

Micrel Expands Family of High Frequency, Small White LED Drivers

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Micrel Inc., (NASDAQ: MCRL), an industry leader in Power, Connect and Protect IC solutions, today announced that it has expanded its family of high frequency, small size, high efficiency white [LED](#) drivers. The MIC2292 and MIC2293 are aimed at applications that provide [LCD](#) backlighting in color display applications such as cellular phones, [PDAs](#), and digital cameras. The devices are the newest additions to Micrel's family of 1.2MHz LED drivers, which also includes the MIC2289. The chips are currently sampling with volume quantities available within 12 weeks. Chip pricing starts at \$1.25 in 1K quantity. Lead-free packaging is also available.

The MIC2292 and MIC2293 enhance Micrel's leadership offering of small, high efficiency PWM DC/DC boost white LED drivers," said Tony Grizelj, Micrel's marketing manager for power products. "The newly available 1.6MHz and 2MHz high frequency options, featuring an internal Schottky diode, allow designers to minimize size and noise within a system while achieving up to 30 percent higher efficiency over charge pump based solutions."

The MIC2292 and MIC2293 are 1.6MHz and 2MHz Pulse Width Modulated (PWM) DC/DC white LED drivers, respectively. Only four external components are required to design a complete white LED driver solution - a tiny ceramic input and output capacitor, a small size inductor, and a tiny resistor to set the LED current level. The family frequency options of 1.2MHz, 1.6MHz, and 2MHz all offer reduced ripple and noise in the system. Built on Micrel's proprietary in-house

fabrication process, the MIC2292 and MIC2293 feature an internal 34V switch that can handle more than 0.5A of current. The high voltage and high power capabilities allow the devices to easily light three to six series LEDs powered from a Li Ion battery. The highest level of protection is insured with the internal current limit, thermal shutdown, and output over voltage protection. The MIC2292 and MIC2293 are available in 2mm x 2mm MLF™-8L packaging.

"Consumer electronics continue to require ICs that offer higher performance, smaller packaging and less noise," said Bob Whelton, executive vice president of Operations, Micrel. "The MIC2292 and MIC2293 expand Micrel's family of small, high-efficiency white LED drivers while allowing designers to reduce their input noise by a factor of two. This is especially important in RF applications such as cell phones and the latest PDAs."

Source: www.micrel.com/

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