

UTAC's Cutting Edge Semiconductor Packaging Solutions for Automotive Infotainment Systems

In the fast-evolving automotive industry, two segments stand out as the fastest growing: Automotive High Performance Computing (HPC) and Advanced Driver Assistance Systems (ADAS). These segments require high-end computing processors that operate efficiently with low voltage and high current. A crucial area where high-end computing is required is in automotive infotainment systems. UTAC, a leading semiconductor packaging technology provider, has been at the forefront of meeting these demanding requirements, propelling the company to become a preferred partner for automotive Original Equipment Manufacturers (OEMs) and Integrated Device Manufacturers (IDMs).

UTAC's Semiconductors for Automotive Infotainment Systems:



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Automotive infotainment systems are a critical component of modern vehicles, providing a range of features such as multimedia entertainment, connectivity, and navigation. These systems rely on various semiconductor components to deliver seamless performance. UTAC supplies key semiconductor contents for automotive infotainment systems, including microcontrollers, digital signal processors (DSPs), memory

chips, power management chips, audio and video processing chips, communication interfaces, and display drivers. These components ensure the smooth operation and enhanced user experience of automotive infotainment systems.

Leadership in Power Semiconductor Packaging:

In addition to catering to the automotive infotainment sector, UTAC has established itself as a leader in power semiconductor packaging technology. With a strong foothold in the industrial, consumer, and emerging markets such as 5G and automotive, UTAC's power semiconductor packaging solutions have achieved significant milestones. In 2022, UTAC achieved a remarkable cumulative shipment of 2 billion units. Serving top 5 power semiconductor IDMs and expanding its customer base by adding three more power semiconductor companies in 2023, UTAC solidifies its position as a key player in the industry.

AEC-Q100 Approval and Automotive-Qualified QFN Cu Clip:

UTAC's dedication to research and development has led to notable breakthroughs, such as the introduction of the wettable flank version of the QFN Cu clip product. This innovative packaging technology fulfills the stringent requirements of the automotive industry by enabling easy inspection of solder joints. As a result, UTAC's wettable flank QFN Cu clip has obtained the crucial AEC-Q100 approval, widening the range of packaging options available to UTAC's clients in the automotive business. UTAC's automotive version of QFN Cu clip technology has positioned the company as a preferred partner for IDMs seeking to develop automotive-qualified QFN Cu clips.

Co-development for Smaller Size Wettable Flank QFN Cu Clip:

With UTAC's leadership in the market, several IDMs have approached the company for co-development of automotive-qualified QFN Cu clips with smaller sizes. UTAC's expertise and innovative prowess ensure



its continuous support for the automotive industry's evolving needs. Notably, UTAC's automotive QFN Cu clips, such as the 5x5 33LD and 5x9 39LD, have entered production in 2022, establishing UTAC as a trusted partner for automotive OEMs and IDMs. The company's commitment to keeping pace with market demands is exemplified by its leading position in the development of wettable flank QFN Cu clips with dimensions such as 4x6 and 4x5 QFN cu clip for next generation processors.

Conclusion:

UTAC's remarkable achievements in semiconductor packaging technology make it a frontrunner in the automotive industry. By delivering cutting-edge solutions for automotive infotainment systems, UTAC ensures enhanced performance and a seamless user experience. With their power semiconductor packaging expertise, AEC-Q100 approved wettable flank QFN Cu clip, and continuous focus on innovation and co-development, UTAC is well-positioned to address the ever-evolving needs.



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