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## Evaluation Board Offers High-Efficiency 3-kW Totem-Pole PFC

<u>Cambridge GaN Devices'</u> (CGD's) CGD-ASY-EVB030FA-01 totem-pole PFC evaluation board is engineered to deliver exceptional efficiency, meeting 80+ Titanium standards when paired with a downstream dc-dc converter. It is optimized for high-power density applications, including high-performance computing, industrial systems, and data servers.

The board features two P2 DHDFN series 650-V, 25-m $\Omega$  GaN HEMTs based on CGD's robust and simple-to-drive ICeGaN technology. It also offers top-side cooling, which aids in heat dissipation, ensuring the components run cool even under high performance and load conditions. Additionally, its modular design with three daughterboards enhances flexibility, making evaluation easier.

Operating from a universal, 90 to 264-Vac input, the PFC converter generates 400-V dc output. It operates at the usual 65-kHz switching frequency for a PFC stage and achieves a peak effciency of 99%. The board measures 70 x 252 x 39 mm (see the figure). A quick reference and user guide are available on the company  $\frac{1}{2}$  website.



Figure. The CGD-ASY-EVB030FA-01 is a 3-kW totem-pole PFC evaluation board engineered to deliver exceptional efficiency, meeting 80+ Titanium standards when paired with a downstream dc-dc converter. It is optimized for high-power density applications, including high-performance computing, industrial systems, and data servers.