Tesla Inc

Next-Gen Roadster Gets a (Largely Anticipated) Rocket Upgrade, Showcasing Deep SPCX Collaboration; Expected SoP in 2028

Neutral

TSLA, TSLA US
Price (15 Oct 26):$362.44

Autos & Auto Parts

Rajat Gupta [AC]
(1-212) 622-6382
rajat.gupta@jpmorgan.com

Jash Patwa
(1-212) 622-5472
jash.patwa@jpmchase.com

Yash Beswala
(1-212) 622-0028
yash.beswala@jpmchase.com
J.P. Morgan Securities LLC

TSLA (CEO Elon Musk, VP of Vehicle Engineering Lars Moravy, and Chief Designer Franz von Holzhausen) unveiled its long-awaited second-generation Roadster at SPCX's McGregor, Texas facility, showcasing a vehicle developed in collaboration with SPCX *(covered by Doug Anmuth)* that combines conventional automotive engineering with rocket propulsion technology. The redesigned two-seat Roadster incorporates cold-gas thrusters, an advanced underbody suction system and active aerodynamics, enabling unconventional performance capabilities, including controlled aerial maneuvers. Production is targeted for 2028, compared with the original 2020 delivery target announced when the vehicle was first unveiled in 2017. The company did not disclose final pricing, battery capacity, driving range or anticipated production volumes. Roadster orders are open, requiring ~$5K upfront and another ~$45K due after 10 days for the "Performance" road-ready version, and ~$250K overall deposit for the "Thrust" variant which includes the aero and multi-mode suction-systems along with thrusters. Another 1-seater "Rocket" variant is reserved for invite-only buyers. Management also indicated that the Roadster would eventually become TSLA's only manually driven vehicle as the broader portfolio transitions toward full autonomy.

- **Vehicle specifications.** The Roadster incorporates ten cold-gas thruster nozzles supplied by two ultra-high-pressure storage vessels with a combined capacity of ~600 liters, containing ~250 kg of compressed air and generating 80+ kilonewtons of thrust. The system utilizes rechargeable compressed air rather than specialized propellants, enabling repeated propulsion and aerial maneuvers. Separately, a multi-mode underbody fan system can generate suction equivalent to ~2G, providing additional traction even at low speeds, while adjustable airflow channels and an active rear wing allow the vehicle to transition between high-downforce and low-drag configurations. Management indicated that the combined systems could support cornering forces exceeding 2G and potentially establish new track records. Other design features include chassis-integrated seating and steer-by-wire steering, braking and throttle controls. Management indicated a top speed of 230 mph+, while discussing a more ambitious target of ~Mach 0.5 (~380 mph) alongside 0-60 acceleration in sub-1 second.
- **Event demonstrations.** The presentation featured a series of live demonstrations of the Roadster's propulsion and aerodynamic capabilities, including traversing a ramp while inverted using the underbody suction system, executing controlled mid-air rotations and jumping over a lineup of Tesla vehicles, including a Semi, before landing. The ramp demonstration was conducted without a human occupant. TSLA also showcased 0-60 mph acceleration in 0.81 seconds, with management anticipating further improvements in the production configuration. The

See page 3 for analyst certification and important disclosures.

presentation focused predominantly on demonstrating the vehicle's engineering capabilities rather than detailing commercialization plans, with management acknowledging that the Roadster is not necessarily optimized for safety and that certain capabilities may face regulatory restrictions.

