

LED Drivers Come In DFN With Side-Wettable Flanks

[Nexperia](#)'s NCR32xPAS/NCR42xPAS LED drivers come in the space-saving DFN2020D-6 (SOT-1118D) package which features side-wettable flanks (SWF) that facilitate the use of AOI (automated optical inspection), and improve reliability. According to the vendor, this is the first time LED drivers have been available in this beneficial package. The new leadless devices join Nexperia's wide range of LED drivers in leaded packages offering equivalent performance yet reducing PCB space by up to 90% compared to SOT-223 (see the figure).

With a footprint of just 2 mm x 2 mm and a low profile of 0.65 mm, the DFN2020D-6 LED drivers are available in NPN and PNP technology. They feature an output current of up to 250 mA (NCR32x types) and a maximum supply voltage of 75 V. Their high thermal power capability is at least equal to any other package for LED drivers, according to Nexperia.

The use of side-wettable flanks not only enables AOI techniques to be used, which is especially important for automotive customers, but also improves reliability. Devices with side-wettable flanks exhibit a greater resistance to shear forces, and can handle greater board flexing without cracking than devices without side-wettable flanks.

Commented Frank Matschullat, product group manager at Nexperia, "The new DFN2020D-packaged parts with SWF address the concerns of various sectors—size, performance, ruggedness—so they are a perfect match for many diverse applications in general lighting, white goods and automotive. Nexperia is committed to deliver industry's broadest discrete portfolio in DFN technology, so introducing LED drivers in this rugged, space-saving package is a natural step. However, parts are also available in leaded SMD styles so customers can choose which to use."

Four DFN2020D-6 LED drivers are in mass production now. More information including product specs and datasheets is available, see the LED driver/Constant current source [page](#).



Figure. The AEC-Q101-qualified DFN2020D-6 LED driver ICs save up to 90% PCB space, while also featuring side-wettable flanks that enable automated inspection and improve reliability.