



## PRESS RELEASE

### **Through-hole Power Bead Inductors for Desktop Architectures Provide Improved Efficiency**

Focus EDL announces what it says is the industry's first series of through-hole power bead inductors for desktop architectures. Produced by Pulse, the PA1894NL and PA2080NL series use a single-turn conductor with a ferrite core instead of a multi-turn conductor wound on a powdered iron toroid core.

This improved structure allows for a 2% to 3% increase in Vcore voltage regulator efficiency, a 35% to 55% reduction in inductor footprint, and enables the tightest direct current resistance (DCR) tolerance available in the industry at  $\pm 4\%$ . The operating temperature is  $-40^{\circ}$  to  $+130^{\circ}$  Celsius. The use of ferrite core material makes these inductors immune to thermal aging, increasing system reliability.

The PA2080NL series is 10.5mm long x 7.5mm wide x 8.9mm high maximum with inductance ranging from 140nH to 220nH, a DCR of 0.49 milliOhm  $\pm 4\%$ , and up to 80Apk. The PA1894NL series is 10.0mm long x 9.0mm wide x 10.0mm high maximum with inductance ranging from 185nH to 335nH, a DCR of 0.64 milliOhm  $\pm 4\%$ , and up to 72Apk. The footprint of the inductor series is designed to fit the pin-pitch of existing toroid solutions for easy test and verification.

They are used in power supplies for microprocessors (Vcore power circuit) in desktop, gaming, server, and workstation applications.