

Tesla Model 3 Driver Assist Autopilot 2.5 Control Module Unit

Complete analysis of the module, which integrates Nvidia for the GPUs and Intel for the processor.



For several years, Tesla has been working to make cars more and more autonomous in order to reduce accidents and provide optimum driver assistance.

Hynix for the memory; and STMicroelectronics for the audio amplifiers.



Semi-autonomous cars use lots of sensors to approximate autonomous driving, like cameras, radar, lidar, and ultrasonic sensors in order to explore the environment around the car. All of this sensor-derived information must be grouped, and this is where the control unit comes into play. It is essential in order to be able to analyze the data received, and to reach the conditional autonomy offered at level 3.

Our report, which is based on a complete teardown analysis of the Tesla Model 3 Driver-Assist Autopilot Control Module Unit, provides the BoM and manufacturing cost of the control unit. The report also includes a physical analysis of the main ICs (i.e. Nvidia, Intel, Infineon), along with a complete cost analysis and an estimated sales price.

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For the technical solution of its system, Tesla has integrated complete modules from different manufacturers such as Telit, uBlox, and LG Innotek, which are associated with high-performance ICs from Nvidia for the GPU (represents an important part of the final product); Intel for the processor; NXP (Freescale) and Infineon for the microcontrollers; Micron Technology, Samsung, and SK

COMPLETE TEARDOWN WITH

- Detailed photos
- Block diagram
- PCB cross-section and cost estimate
- Estimate for integrated circuit
- Complete and priced bill-of-materials (BoM)
- Manufacturing process flow
- Manufacturing cost analysis
- Estimated sales price

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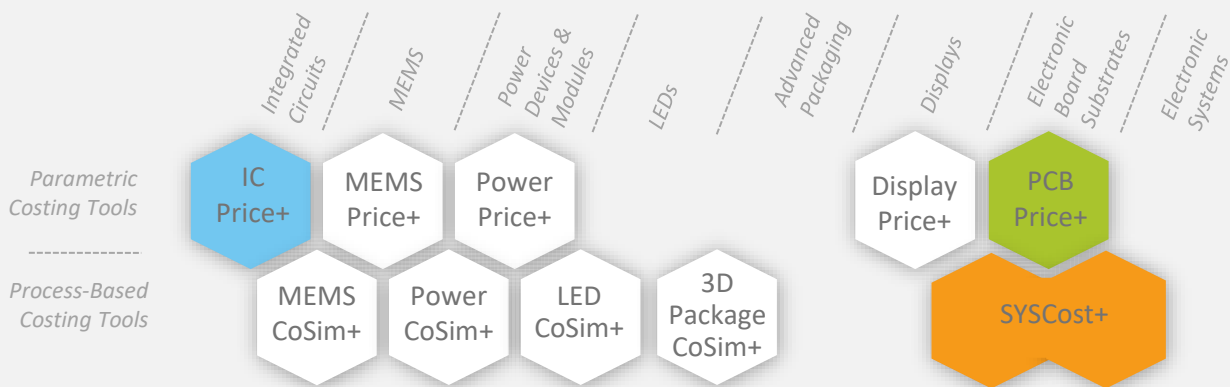


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