



Valens Automotive

Resilient Ultra-High Speed In-Vehicle Connectivity



Smart Chipsets for
Smart Connectivity

A New Era for In-Vehicle Connectivity

With an increasing number of devices in our connected cars – including cameras, sensors, radars, LiDARs and displays – our vehicles' infrastructure is at a breaking point.

Today's existing automotive connectivity infrastructure is unable to deliver the required bandwidth and performance necessary to address the needs of the connected and, eventually, autonomous cars. Valens' Automotive technology is here to tackle these challenges.

Driving the Future with Valens Automotive

Valens Automotive technology enables the tunneling of simultaneous streams of high-throughput data to support the many cameras, sensors, LiDARs, and displays that take our vehicles to the next level of in-vehicle connectivity.

Valens' chipsets provide a single, holistic, cost-effective approach to address the challenges of connectivity of today and the future. Valens' superior physical layer (PHY) significantly reduces software complexity, with proper mechanisms to ensure high resilience, such as error correction (RTS), adaptive modulation, and real-time noise cancellers.

Valens brings:

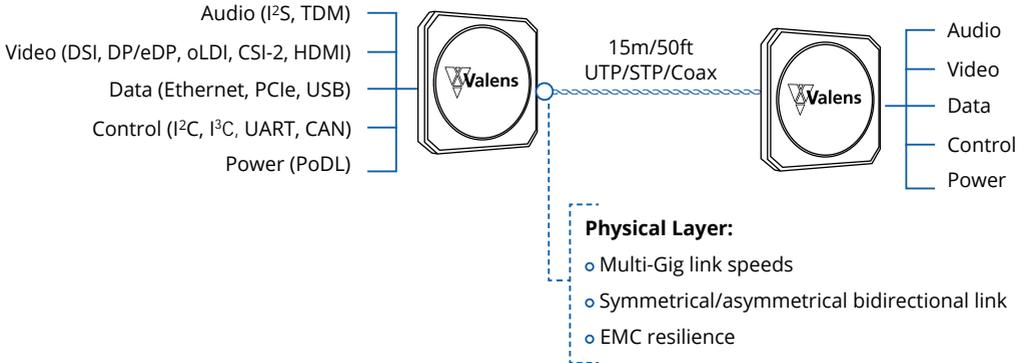
➤ **Unprecedented multi-Gig throughput over the simplest wiring infrastructure**

Valens Automotive is a scalable and modular technology, tunneling high-bandwidth data with near-zero latency. It enables the transmission of video and data over a single unshielded twisted pair (UTP) wire, a low-cost, low-weight alternative.

➤ **Extraordinary capabilities to handle EMC requirements without compromising performance**

Valens Automotive is highly resistant to interference caused by adjacent systems, while minimizing its own emissions, even over UTP. It also guarantees redundancy for ultimate reliability.

Valens Automotive: Smart Chipset for Multi-Gig In-Vehicle Connectivity



➤ **Convergence of multiple native interfaces over the same link**

Valens' chipsets leads to substantially lower system costs, by simplifying connectivity of different applications over the same link, including the unique capability and flexibility to support and extend any protocol (such as PCIe, USB, Ethernet), both symmetric and asymmetric.

➤ **Simple and scalable architecture, while enabling daisy-chaining, multistreaming, and networking**

Valens brings architecture flexibility for transmission of video and data, reducing the number, length and ultimate weight of wiring within our cars.

More Bandwidth, More Applications, Leaner Infrastructure

Valens' technology has been recognized by the MIPI® Alliance as the most resilient technology for in-vehicle ultra-high speed connectivity. Valens is leading the market with innovative connectivity concepts for overall lower total system costs, more bandwidth and support for increased number of applications.

Valens is on the road. Our chipsets are currently embedded in today's vehicles.



About Valens

Valens is a fabless semiconductor company established in 2006 and headquartered in Israel. Valens Automotive, a division of Valens, was established in 2015 to deliver ultra-high-speed in-vehicle connectivity. Valens' patented HDBaseT technology is used by the world's largest audio/video component manufacturers in the audiovisual and consumer electronics markets, enabling the highest quality of connectivity without the limitations of legacy infrastructure.

Valens continues to push the boundaries of wired connectivity everywhere. For more information, visit <https://www.valens.com/automotive-solutions>, follow @ValensAuto, or contact us at info-auto@valens.com.