

NXP releases world's smallest logic packages for handheld mobility

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NXP Semiconductors today announced the world's smallest logic plastic packages measuring 0.9 x 1.0 x 0.35 mm with 0.3 mm pitch.

The ultra-compact [packaging](#) design is ideal for leading-edge portable handheld devices such as smartphones, tablets and SD cards where chip and board space comes at a premium. The SOT1115 package decreases package size by 10 percent for the 6-pin version compared to the previous smallest package, SOT891, of which NXP has produced over one billion units. The 8-pin SOT1116 decreases the package size by 60 percent, compared to the previous smallest 8-pin package SOT833, enabling manufacturers to radically minimize their PCB size.

“Smartphones and eReaders are getting smaller and thinner. As manufacturers strive to pack more features and functionality into these confined spaces, logic chips provide design flexibility in tiny packages. Logic is the glue that connects everything together,” said Pierre-Yves Lesaicherre, senior vice president and general manager, microcontrollers and logic, NXP Semiconductors. “As the largest leadless plastic package manufacturer in the world, we work very closely with the leading innovative customers in the market. Our latest logic leadless packages dramatically shrink package size making it possible to design slimmer phones, tablets and other portable devices without taking up valuable real estate -- offering real return on investment.”

NXP has conducted studies of the mechanical failure modes of very small [logic](#) packages and determined that leadless plastic packages

perform better in terms of mechanical adherence to the PCB. When compared against packages of the same footprint, NXP's leadless packages outperform leaded and leadless WCSP packages of similar size by requiring up to four times more force to dislodge. This is because NXP's leadless packages have a greater contact area with the PCB, giving them better mechanical performance and robustness.

NXP SOT1115 and SOT1116 packages are available from distribution at US \$0.16 and \$0.21 respectively.

More information: Further information on the new products can be found at: ics.nxp.com/packaging/micropak/

Provided by NXP

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