



SCAN FOR ARTICLE:

"TFT, LCD, and OLED
Displays: Differences and
Design Considerations"



FEATURED PRODUCTS FROM ARKCO SALES

Chip-on-Glass LCD



Common applications for DOG series

Medical devices. Glucose meters, handheld diagnostic tools that require small, reliable, and high-contrast displays

Communication devices. Handheld radios, GPS devices, and mobile phones that benefit from the power-efficient and compact nature of COG technology.

Industrial equipment. Control panels, instrumentation, small-footprint HMIs

Consumer electronics. Fitness trackers, smartwatches, calculators

Automotive systems. Instrument clusters, climate control systems, infotainment displays, wherever space is limited and reliability is crucial.

Versatile. Durable. Cost-effective.

Better chip-on-glass displays—by a wide margin

- Better reliability in harsh environments. With a wider operating temperature range (typically -20°C to +70°C or more) and enhanced durability, the DOG series is better suited for industrial applications compared to standard COG displays.
- Better energy efficiency. Lower power consumption (from 150µA) extends battery life in portable applications.
- Easier integration. With multiple interface options and plug-and-play support, the DOG series simplifies the design process and reduces time to market.
- Better visual performance. Higher contrast and brightness ensure better readability, even under challenging conditions, which makes them stand out among competitors.
- Touchscreen capable. Need we say more?

Benefits of chip-on-glass

Compact design. All COG technology integrates the driver IC directly onto the glass substrate, eliminating the need for additional PCB space. This allows for a thinner, more compact module—ideal for devices with limited space

Cost-efficiency. A simpler manufacturing process with fewer components (like flex cables, external wiring, additional PCBs, etc.) means COG displays can be more cost-effective in terms of production and assembly.

Reliability. Fewer connections and components mean fewer points of failure, resulting in better long-term reliability. The integration of the driver IC onto the glass minimizes mechanical stress during operation, leading to a more durable display.

Display quality. The direct bonding of the driver to the glass improves signal integrity, enhancing contrast and brightness uniformity. COG displays can offer sharper images, lower power consumption, and better performance in terms of refresh rates.

Contact for quotes, samples, or application assistance:



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