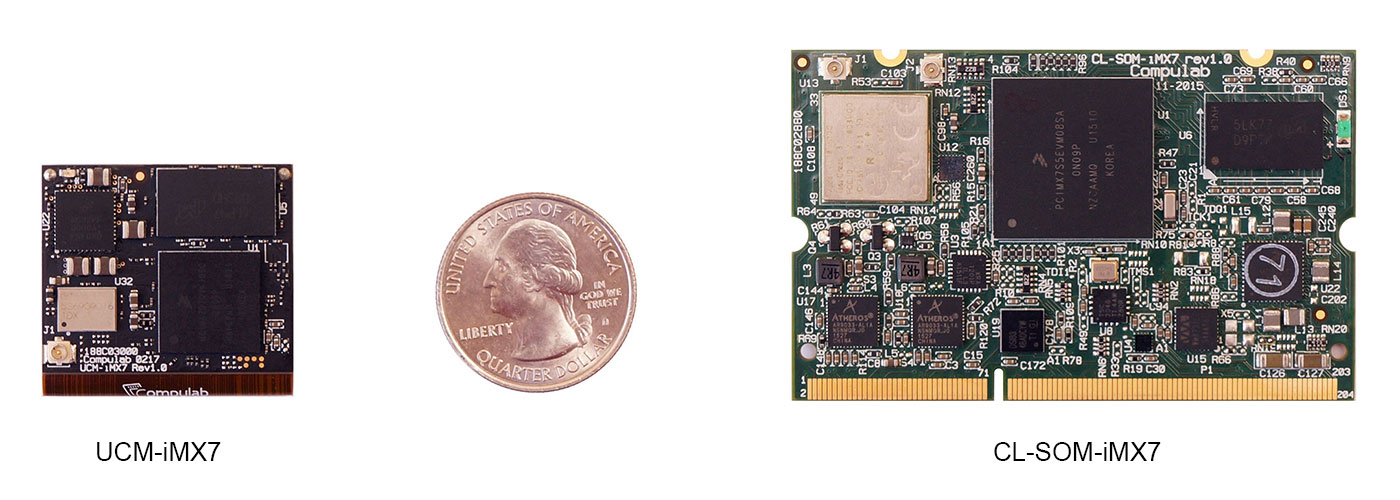
# CompuLab introduces new type of extremely miniature SoMs based on company’s new “Ultra-compact Multilevel Module” technology

Yokneam, Israel – 1-June-2017 – CompuLab introduces a new type of tiny System-on-Module products built with CompuLab’s new “Ultra-compact Multilevel Module” (UCMM) technology. UCMM allows to achieve exceptional level of miniaturization with no compromise on feature-set, packing a fully featured SoM into a form-factor which is only a fraction of typical size of comparable modules. UCM-iMX7, the first UCMM product introduced by CompuLab, measures just 27 x 30 mm – three times smaller than comparable products with a similar feature-set.



Designed into a stamp-sized foot-print, UCM-iMX7 features a dual-core i.MX7 1GHz processor, 2GB of RAM, 64GB of eMMC storage, as well as WiFi, Bluetooth and Gbit Ethernet interfaces. In addition, a wide range of peripheral interfaces including PCIe, 5 USB2 ports, parallel RGB, 7 UARTs and GPIOs is available on the two miniature 100-pin connectors.

UCM-iMX7 is provided with a Linux BSP that includes Linux kernel 4.1.15, Yocto Project file-system and U-Boot boot-loader. CompuLab will also support UCM-iMX7 with mainline Linux and upstream Yocto Project.

Industrial temperature range of -40° to 85° C allows UCM-iMX7 to support operation in harsh environments and outdoor installations.

UCM-iMX7 is an ideal solution for applications that require powerful processing in extremely compact size such as:

* Autonomous drones with capability of visual object recognition
* VR, augmented reality and smart glasses
* Wearable computing such as wearable healthcare monitors and medical devices
* Professional handhelds customized per specific industry requirements
* Smart IoT cameras

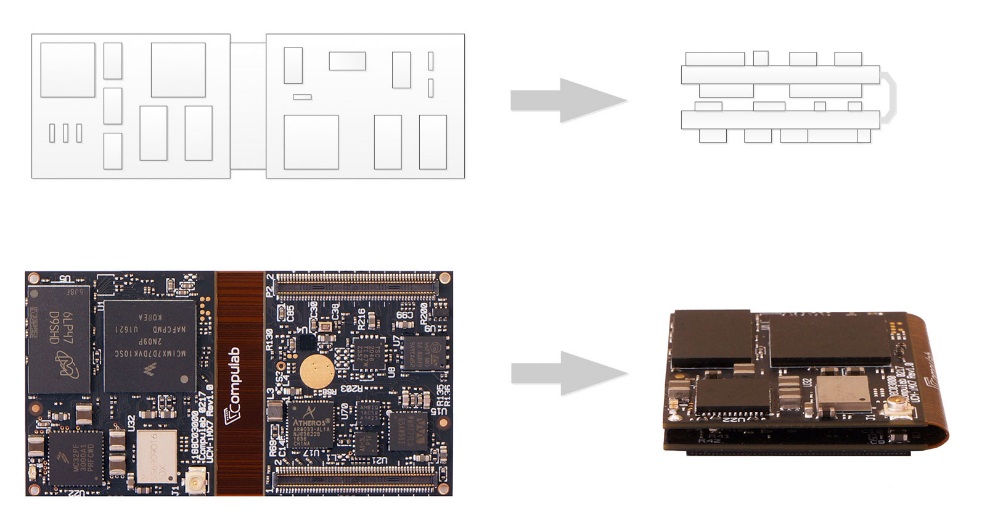
Compulab has also introduced a miniature open frame smartwatch-like gadget built around the UCM-iMX7 module with a lithium-ion battery, a 1.5” LCD and a thin interconnect board, all sandwiched into one compact 27 x 30 mm device. The gadget is intended only for technology proof demonstration and CompuLab’s UCM-iMX7 module does not target the smartwatch market.



## UCMM Technology

The UCMM technology allows highly efficient packing of components into several vertical levels. Typical UCMM module is composed of two or more rigid printed circuit boards (PCBs) and one or more flexible layers that route interconnection signals between the rigid PCBs. Flexible layers allows to bend and fold the rigid PCB parts to form a vertical stack of two or more PCBs, efficiently decreasing SoM foot-print at the cost of slightly increased height.

Allowing to design higher processing power into smaller form-factor devices, UCMM technology offers a unique solution for performance demanding systems requiring continuous image processing, polished UMI or streaming data to cloud.



## UCM-iMX7 Specifications

**CPU** NXP i.MX7 Dual / Solo ARM Cortex-A7 SoC, 1GHz

**Co-processor** ARM Cortex-M4, 200Mhz

**RAM** Up to 2GB DDR3L-1066

**Storage** Up to 64GB on-board eMMC

Up-to 1GB on-board SLC NAND

**Display** Parallel 24-bit display interface, up to 1920 x 1080

MIPI-DSI, up to 1400 x 1050

**Touchscreen** 4-wire resistive touch-screen support

**Camera** Parallel camera interface, up to 24-bit

MIPI-CSI, 2 data lanes

**Audio** Audio codec with stereo line-out, line-in, mic

**Network** GigabitEthernet

WiFi 802.11b/g/n + Bluetooth 4.1 BLE

**PCI Express** PCIe x1 Gen. 2.1

**USB** 1x USB2.0 OTG + 4x USB2.0 host ports

**UART**  Up to 7x UART ports

**SDIO** Up to 2x MMC/SD/SDIO interface

**General I/O** Up to 3x I2C, 3x SPI, 2x CAN, 6x Timer, 112x GPIO

**ADC** Up to4x general-purpose ADC inputs

**Power** 3.2V to 4.5V / Li-Ion battery

**Dimensions**  27 x 30 x 8 mm

**Temp. range** -40 to 85°C

## Availability and Pricing

UCM-iMX7 will be available in June 2017 through CompuLab’s worldwide distribution channel and through direct sales ([www.compulab.com](http://www.compulab.com/)).

UCM-iMX7 is available in a variety of configurations starting from $39 for volume orders.

EVAL-UCM-iMX7 evaluation kit will be offered at $475.

Detailed ordering and pricing information is available at [UCM-iMX7 product page](http://www.compulab.com/products/computer-on-modules/ucm-imx7-nxp-i-mx-7-ultra-miniature-system-on-module/).

## About CompuLab

CompuLab is a leading designer and manufacturer of embedded computing products since 1992.

CompuLab products are embedded in digital signage, telecommunication systems, automotive devices, gaming systems, medical devices, aerospace and marine systems, and countless other applications.

CompuLab headquarters are located in Yokneam, Israel with offices in St. Petersburg, FL.

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NOTE TO EDITORS: For additional info and high-res product images please refer to the [UCM-iMX7 press kit](http://www.compulab.com/wp-content/uploads/2017/05/UCM-iMX7-press-kit.zip) or visit [www.compulab.com](http://www.compulab.com/).