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## TESLA MOTORS INC. (TSLA)

BUY - \$22.84

APPLIED TECHNOLOGIES

PLEASE REFER TO DISCLOSURES ON PAGES 5 & 6 FOR IMPORTANT INFORMATION

### The Business is Building; Reiterate PT & Buy

Changes: FY11 Revenue to \$168MM from \$159MM

FY11 EPS to (\$2.12) from (\$1.74)-- reflects higher R&D estimate & higher share counts

FY12 Revenue to \$135MM from \$127MM

FY12 EPS to (\$2.33) from (\$2.16) -- reflects higher R&D estimate & higher share counts

**Initiating FY13 estimates** 

Financial Summary*						
Adj. EPS	<u>2010</u>	<u>2011E</u>	<u>2012E</u>	<u>2013E</u>	Price	\$22.84
Mar	-3.26A	-0.54	-0.48	0.23	12-Month Target	\$30.00
Jun	-3.41A	-0.55	-0.48	0.76	52-Week Range	\$14.98-\$36.42
Sep	-0.37A	-0.52	-0.68	0.39	Diluted Shares ('000)	94,240
Dec	-0.47A	-0.51	-0.69	0.21	Market Cap ('000)	\$2,1 52,442
FY	-2.53	-2.12	-2.33	1.57	Avg. Daily Vol	741,838
					3-5 Yr. Revenue Growth	20%+
Revs (\$'000)					3-5 Yr. EPS Growth	20%+
Mar	\$20,812A	\$39,059	\$40,373	\$344,570	Book Value	\$2.20
Jun	\$28,405A	\$42,855	\$40,176	\$595,160	LT Debt / Total Capital	26%
Sep	\$31,241A	\$47,869	\$29,602	\$430,100	Insider Ownership	57%
Dec	\$36,286A	\$38,460	\$24,722	\$347,570	Est. Q1 Reporting Date	May '11
FY	\$116,744	\$168,244	\$134,873	\$1,717,401		
Mkt Cap/Rev	18x	13x	16x	1x		

<sup>\*</sup>Column totals might not sum because of rounding and changes in share count, particularly given the recent IPO. Also, Q110 and Q210 EPS estimates and cash estimates are pro-forma adjusted for post-IPO diluted shares outstanding.

### **Investment Thesis:**

After the close last night, Tesla Motors reported Q410 revenue that was better than expectations, with strength driven by Roadster sales and development services work for Daimler and Toyota. Tesla also guided to FY11 revenue above street expectations, driven by development revenue from Toyota and higher-ASP Roadster sales in Europe and Asia. R&D costs were higher than we had modeled and should continue to rise in FY11. We have adjusted our estimates accordingly.

Our two biggest takeaways from the quarterly earnings call were:

1) While Model S development progresses on schedule, the company is making adjustments to its manufacturing plan for the vehicle. Tesla plans to invest in paint and body shop technologies that should help the company see higher margins on the Model S. It also is expanding the capacity of its automation lines to produce 20,000 units per year on one work shift, as opposed to two. Such investments should result in capital expenditures of \$190MM to \$215MM in 2011, which is higher than the \$120MM previously planned. We note that the company appears to have enough cash available to bring the Model S to market. We believe that these investments should have a positive impact on long-term profitability.



2) Tesla may decide to raise additional capital to fund Model X<sup>1</sup> development, according to management. We expect any capital raise to occur toward the end of FY11, after the company has revealed a beta version of the Model S. Development costs for the Model X are expected to be \$100MM to \$150MM, according to management. Though a capital raise is not certain, we have adjusted our Q411 share count in anticipation of one.

On the conference call, management also provided a favorable update on Model S development. The first Alpha build of the Model S was driven in December, and the company is now testing 15 builds. Next, the company plans to finish its beta build over the summer and offer test rides by year end. CEO Elon Musk says he drives the alpha build each week and that "it feels very light and agile on the road."

**Dougherty & Co. estimates:** 

Development Services revenue continues to be strong and helps to fund Model S development. We believe that about \$67MM in revenue still remains to be realized on the Toyota Rav4 contract over the next five quarters. Also, Daimler increased its orders for the Smart fortwo electric battery packs from 1,500 units to 1,800. This is the third increase from Daimler and an endorsement of Tesla's battery technology.

Given the solid results and favorable outlook, we reiterate our \$30 PT and Buy rating. Our PT is based on a DCF that takes into account sales of Tesla's new Model S, slated for release in 2012.

### **Q410 Quarterly highlights**

TESLA	<u>2010 A</u>	<u>2011 E</u>	<u>2012 E</u>	<u>2013 E</u>	<u>2014 E</u>
Roadster Revenue	72,728	79,570	49,608	-	-
Model S Revenue	-	-	159	1,626,208	2,032,760
ZEV Credit Revenue	1,302	4,000	4,000	4,000	4,000
Dest. Charges & Leasing	1,607	1,474	1,107	26,193	32,491
Powertrain Revenue	21,441	21,200	32,000	33,000	36,000
Development Revenue _	19,666	62,000	48,000	28,000	28,000
Total revenue	116,744	168,244	134,873	1,717,401	2,133,251
GM	26%	28%	10%	25%	25%
OM	-126%	-140%	-199%	9%	13%
EBITDA	(136,216)	(225,809)	(256,523)	166,984	285,914
EBITDA/Share	(2.69)	(2.34)	(2.51)	1.43	1.97
EPS	(2.53)	(2.12)	(2.33)	1.57	2.08

620

376

20,000

25,000

567

• Tesla reported Q410 revenue of \$36MM, which beat our \$33MM estimate and beat the street average estimate of \$34MM.

Assumptions Roadster Units

**Model S Units** 

- Gross margin of 31% was better than our 23% estimate, but we do not believe that this margin level is sustainable as it was driven by revenue and expense recognition timing related to development services contracts. Gross margins from automotive sales were 19.8% and gross margins from development services were 78%.
- The Q410 net loss was \$51MM, which was greater than our \$41MM estimate and the street's \$49MM estimate, mostly caused by higher-than-expected R&D costs. The Thomson Reuters consensus EPS figure was an amalgamation of GAAP and non-GAAP estimates, and thus, there is no reliable consensus comparison.
- Management issued FY11 revenue guidance of \$160MM to \$175MM, or growth of roughly 40% to 50%. The midpoint was 5% higher than our \$159MM expectation and 10% higher than the street's \$152MM expectation. We believe that the growth will come from development work related to the Toyota Rav4 and higher ASPs on the Roadster, helped in part by foreign sales.

<sup>&</sup>lt;sup>1</sup> A variant on the Model S platform that will serve as a crossover SUV.

# TESLA

### DOUGHERTY & COMPANY LLC

- Tesla sold 149 Roadsters in the quarter. We estimate that the average selling price per Roadster was about \$135,000 per vehicle, up 12% sequentially.
- Development services revenue of \$7.1MM was better than our estimate of \$5.5MM. We note that revenue recognition here can be lumpy.

### **Investment Risks:**

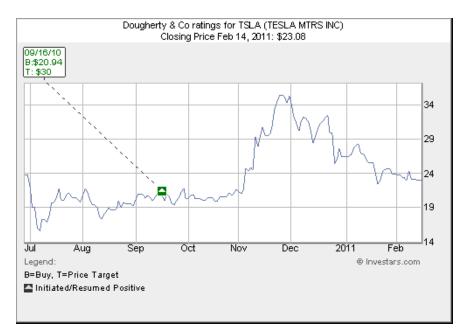
Risks that could prevent Tesla (TSLA) shares from achieving our price target include:

- Model S Progress Risks We believe that not achieving the anticipated roadmap for the Model S platform presents one of the largest risks to the stock. Supplier issues could be a source of delay. Tesla's Roadster, for example, relies on 150 suppliers for 2,000 parts. In the past, supplier delays have stalled progress on the Roadster.
- Profitability Targets Tesla's future profitability depends upon achieving 43% net cost reduction from the Roadster to the Model S. Failure to achieve cost reduction objectives would be detrimental to the company and the stock.
- CEO Leadership Dependence We believe that Tesla has been able to secure a bevy of automotive engineering and design talent. Much of that can be attributed to the leadership and vision of CEO Elon Musk. We don't expect Musk, a serial entrepreneur, to remain at the helm of the company beyond 2014. Contractually, Musk should stay on until the Model S has performed successfully.
- Withdrawal of Government Support Widespread electric vehicle adoption is encouraged by government buyer incentives, government emissions regulations and government grants that support technological advancement and buildout of the charging infrastructure. A deleterious change to the subsidies or support surrounding electric vehicles could create an ethanol-like failure of the concept.
- Failure of the Electric Vehicle Concept Despite the hype, electric vehicles have not proven their success as a concept. Range anxiety is a real obstacle faced by consumers. Advertised ranges are generally overstated. Like internal combustion engines, ranges vary by usage pattern, including speed, acceleration and cabin climate control, and the temperature and climate of the operating environment. This issue is much bigger for electric vehicles than for internal combustion engines, given the existing limits to their ranges. Also, we note that ethanol failed for a variety of reasons, but a key reason was poor consumer adoption at the pump vehicle range drops up to 20% when fueled by E85. (Tesla has floated the idea of swap pack batteries that can be rented for longer trips. We think that this model is unlikely to take off.)



		Actual								Estimated						Model S Begins						
	FY	FY	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY
	2007	2008	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2011E	2011E	2011E	2011E	2011E	2012E	2012E	2012E	2012E	2012E
			MAR	JUN	SEP	DEC		MAR	JUN	SEP	DEC		MAR	JUN	SEP	DEC		MAR	JUN	SEP	DEC	
Income Statement		2000201					659%	-0.4%	5.4%	-31.4%	95.2%	4%	87.7%	50.9%	53.2%	6.0%	44%	3.4%	-6.3%	-38.2%	-35.7%	-20%
QOQ		20095%		29.0%	69.0%	-59.2%	659%	-0.4% 12.0%	5.4% 36.5%	-31.4% 10.0%	95.2% 16.1%	4%	87.7%	9.7%	53.2% 11.7%	-19.7%	44%	3.4%	-6.5% -0.5%	-38.2% -26.3%	-35.7% -16.5%	-20%
Auto Sales	73	14,742	20.886	26,945	45.527	18,585	111,943	20.585	23,971	23.350	29,172	97.078	24,059	27.855	31.869	22,460	106.244	23.373	23.176	22,602	17,722	86,873
Development services sales	/3	14,742	20,000	26,345	45,527	10,505	111,943	20,505	4.434	7,891	7,114	19,666	15,000	15,000	16,000	16,000	62,000	23,373 17,000	17,000	7.000	7,000	48,000
Total Revenue	73	14,742	20,886	26,945	45,527	18,585	111,943	20,812	28,405	31,241	36,286	116,744	39,059	42,855	47,869	38,460	168,244	40,373	40,176	29,602	24,722	134,873
Total (Cyclide	, 3	14,142	20,000	20,040	40,021	10,505	111,545	20,012	20,403	31,241	30,200	110,144	55,55	42,000	41,000	30,400	100,244	40,575	40,110	20,002	24,122	134,013
Cost of Auto sales	9	15,883	22,932	24,844	37,828	16,804	102,408	16,858	20,266	19,457	23,401	79,982	21,653	25,069	27,089	20,214	94,026	18,699	18,541	33,084	29,180	99,504
Cost of development sys	-	·-		·-	·-	`-	· -	102	1,878	2,488	1,564	6,032	6,750	6,750	7,200	7,200	27,900	7,650	7,650	3,150	3,150	21,600
Total COGS	9	15,883	22,932	24,844	37,828	16,804	102,408	16,960	22,144	21,945	24,965	86,014	28,403	31,819	34,289	27,414	121,926	26,349	26,191	36,234	32,330	121,104
Gross profit (loss)	64	(1,141)	(2,046)	2,101	7,699	1,781	9,535	3,852	6,261	9,296	11,321	30,730	10,656	11,035	13,580	11,046	46,318	14,025	13,985	(6,632)	(7,608)	13,770
GM	88%	-8%	-10%	8%	17%	10%	9%	19%	22%	30%	31%	26%	27%	26%	28%	29%	28%	35%	35%	-22%	-31%	10%
505	00.750	50.744	704			0.440	40.000	40.005	45.440		07.017	00.000	40.500	40.500	40.000		475 400	40.000	40.000	40.000		475 500
R&D SG&A	62,753	53,714 23,649	7,941 6.607	1,941	1,257 10,733	8,143 16,563	19,282 42,150	13,265 16,585	15,416 22,207	26,698 20,432	37,617 25,349	92,996 84,573	43,500 26,300	43,500 27,000	43,800 26.700	44,300 26,500	175,100 106,500	43,600 27.000	43,600 27,000	43,900 26,700	44,400	175,500 107,200
	17,244 79,997	77,363	14,548	8,247	11,733	24,706	61,432	29,850	37,623	47,130	25,349 62,966	177,569	69,800	70,500	70,500	70,800	281,600	70,600	70,600	70,600	26, <mark>500</mark> 70,900	282,700
Total OpEx	186,81	77,303	14,340	10,188	11,990	24,700	61,432	29,000	37,023	47,130	02,300	177,509	000,000	70,500	70,000	70,000	201,000	70,000	70,000	70,000	70,500	202,700
Op profit (loss)	(79,933)	(78,504)	(16,594)	(8,087)	(4,291)	(22,925)	(51,897)	(25,998)	(31,362)	(37,834)	(51,645)	(146,839)	(59,144)	(59,465)	(56,920)	(59,754)	(235,282)	(56,575)	(56,615)	(77.232)	(78,508)	(268,930)
OM (1033)	-109497%	-533%	-79%	-30%	-9%	-123%	-46%	-125%	-110%	-121%	-142%	-126%	-151%	-139%	-119%	-155%	-140%	-140%	-141%	-261%	-318%	-199%
Interest income	1,749	529	16	29	52	62	159	48	47	100	63	258	63	42	36	10	151	0	14	0	0	14
Interest expense	-	(3,747)	(1,402)	(1,086)	(18)	(25)	(2,531)	(230)	(464)	(298)	-	(992)	-	-	-	-		-		-	-	
Other income (expense)	137	(963)	1,972	(1,715)	(577)	(1,125)	(1,445)	(3,221)	(6,729)	3,180	187	(6,583)	-	4.0								-
Income (loss) before tax	(78,047)	(82,685)	(16,008)	(10,859)	(4,834)	(24,013)	(55,714)	(29,401)	(38,508)	(34,852)	(51,395)	(154,156)	(59,081)	(59,422)	(56,884)	(59,744)		(56,575)	(56,601)	(77,232)	(78,508)	(268,917)
Тах	110	97	8	8	(219)	229	26	118	9	83	(37)	173	133	134	128	135	530	127	127	174	177	606
Net Income (Loss)	(78,157)	(82,782)	(16,016)	(10,867)	(4,615)	(24,242)	(55,740)	(29,519)	(38,517)	(34,935)	(51,358)	(154,329)	(59,214)	(69,556)	(57,012)	(59,878)	(235,661)	(56,703)	(56,729)	(77,406)	(78,685)	(269,522)
Diluted shares	3,444	6,646	6,924	6,966	7,014	7,066	7,022	7,302	7,643													
QoQ Growth			4.2%	0.6%	0.7%	0.7%		3.3%	8.8%													
GAAP EPS	(22.69)	(12.46)	(2.31)	(1.56)	(0.66)	(3.43)	(7.94)	(4.04)	(5.04)													
GAAF EFS	(22.69)	(12.40)	(2.31)	(1.56)	(0.00)	(3.43)	(7.54)	(4.04)	(5.04)													
Diluted (pro-forma)				71,828			77,694	77,974	91,208	92,271	94,240	50,718	94,334	94,429	95,373	101,572	96,427	101.877	102,182	102,489	102,796	102,336
QoQ Growth				11,020			11,004	11,514	17.0%	1.2%	2.1%	30,110	0.10%	0.10%	1.0%	6.5%	30,421	0.3%	0.30%	0.3%	0.3%	102,550
EPS (calculated)				(0.15)			(0.72)	(0.38)	(0.42)	(0.38)	(0.54)	(3.04)	(0.63)	(0.63)	(0.60)	(0.59)	(2.44)	(0.56)	(0.56)	(0.76)	(0.77)	(2.63)
Reconciliation GAAP to Non-GAAP																						
Adjusted Net Income (Loss)				(10,689)	(4,103)			(23,800)	(26,053)	(34,195)	(44,102)	(128,150)	(51,371)	(51,713)	(49,169)	(52,035)	(204,289)	(48,860)	(48,886)	(69,563)	(70,842)	(238,150)
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Adjusted EPS				(1.53)	(0.58)			(3.26)	(3.41)	(0.37)	(0.47)	(2.53)	(0.54)	(0.55)	(0.52)	(0.51)	(2.12)	(0.48)	(0.48)	(0.68)	(0.69)	(2.33)





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