



ARM Engineering
1 Engineering Parkway, Buffalo Grove, IL,
60089
Phone: 800/225-5276
E-Mail: Alan@ARMengineering
Web: ARMengineering.com

CO² Car Write-Up

For the CO² car, I started with a basic shape that just filleted the corners of the block away so that the airflow was much smoother than before. However, I understand aerodynamic properties better than I could design into the CAD drawing. I sanded the leading edge to a point and smoothed out the tail to attempt to create a “rain drop” airflow. I also sanded an air channel out of the bottom to direct the airflow to join with the propulsion from the CO² canister. This air channel is not visible in the picture seen here. There is also a slight arch between the wheel axles. This arch decreased weight and caused an area of low pressure so that the car would have a negative lift that would keep it “glued” to the ground. As for requests, I would have really liked it had the school provided me with two things. One, a 3D Printer so that our designs are exactly how we designed them. Two, a wind tunnel with a smoke stream accessory. This way we could test airflow just like the professionals test their cars.

