



INDUSTRY UPDATE

AUTOMOTIVE & AUTO-TECH
Q4 2023



GREENWICH
CAPITAL GROUP

GCG Automotive & AutoTech Update | Q4 2023

AutoTech Industry Landscape

Fleet Management Software



Infotainment & Embedded Systems



Safety & Security Systems



Vehicle Digital Retail



Dealer Management Software



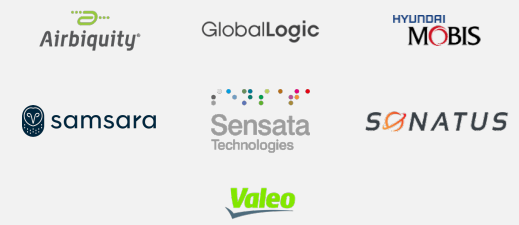
Autonomous Driving Tech



Battery Tech & Infrastructure



Connected Vehicle Tech



Electric Vehicle Manufacturers



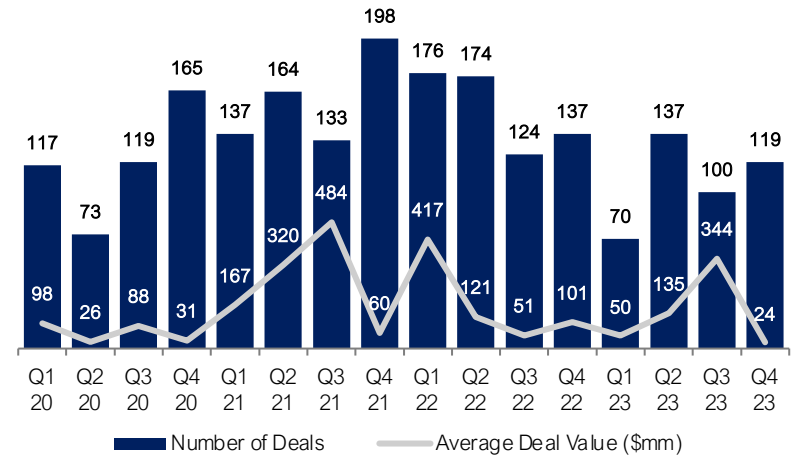
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M&A Trends - Automotive

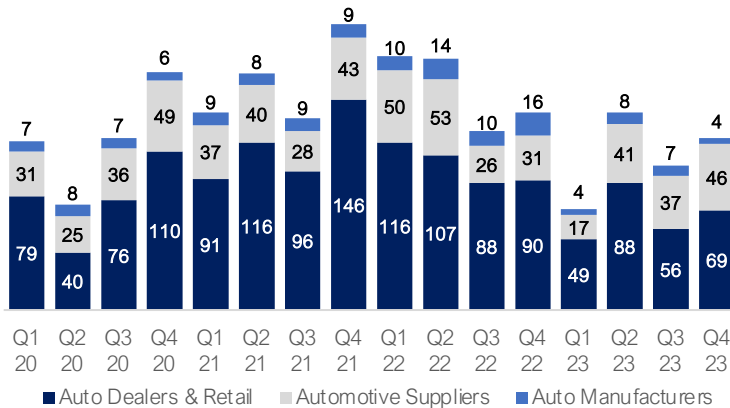
Volume Analysis

Period	CY 2020	CY 2021	CY 2022	CY 2023	% change 20-21	% change 21-22	% change 22-23
Q1	117	137	176	70	17%	28%	(60%)
Q2	73	164	174	137	125%	6%	(21%)
Q3	119	133	124	100	12%	(7%)	(19%)
Q4	165	198	137	119	20%	(31%)	(13%)
Annual	474	632	611	426	33%	(3%)	(30%)

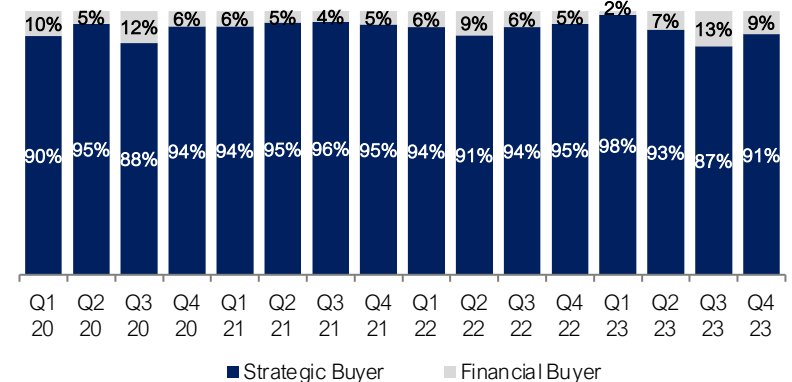
Automotive Industry Deal Activity



Target Sector Analysis by Deal Volume



M&A Activity by Buyer Type



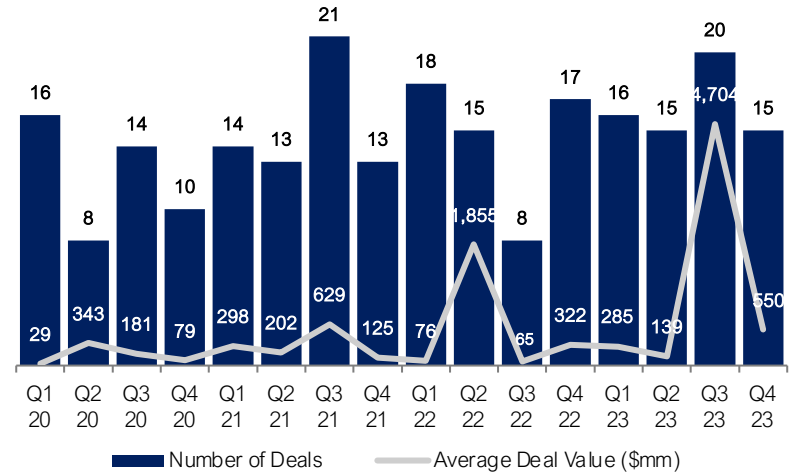
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M&A Trends - AutoTech

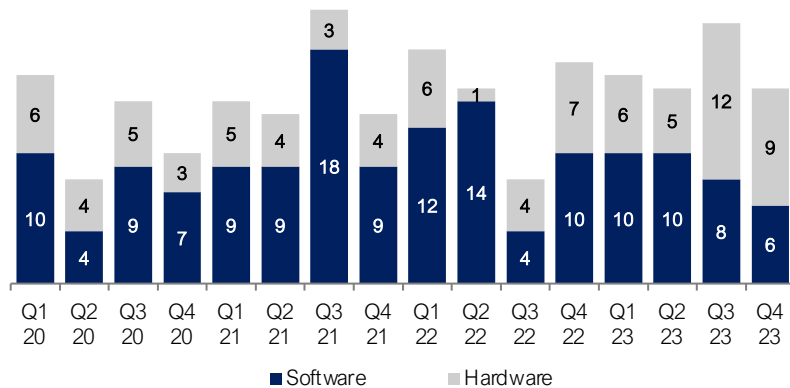
Volume Analysis

Period	CY 2020	CY 2021	CY 2022	CY 2023	% change 20-21	% change 21-22	% change 22-23
Q1	16	14	18	16	(13%)	29%	(11%)
Q2	8	13	15	15	63%	15%	-
Q3	14	21	8	20	50%	(62%)	150%
Q4	10	13	17	15	30%	31%	(12%)
Annual	48	61	58	66	27%	(5%)	14%

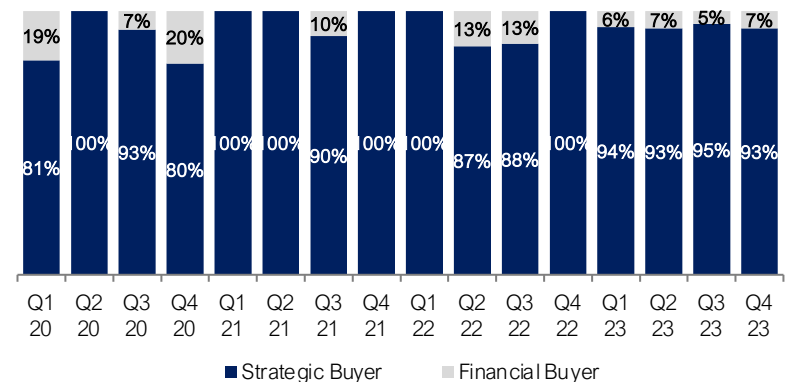
AutoTech Software and Hardware Deal Activity



Target Sector Analysis by Deal Volume



M&A Activity by Buyer Type



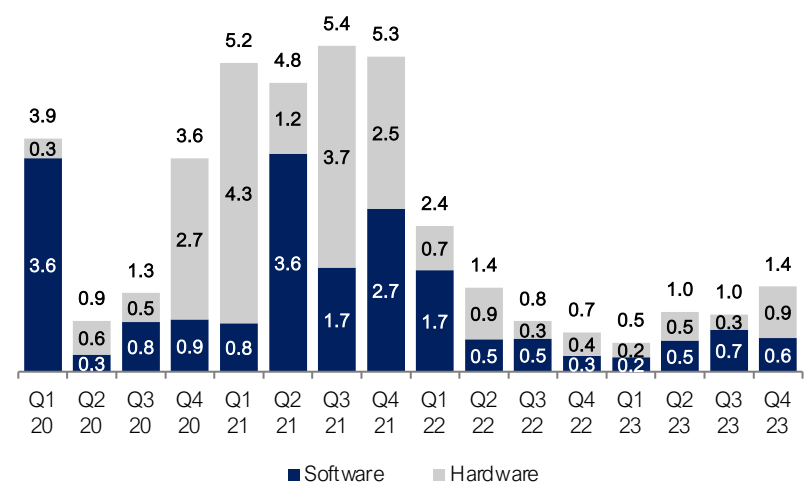
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AutoTech Private Placement Trends

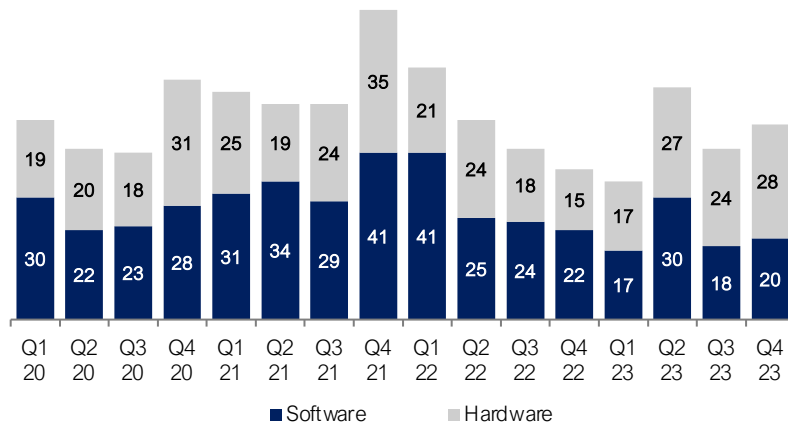
Volume Analysis

Period	CY 2020	CY 2021	CY 2022	CY 2023	% change 20-21	% change 21-22	% change 22-23
Q1	49	56	62	34	14%	11%	(45%)
Q2	42	53	49	57	26%	(8%)	16%
Q3	41	53	42	42	29%	(21%)	-
Q4	59	76	37	48	29%	(45%)	30%
Annual	191	238	190	181	25%	(18%)	(5%)

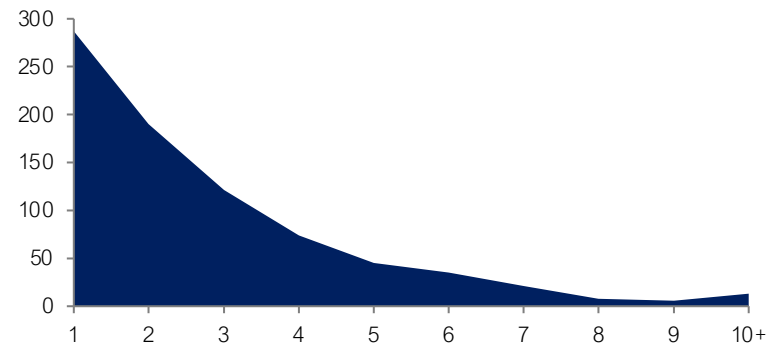
Total Money Raised (\$ billion)



Target Sector Analysis by Deal Volume



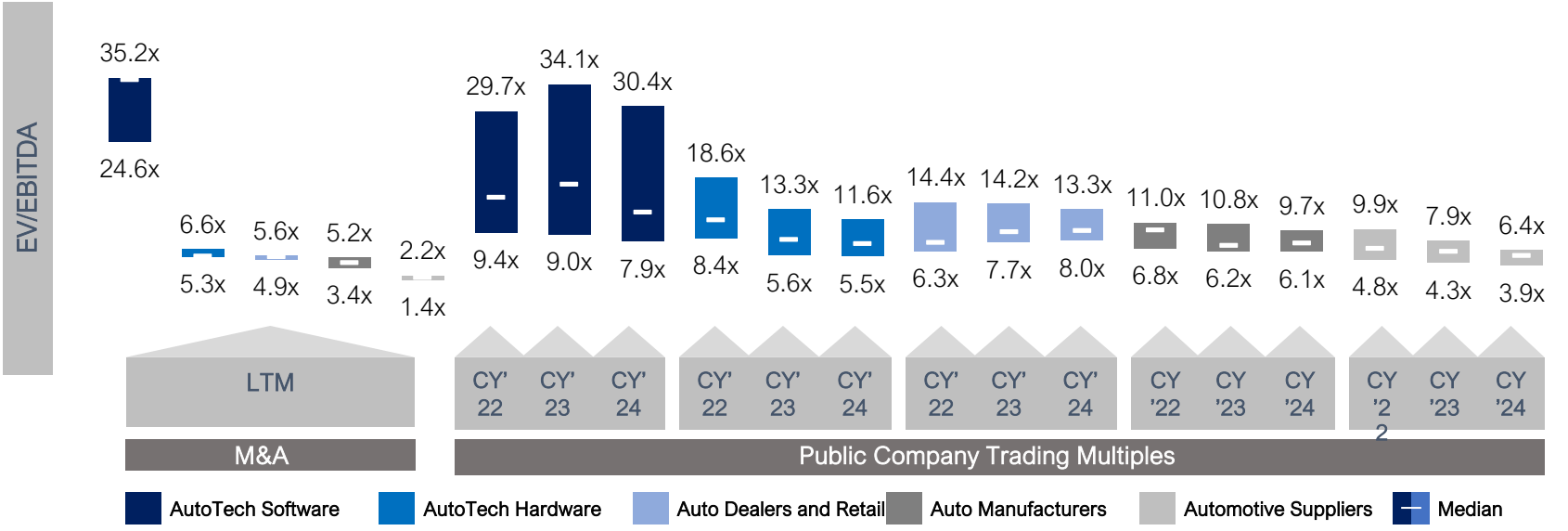
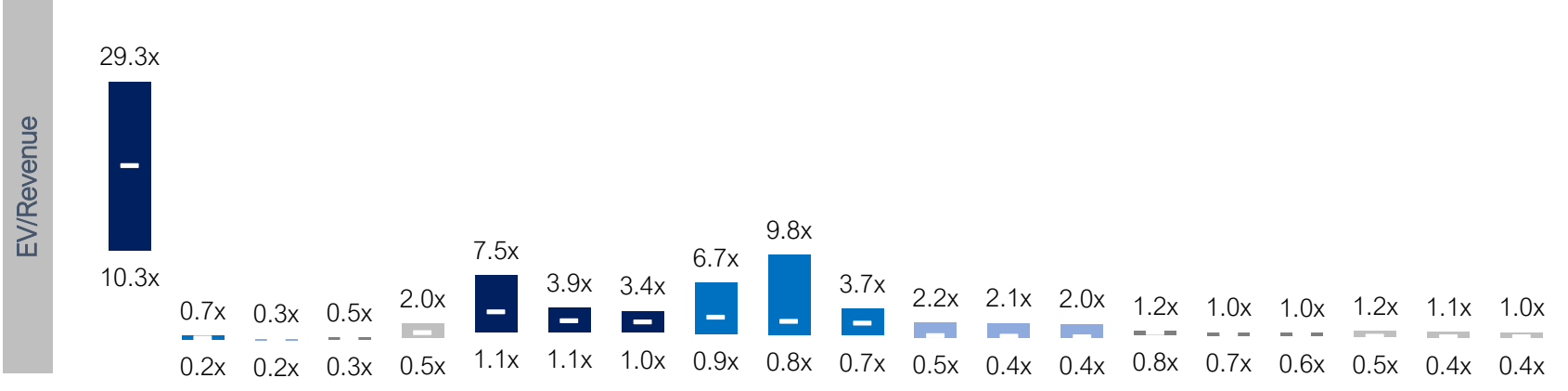
Funding Round #



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Valuation Overview

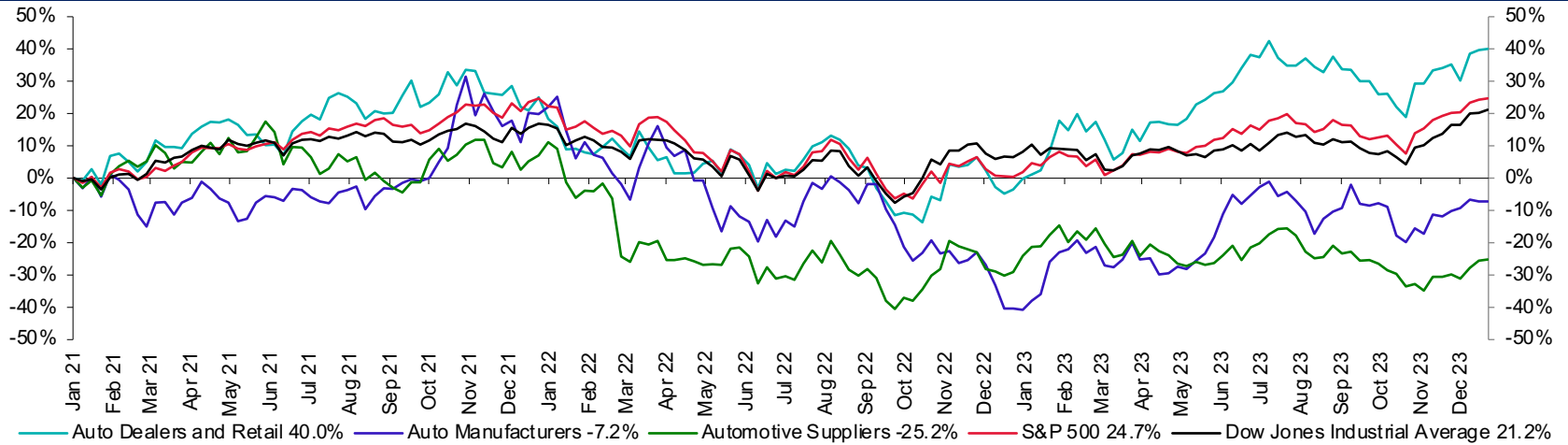
Public Comps and M&A Summary Valuation Metrics



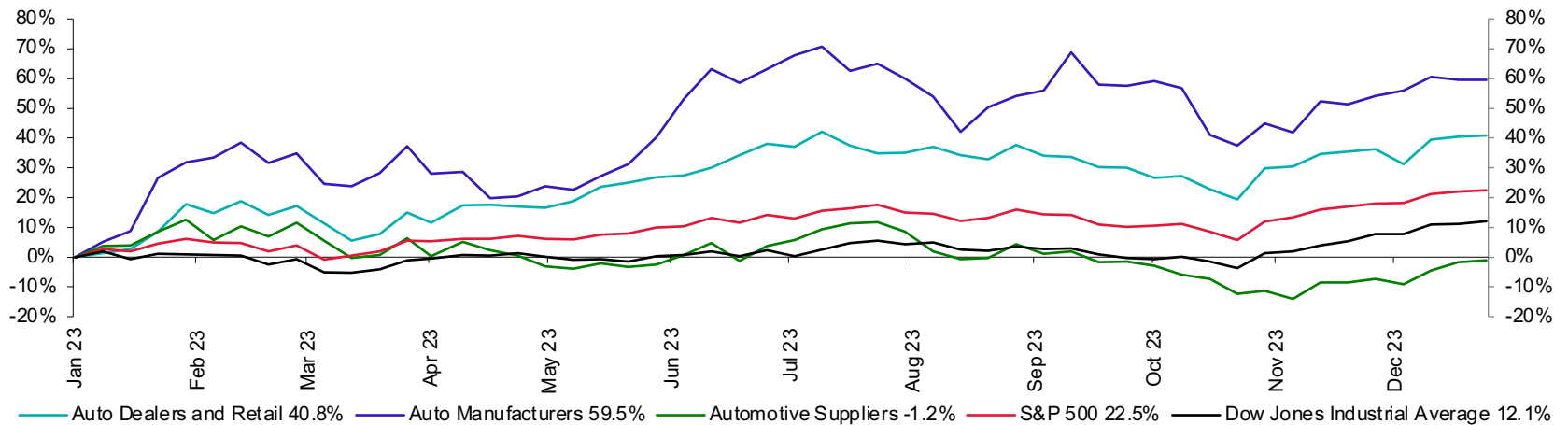
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Automotive Index Performance

Automotive Retail, Suppliers & Manufacturers VS S&P & Dow Jones Custom Index Chart – 3 Years



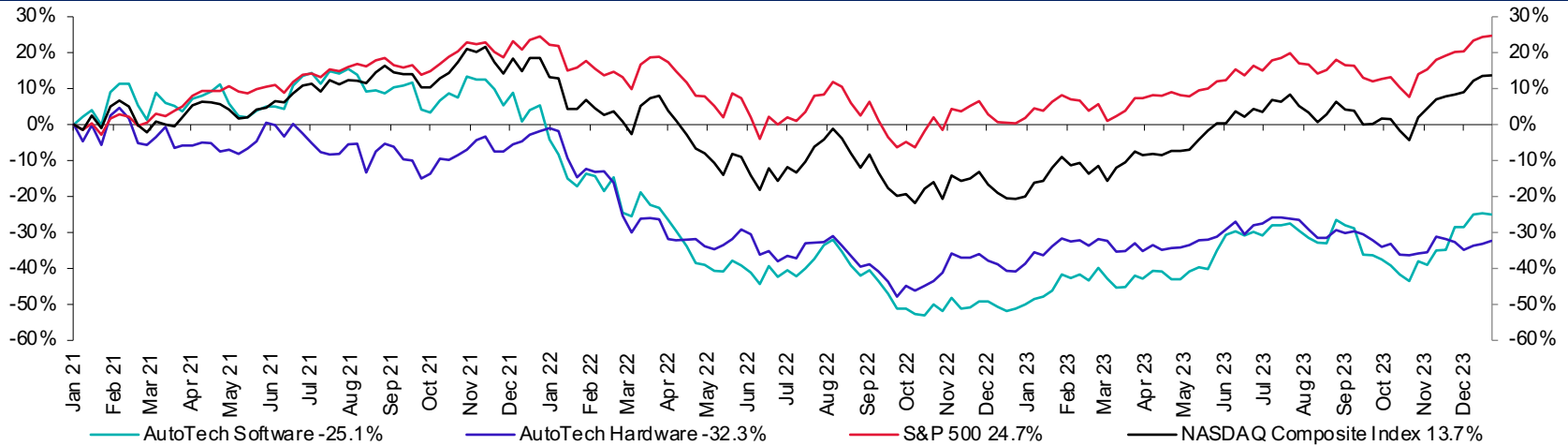
Automotive Retail, Suppliers & Manufacturers VS S&P & Dow Jones Custom Index Chart - LTM



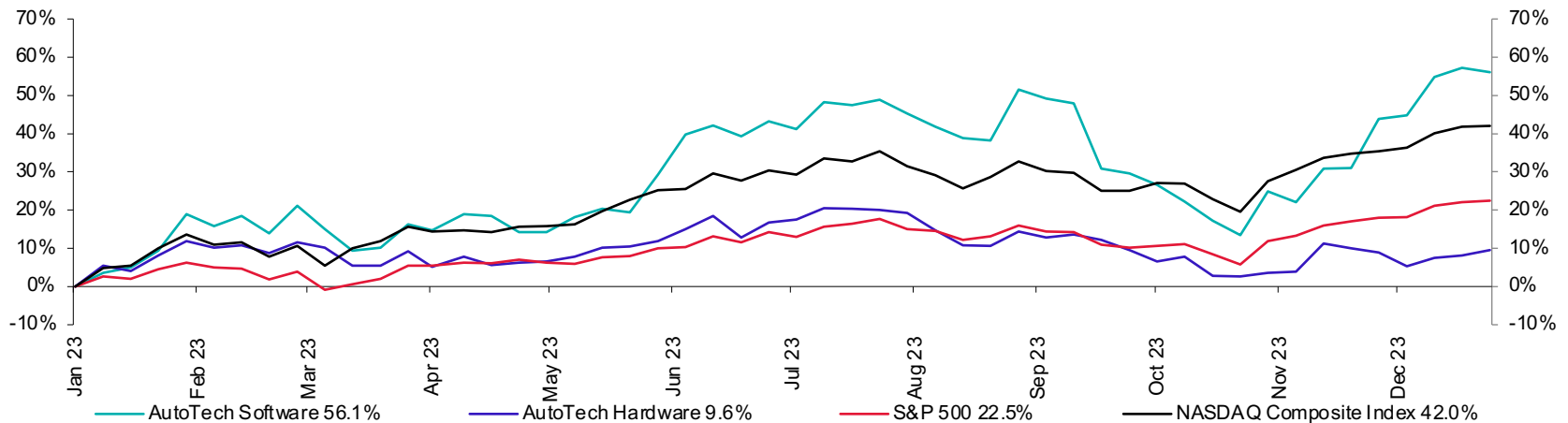
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AutoTech Index Performance

AutoTech Software & Hardware VS S&P& Nasdaq Custom Index Chart – 3 Years



AutoTech Software & Hardware VS S&P & Nasdaq Custom Index Chart - LTM



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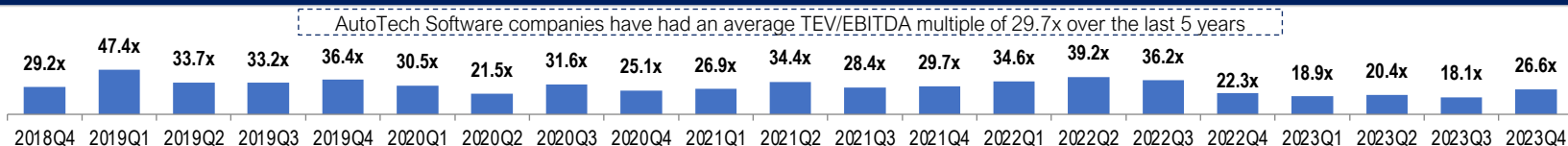
Public Comparable Companies

AutoTech Software	LTM Results		LTM Margins		1Yr FWD Margins		Country	Enterprise Value	TEV / LTM:		TEV / 1Yr FWD:	
	Revenue	EBITDA	Gross	EBITDA	Gross	EBITDA			Revenue	EBITDA	Revenue	EBITDA
ALD S.A.	\$ 16,473	\$ 1,838	19.5%	11.2%	NA	7.0%	France	\$ 39,968.1	2.4x	21.7x	1.7x	24.0x
CarMax, Inc.	\$ 28,248	\$ 1,279	11.6%	4.5%	10.2%	4.0%	United States	\$ 31,009.7	1.1x	24.3x	1.2x	29.1x
Samsara Inc.	\$ 848	\$ (221)	72.9%	(26.1%)	74.1%	2.7%	United States	\$ 17,286.4	20.4x	NM	15.6x	NM
Carvana Co.	\$ 11,184	\$ (153)	13.5%	(1.4%)	15.9%	3.2%	United States	\$ 11,019.8	1.0x	NM	1.0x	31.4x
Aurora Innovation, Inc.	\$ 2	\$ (787)	NA	(39350.0%)	NA	NA	United States	\$ 5,295.5	NM	NM	NM	NM
KPIT Technologies Limited	\$ 509	\$ 94	34.2%	18.4%	34.5%	20.3%	India	\$ 4,904.2	9.6x	52.3x	7.7x	37.9x
CarGurus, Inc.	\$ 978	\$ 155	63.5%	15.8%	71.9%	21.4%	United States	\$ 2,497.1	2.6x	16.1x	2.6x	12.3x
Navinfo Co., Ltd.	\$ 492	\$ (120)	40.4%	(24.4%)	49.6%	8.7%	China	\$ 2,478.1	5.0x	NM	4.3x	49.7x
Cars.com Inc.	\$ 678	\$ 164	67.9%	24.2%	82.4%	28.6%	United States	\$ 1,655.0	2.4x	10.1x	2.3x	8.0x
Vroom, Inc.	\$ 867	\$ (164)	18.7%	(19.0%)	20.1%	(15.6%)	United States	\$ 1,134.5	1.3x	NM	1.1x	NM
Karooo Ltd.	\$ 205	\$ 76	63.4%	37.0%	65.3%	40.6%	Singapore	\$ 731.5	3.6x	9.6x	3.4x	8.4x
Wuhan Kotei Informatics Co.,Ltd.	\$ 82	\$ 5	33.6%	6.6%	34.4%	7.4%	China	\$ 588.0	7.2x	108.6x	6.1x	82.8x
Infomedia Ltd	\$ 86	\$ 13	95.3%	15.2%	67.7%	39.4%	Australia	\$ 332.2	3.8x	25.4x	3.6x	9.1x
TrueCar, Inc.	\$ 154	\$ (60)	90.3%	(39.0%)	90.4%	4.6%	United States	\$ 190.7	1.2x	NM	1.0x	22.5x
MotorK plc	\$ 48	\$ (14)	32.5%	(29.0%)	NA	9.2%	Italy	\$ 164.0	3.5x	NM	2.9x	31.8x
MiX Telematics Limited	\$ 149	\$ 35	62.8%	23.6%	62.6%	24.2%	United States	\$ 157.6	1.1x	4.5x	1.1x	4.6x
Kingwaytek Technology Co., Ltd.	\$ 15	\$ 3	50.8%	22.5%	NA	NA	Taiwan	\$ 113.7	7.5x	33.4x	NM	NM
Quartix Technologies plc	\$ 37	\$ 7	70.1%	19.5%	NA	17.1%	United Kingdom	\$ 87.5	2.4x	12.3x	2.3x	13.5x
Fabrica Communications Co., LTD.	\$ 53	\$ 8	49.8%	15.4%	NA	17.8%	Japan	\$ 57.6	1.1x	7.0x	0.9x	5.1x
Ficha Inc.	\$ 3	\$ (0)	74.6%	(7.3%)	NA	NA	Japan	\$ 28.8	10.7x	NM	NM	NM
Element Fleet Management Corp.	\$ 1,410	\$ -	97.3%	0.0%	6.0%	0.0%	Canada	\$ -	NM	NM	NM	NM

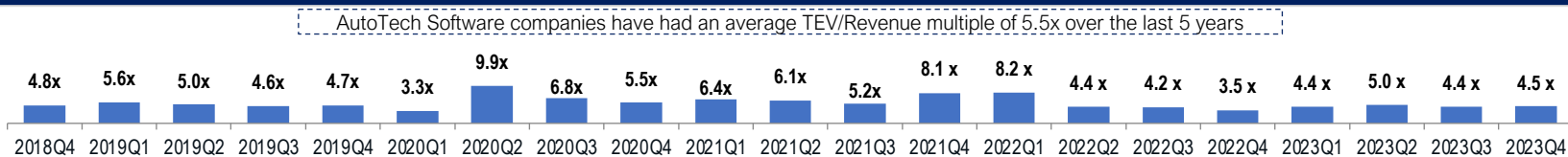
25th Percentile	32.8%	(21.7%)	19.0%	3.8%
Mean	53.1%	(1870.6%)	48.9%	13.4%
Median	56.8%	6.6%	56.1%	9.0%
75th Percentile	72.2%	19.0%	72.5%	22.1%

25th Percentile	1.2x	9.7x	1.1x	8.4x
Mean	4.6x	27.1x	3.5x	24.7x
Median	2.6x	18.9x	2.3x	22.5x
75th Percentile	7.2x	31.4x	4.0x	31.8x

Public Comps (TEV/EBITDA)



Public Comps (TEV/Revenue)



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Public Comparable Companies (Cont'd)

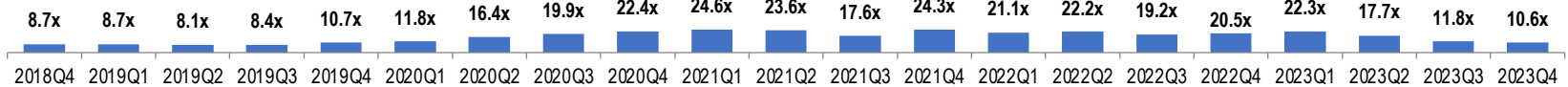
AutoTech Hardware	LTM Results		LTM Margins		1Yr FWD Margins		Country	Enterprise Value	TEV / LTM:		TEV / 1Yr FWD:	
	Revenue	EBITDA	Gross	EBITDA	Gross	EBITDA			Revenue	EBITDA	Revenue	EBITDA
DENSO Corporation	\$ 46,161	\$ 5,759	14.8%	12.5%	16.6%	14.9%	Japan	\$ 46,260.2	1.0x	8.0x	0.9x	6.3x
Continental Aktiengesellschaft	\$ 43,674	\$ 5,433	22.6%	12.4%	23.8%	11.7%	Germany	\$ 24,028.5	0.6x	4.4x	0.5x	4.4x
Hyundai Mobis Co.,Ltd	\$ 44,256	\$ 3,798	11.3%	8.6%	11.4%	6.3%	South Korea	\$ 11,324.6	0.3x	3.0x	0.2x	3.9x
Sensata Technologies Holding plc	\$ 4,076	\$ 920	32.8%	22.6%	32.1%	23.2%	United States	\$ 8,593.9	2.1x	9.3x	2.1x	9.1x
Ningbo Jyoson Electronic Corp.	\$ 7,587	\$ 426	12.9%	5.6%	14.1%	9.4%	China	\$ 6,405.9	0.8x	15.0x	0.8x	8.2x
HUAYU Automotive Systems Company Limited	\$ 22,821	\$ 1,387	13.5%	6.1%	13.4%	7.3%	China	\$ 5,179.8	0.2x	3.7x	0.2x	2.8x
Melexis NV	\$ 992	\$ 320	45.7%	32.2%	45.8%	31.8%	Belgium	\$ 4,185.2	4.2x	13.1x	3.8x	12.0x
Visteon Corporation	\$ 4,028	\$ 398	11.7%	9.9%	12.4%	11.4%	United States	\$ 3,527.6	0.9x	8.9x	0.8x	7.4x
Ambarella, Inc.	\$ 258	\$ (117)	60.3%	(45.4%)	63.3%	(15.2%)	United States	\$ 2,250.3	8.7x	NM	9.7x	NM
Luminar Technologies, Inc.	\$ 59	\$ (522)	(115.2%)	(887.9%)	NA	(158.8%)	United States	\$ 1,699.3	28.9x	NM	11.9x	NM
Autel Intelligent Technology Corp., Ltd.	\$ 399	\$ 69	53.2%	17.2%	54.4%	19.6%	China	\$ 1,480.2	3.7x	21.5x	3.2x	16.2x
Elmos Semiconductor SE	\$ 576	\$ 187	47.6%	32.4%	47.2%	32.3%	Germany	\$ 1,465.5	2.5x	7.9x	2.2x	6.9x
indie Semiconductor, Inc.	\$ 186	\$ (110)	25.0%	(59.1%)	52.6%	2.9%	United States	\$ 1,322.0	7.1x	NM	4.1x	141.0x
Stoneridge, Inc.	\$ 977	\$ 55	20.6%	5.6%	21.5%	6.4%	United States	\$ 696.4	0.7x	12.6x	0.7x	11.2x
HAXC Holdings (Beijing) Co., Ltd.	\$ 146	\$ (1)	8.3%	(1.0%)	6.8%	0.0%	China	\$ 510.2	3.5x	NM	3.0x	NM
MicroVision, Inc.	\$ 2	\$ (75)	11.8%	(3466.8%)	32.5%	0.0%	United States	\$ 442.8	NM	NM	9.1x	NM
MCNEX Co., Ltd	\$ 689	\$ 49	7.8%	7.2%	8.3%	9.0%	South Korea	\$ 441.1	0.6x	8.9x	0.6x	6.3x
Tung Thih Electronic Co., Ltd.	\$ 294	\$ 27	22.7%	9.3%	16.0%	9.3%	Taiwan	\$ 407.1	1.4x	14.8x	1.3x	14.0x
Mobiletron Electronics Co.,Ltd.	\$ 124	\$ (1)	18.7%	(0.9%)	NA	NA	Taiwan	\$ 299.8	2.4x	NM	NM	NM
Innoviz Technologies Ltd.	\$ 8	\$ (124)	(157.5%)	(1640.9%)	NA	(230.0%)	Israel	\$ 285.0	37.8x	NM	5.3x	NM
E-Lead Electronic Co., Ltd.	\$ 118	\$ 13	23.8%	11.2%	NA	NA	Taiwan	\$ 279.9	2.4x	21.2x	NM	NM
Ouster, Inc.	\$ 70	\$ (175)	8.7%	(251.1%)	30.0%	(61.1%)	United States	\$ 179.5	2.6x	NM	1.7x	NM
Arbe Robotics Ltd.	\$ 1	\$ (48)	6.5%	(3765.1%)	26.4%	(104.2%)	Israel	\$ 120.0	94.3x	NM	4.6x	NM
Cepton, Inc.	\$ 10	\$ (50)	14.5%	(520.3%)	10.5%	(205.5%)	United States	\$ 98.4	10.2x	NM	5.1x	NM

25th Percentile	9.3%	(203.1%)	12.6%	(26.7%)
Mean	9.3%	(435.2%)	26.9%	(26.3%)
Median	14.7%	5.9%	22.7%	6.8%
75th Percentile	24.7%	12.1%	42.5%	12.5%

25th Percentile	0.8x	7.0x	0.8x	5.9x
Mean	9.4x	10.9x	3.3x	17.9x
Median	2.4x	9.1x	2.2x	7.8x
75th Percentile	7.1x	14.9x	4.7x	12.5x

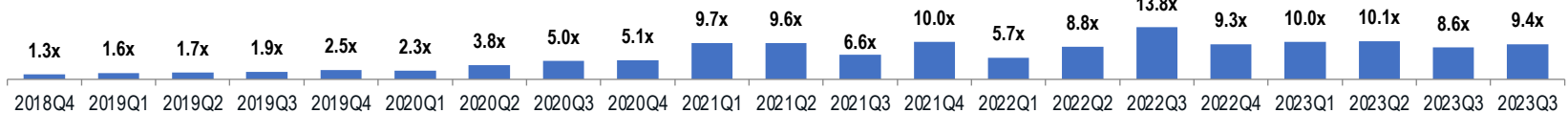
Public Comps (TEV/EBITDA)

AutoTech Hardware companies have had an average TEV/EBITDA multiple of 16.7x over the last 5 years



Public Comps (TEV/Revenue)

AutoTech Hardware companies have had an average TEV/Revenue multiple of 6.5x over the last 5 years



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Public Comparable Companies (Cont'd)

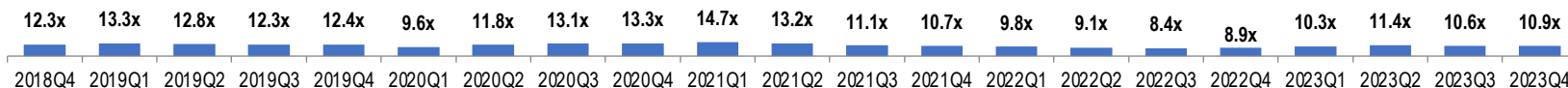
Auto Dealers and Retail	LTM Results		LTM Margins		1Yr FWD Margins		Country	Enterprise Value	TEV / LTM:		TEV / 1Yr FWD:	
	Revenue	EBITDA	Gross	EBITDA	Gross	EBITDA			Revenue	EBITDA	Revenue	EBITDA
Copart, Inc.	\$ 3,997	\$ 1,762	46.6%	44.1%	46.6%	44.6%	United States	\$ 44,578.9	11.2x	25.3x	10.2x	23.0x
CarMax, Inc.	\$ 28,248	\$ 1,279	11.6%	4.5%	11.6%	4.0%	United States	\$ 31,009.7	1.1x	24.3x	1.2x	29.1x
Lithia Motors, Inc.	\$ 30,315	\$ 2,190	16.9%	7.2%	16.9%	5.3%	United States	\$ 19,084.3	0.6x	8.7x	0.5x	10.2x
Penske Automotive Group, Inc.	\$ 29,267	\$ 2,268	16.8%	7.7%	16.8%	5.6%	United States	\$ 17,846.2	0.6x	7.9x	0.6x	10.6x
AutoNation, Inc.	\$ 26,879	\$ 1,994	19.3%	7.4%	19.3%	6.9%	United States	\$ 13,664.3	0.5x	6.9x	0.5x	7.2x
Asbury Automotive Group, Inc.	\$ 14,697	\$ 1,239	19.2%	8.4%	19.2%	7.0%	United States	\$ 8,129.6	0.6x	6.6x	0.5x	6.9x
Group 1 Automotive, Inc.	\$ 17,463	\$ 1,167	17.2%	6.7%	17.2%	5.2%	United States	\$ 7,631.4	0.4x	6.5x	0.4x	8.1x
Sonic Automotive, Inc.	\$ 14,378	\$ 747	15.9%	5.2%	15.9%	4.4%	United States	\$ 5,133.4	0.4x	6.9x	0.4x	8.1x
OPENLANE, Inc.	\$ 1,627	\$ 359	46.8%	22.1%	46.8%	16.8%	United States	\$ 4,119.3	2.5x	11.5x	2.4x	14.4x
AutoCanada Inc.	\$ 4,688	\$ 232	17.4%	4.9%	17.4%	3.9%	Canada	\$ 1,974.0	0.4x	8.5x	0.4x	10.8x
Cars.com Inc.	\$ 678	\$ 164	67.9%	24.2%	67.9%	28.6%	United States	\$ 1,655.0	2.4x	10.1x	2.3x	8.0x
Monro, Inc.	\$ 1,295	\$ 191	34.5%	14.8%	34.5%	12.6%	United States	\$ 1,500.4	1.2x	7.8x	1.1x	9.0x

25th Percentile	16.9%	5.6%	16.9%	4.6%
Mean	27.5%	13.1%	27.5%	12.1%
Median	18.3%	7.6%	18.3%	6.2%
75th Percentile	43.6%	20.3%	43.6%	15.7%

25th Percentile	0.5x	6.9x	0.4x	8.0x
Mean	1.8x	10.9x	1.7x	12.1x
Median	0.6x	8.2x	0.6x	9.6x
75th Percentile	2.1x	11.1x	2.0x	13.5x

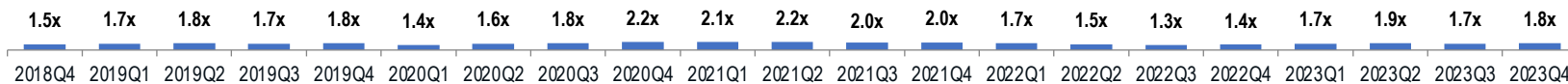
Public Comps (TEV/EBITDA)

Auto Dealers and Retail have had an average TEV/EBITDA multiple of 11.4x over the last 5 years



Public Comps (TEV/Revenue)

Auto Dealers and Retail have had an average TEV/Revenue multiple of 1.8x over the last 5 years



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Public Comparable Companies (Cont'd)

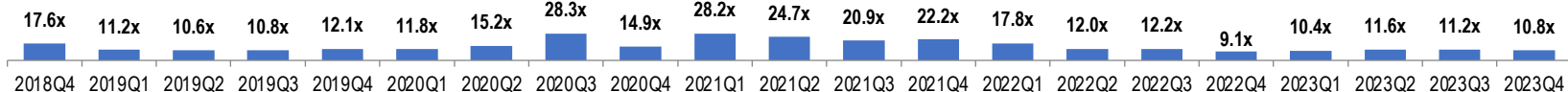
Auto Manufacturers	LTM Results		LTM Margins		1Yr FWD Margins		Country	Enterprise Value	TEV / LTM:		TEV / 1Yr FWD:	
	Revenue	EBITDA	Gross	EBITDA	Gross	EBITDA			Revenue	EBITDA	Revenue	EBITDA
Tesla, Inc.	\$ 95,924	\$ 16,078	19.8%	16.8%	19.8%	17.7%	United States	\$ 773,037.4	8.1x	48.1x	7.0x	39.6x
Toyota Motor Corporation	\$ 277,357	\$ 43,799	19.1%	15.8%	19.1%	13.9%	Japan	\$ 410,706.1	1.5x	9.4x	1.3x	9.6x
Volkswagen AG	\$ 329,645	\$ 28,764	17.6%	8.7%	17.6%	12.5%	Germany	\$ 277,354.0	0.8x	9.6x	0.8x	6.5x
Ford Motor Company	\$ 174,228	\$ 16,905	10.4%	9.7%	10.4%	8.4%	United States	\$ 162,471.0	0.9x	9.6x	0.9x	10.9x
BMW	\$ 160,936	\$ 25,387	17.7%	15.8%	17.7%	16.7%	Germany	\$ 161,465.6	1.0x	6.4x	1.0x	5.9x
General Motors Company	\$ 171,971	\$ 17,441	12.3%	10.1%	12.3%	13.5%	United States	\$ 144,671.8	0.8x	8.3x	0.9x	6.3x
Hyundai Motor Company	\$ 118,525	\$ 15,644	20.6%	13.2%	20.6%	11.9%	South Korea	\$ 112,980.2	1.0x	7.2x	0.9x	7.7x
Honda Motor Co., Ltd.	\$ 123,404	\$ 17,138	20.8%	13.9%	20.8%	9.4%	Japan	\$ 86,304.6	0.7x	5.0x	0.6x	6.5x
Renault SA	\$ 56,933	\$ 6,828	19.9%	12.0%	19.9%	12.9%	France	\$ 61,716.0	1.1x	9.0x	1.0x	8.0x
Nissan Motor Co., Ltd.	\$ 80,327	\$ 8,352	16.8%	10.4%	16.8%	7.4%	Japan	\$ 59,614.0	0.7x	7.1x	0.7x	8.8x
Kia Corporation	\$ 73,278	\$ 10,944	22.7%	14.9%	22.7%	13.4%	South Korea	\$ 16,798.7	0.2x	1.5x	0.2x	1.6x

25th Percentile	16.8%	10.1%	16.8%	9.4%
Mean	18.0%	12.8%	18.0%	12.5%
Median	19.1%	13.2%	19.1%	12.9%
75th Percentile	20.6%	15.8%	20.6%	13.9%

25th Percentile	0.7x	6.4x	0.7x	6.3x
Mean	1.5x	11.0x	1.4x	10.1x
Median	0.9x	8.3x	0.9x	7.7x
75th Percentile	1.1x	9.6x	1.0x	9.6x

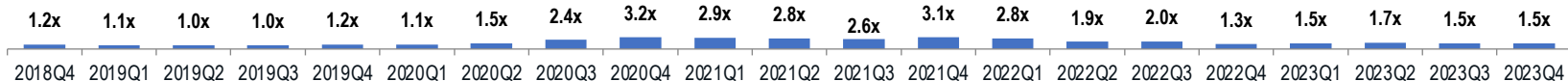
Public Comps (TEV/EBITDA)

Auto Manufacturers have had an average TEV/EBITDA multiple of 15.4x over the last 5 years



Public Comps (TEV/Revenue)

Auto Manufacturers have had an average TEV/Revenue multiple of 1.9x over the last 5 years



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Public Comparable Companies (Cont'd)

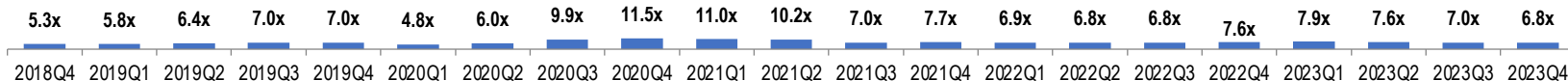
Automotive Suppliers	LTM Results		LTM Margins		1Yr FWD Margins		Country	Enterprise Value	TEV / LTM:		TEV / 1Yr FWD:	
	Revenue	EBITDA	Gross	EBITDA	Gross	EBITDA			Revenue	EBITDA	Revenue	EBITDA
Aptiv PLC	\$ 19,772	\$ 2,497	16.8%	12.6%	16.8%	14.7%	Ireland	\$ 30,859.4	1.6x	12.4x	1.5x	9.9x
Magna International Inc.	\$ 41,911	\$ 4,078	12.6%	9.7%	12.6%	9.5%	Canada	\$ 23,698.3	0.6x	5.8x	0.5x	5.7x
Forvia SE	\$ 30,399	\$ 2,535	13.2%	8.3%	13.2%	13.0%	France	\$ 15,231.3	0.5x	6.0x	0.5x	3.8x
BorgWarner Inc.	\$ 17,159	\$ 2,534	19.1%	14.8%	19.1%	13.2%	United States	\$ 11,576.7	0.7x	4.6x	0.8x	5.9x
Lear Corporation	\$ 22,997	\$ 1,884	7.9%	8.2%	7.9%	7.8%	United States	\$ 10,846.4	0.5x	5.8x	0.5x	5.8x
Autoliv, Inc.	\$ 10,059	\$ 1,129	16.8%	11.2%	16.8%	14.9%	Sweden	\$ 10,839.3	1.1x	9.6x	1.0x	6.8x
Valeo SE	\$ 23,832	\$ 2,312	17.3%	9.7%	17.3%	12.2%	France	\$ 9,543.7	0.4x	4.1x	0.4x	3.2x
Schaeffler AG	\$ 17,241	\$ 2,144	22.5%	12.4%	22.5%	13.3%	Germany	\$ 7,915.6	0.5x	3.7x	0.4x	3.3x
Gentex Corporation	\$ 2,204	\$ 551	32.4%	25.0%	32.4%	27.5%	United States	\$ 7,343.5	3.3x	13.3x	3.0x	11.0x
Adient plc	\$ 15,395	\$ 997	6.5%	6.5%	6.5%	6.4%	Ireland	\$ 5,446.8	0.4x	5.5x	0.3x	5.5x
CIE Automotive, S.A.	\$ 4,028	\$ 687	36.9%	17.1%	36.9%	18.2%	Spain	\$ 4,751.0	1.2x	6.9x	1.1x	5.9x
American Axle & Manufacturing	\$ 6,009	\$ 687	10.0%	11.4%	10.0%	11.2%	United States	\$ 3,389.2	0.6x	4.9x	0.5x	4.9x

25th Percentile	10.7%	8.7%	10.7%	9.9%
Mean	17.7%	12.3%	17.7%	13.5%
Median	16.8%	11.3%	16.8%	13.1%
75th Percentile	21.7%	14.2%	21.7%	14.9%

25th Percentile	0.5x	4.7x	0.4x	4.1x
Mean	0.9x	6.9x	0.9x	6.0x
Median	0.6x	5.8x	0.5x	5.7x
75th Percentile	1.2x	8.9x	1.1x	6.6x

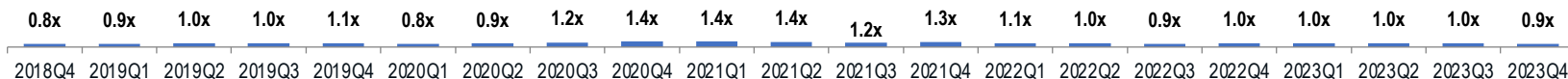
Public Comps (TEV/EBITDA)

Automotive Suppliers have had an average TEV/EBITDA multiple of 7.5x over the last 5 years



Public Comps (TEV/Revenue)

Automotive Suppliers have had an average TEV/Revenue multiple of 1.1x over the last 5 years



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Selected M&A Transactions

Date	Target	Buyer	Description	Vertical	Deal Value(M)	Implied EV (M)	EV/ Revenue	EV/ EBITDA
Dec-23	Lumax Ancillary Ltd	Lumax Auto Technologies Limited	Lumax Ancillary Ltd manufactures and markets wiring harness, signaling equipment, and auto control cables.	Automotive Suppliers	5.9	6.9	0.3x	NM
Dec-23	Nippon Leakless Talbros Private Limited	Nippon Leakless; Leakless Gasket India Private Limited	Nippon Leakless Talbros Private Limited engages in the manufacturing of engine gaskets.	Automotive Suppliers	9.9	24.6	0.02x	NM
Dec-23	Suvanto Trucks Oy	Wetteri Oyj	Suvanto Trucks is the largest independent dealer of used trucks in Finland.	Auto Dealers & Retail	4.5	4.5	0.1x	NM
Dec-23	ESG Elektroniksystem- und Logistik-GmbH	Hensoldt AG	The company provides services in the areas of ADAS and embedded software, connected car, and others.	Connected Vehicle Tech	787.9	787.9	NM	NM
Nov-23	IJTT Co., Ltd.	SPARX Group Co., Ltd.; Nihon Monozukuri Mirai Fund	The company offers industrial engines, power take offs, propeller shafts, e- Axle, and transfer and other parts.	Automotive Suppliers	70.0	163.2	0.1x	1.8x
Nov-23	Rowes Garage Limited	Vertu Motors plc	The company is a Honda & Suzuki dealership offering new and used cars as well as after sales services.	Auto Dealers & Retail	-	7.5	0.2x	NM
Oct-23	Dutch Lanka Trailer Manufacturers Ltd	United Motors Lanka PLC	Company designs and manufactures trailers and semi-trailers for transport and logistic applications.	Automotive Manufacturer	2.2	2.2	0.2x	NM
Oct-23	Portfolio of dealerships in Melbourne, Victoria	Eagers Automotive Limited	Portfolio of dealerships and key properties in Melbourne, Victoria comprises car dealerships.	Auto Dealers & Retail	157.3	157.3	0.2x	NM
Oct-23	Vitesco Technologies Group Aktiengesellschaft	Schaeffler AG	The company produces components for drivetrains in hybrid vehicles, electric vehicles, and ICE engines.	Embedded Systems	1,233.2	3,831.6	0.4x	5.4x
Oct-23	Behr-Hella Thermocontrol GmbH	AUO Corporation	The company manufactures and sells climate control, operation, and display products for the auto industry.	Embedded Systems	630.6	630.6	1.0x	7.8x
Sep-23	Pendragon PLC	AutoNation, Inc.	Pendragon PLC, together with its subsidiaries, operates in the automotive retail sector in the United Kingdom.	Auto Dealers & Retail	1,080.2	749.6	0.2x	4.6x
Sep-23	Konetik	Quartix (LON: QTX)	Developer of a fleet management system designed to integrate EV's with the company's systems.	Fleet Management	2.5	2.5	NM	NM
Sep-23	Jim Koons Management Co Inc.	Asbury Automotive Group, LLC	Jim Koons Management Co Inc. operates as a dealer of new and used motor vehicles.	Auto Dealers & Retail	1,200.0	1,200.0	0.4x	NM
Sep-23	ASAP Holding	HCL Technologies (NSE: HCLTECH)	Developer of software and testing systems for autonomous driving applications and electric vehicles.	Autonomous Tech	273.9	273.9	NM	NM
Aug-23	UMW Holdings Berhad	SIME DARBY ENTERPRISE SDN BHD	The company engages in automotive, equipment, and manufacturing, engineering, and aerospace businesses.	Automotive Manufacturer	1,482.8	1,375.5	0.4x	4.3x
Aug-23	Automotive business of Plastikon Industries	ABC Technologies Holdings Inc.	Automotive business comprises automotive interiors, assemblies, and EV battery manufacturing.	Automotive Suppliers	130.0	130.0	0.5x	NM
Aug-23	Yogtech Industries	Shubhson Automotive	Manufacturers of lithium batteries based in Miraj, India.	Battery Tech	1.0	1.0	NM	NM
Aug-23	VinFast Auto Pte. Ltd. (nka:VinFast Auto Ltd.)	Black Spade Acquisition Co	The company designs and manufactures premium EVs, e-scooters, and e-buses.	EV OEM	23,000.0	NA	NM	NM



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Selected M&A Transactions

Date	Target	Buyer	Description	Vertical	Deal Value(M)	Implied EV (M)	EV/ Revenue	EV/ EBITDA
Aug-23	Wish Co., Ltd.	teno. Holdings Company Limited	Wish Co., Ltd. engages in automotive retail business.	Auto Dealers & Retail	3.7	3.7	1.1x	NM
Aug-23	Honest Co.,Ltd.	Kazuki Kamata	Honest Co.,Ltd. manufactures and sells automobile components.	Automotive Suppliers	0.5	0.6	0.8x	NM
Jul-23	Xtrac Limited	MiddleGround Management, LP	Company manufactures transmission systems for electric, hybrid, and ICE various vehicles.	Embedded Systems	247.5	247.5	NM	NM
Jun-23	Bridgestone (Huizhou) Tire Co.,Ltd.	Huizhou Zhongkai Xinye Development Co. Ltd.	Bridgestone (Huizhou) Tire Co.,Ltd. operates as a subsidiary of Bridgestone Corporation.	Automotive Suppliers	39.8	39.8	5.9x	NM
Jun-23	Lookers plc	Impero Jersey Corp Ltd	Engages in the sale, hire, and maintenance of motor vehicles and motorcycles in the UK and Ireland.	Auto Dealers & Retail	1,317.3	1,174.8	0.2x	5.9x
Jun-23	add solution GmbH	AXISCADES GmbH	add solution GmbH engages in automotive design and development.	Automotive Manufacturer	6.0	6.0	0.7x	NM
May-23	Battery Enclosures Business of DURA Automotive	Linamar Corporation	The business unit manufactures advanced battery enclosures for battery electric vehicle applications.	Battery Tech	325.0	NA	NM	NM
May-23	Embark Technology, Inc.	Applied Intuition, Inc.	Develops autonomous driving software solutions for the truck freight industry in the United States.	Autonomous Tech	91.9	NA	NM	NM
Apr-23	Walter Pack Automotive Products India	S.J.S. Enterprises Limited	Manufactures decorative parts for the automotive and domestic appliance sectors.	Automotive Suppliers	30.4	33.6	2.3x	NM
Apr-23	INFAC Elecs Co., Ltd.	INFAC Corporation	Manufactures and sells auto, active, passive, combined, and LG antennas, as well as feeder cables.	Automotive Suppliers	7.1	44.5	0.4x	NM
Apr-23	CKD Business Division of Shin Young Co., Ltd	Ilji Technology Co., Ltd.	Comprises automobile parts manufacturing business.	Automotive Suppliers	22.5	22.5	2.9x	NM
Apr-23	Aytemiz Akaryakit Dagitim A.S.	PJSC Tatneft	Aytemiz Akaryakit Dagitim A.S. engages in fuel distribution and dealership activities in Turkey.	Auto Dealers & Retail	320.0	320.0	0.2x	NM
Mar-23	Adita Oy	Relais Group Oyj	Adita Oy distributes spare parts and equipment for cars and marines.	Auto Dealers & Retail	1.1	1.1	0.2x	NM
Mar-23	Fritzmeier Motherson Cabin Engineering Private Limited	Samvardhana Motherson International Limited	Company manufactures automotive products, car parts, and components.	Automotive Suppliers	13.4	26.8	2.0x	NM
Feb-23	Carson Toyota, Inc.	Fletcher Jones Automotive Group	The company operates as a Toyota dealer in the United States.	Auto Dealers & Retail	48.6	48.6	NM	NM
Feb-23	Custom Wheel House LLC	FOX Factory, Inc.	The company designs, markets, and distributes branded automotive aftermarket wheels and accessories.	Auto Dealers & Retail	131.6	131.6	NM	NM
Feb-23	SAS Autosystemtechnik GmbH & Co.KG	Samvardhana Motherson Automotive Systems Group	The company manufactures cockpit modules for automobiles.	Embedded Systems	575.8	575.8	0.1x	5.2x
Feb-23	IAC International Automotive India Pvt. Ltd.	Lumax Integrated Ventures Private Limited	Specializes in manufacturing and supplying interior and exterior components for cars and heavy duty trucks.	Automotive Suppliers	53.2	70.9	1.2x	NM



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Selected M&A Transactions

Date	Target	Buyer	Description	Vertical	Deal Value(M)	Implied EV (M)	EV/ Revenue	EV/ EBITDA
Feb-23	Aml Juratek Limited	Fras-Le Europe B.V.	The company manufactures brake discs, brake pads, calipers, and actuators.	Automotive Suppliers	21.9	21.9	0.7x	NM
Feb-23	Otonomo Technologies Ltd.	Urgent.ly Inc.	Provides an automotive data service platform for car manufacturers, drivers, insurance and service providers.	Connected Vehicle Tech	271.0	271.0	38.8x	NM
Feb-23	GEO Semiconductor Inc.	indie Semiconductor, Inc.	The company develops and distributes video processors for automotive viewing cameras.	Embedded Systems	90.0	NA	NM	NM
Feb-23	Takahata Precision India Private Limited	SPR Engenious Limited	Manufactures precision moulded parts and assembled products for the automotive and industrial applications.	Automotive Suppliers	NA	26.9	1.3x	NM
Feb-23	Minda Kosei Aluminum Wheel Private Limited	Uno Minda Limited	The company manufactures alloy wheels.	Automotive Suppliers	14.0	61.7	NM	NM
Feb-23	Frenotecnica Srl	Endurance Overseas S.R.L.	Manufactures friction materials and components for braking systems for two-wheeler vehicles.	Automotive Suppliers	5.6	5.6	NM	NM
Feb-23	Sintex-BAPL Limited	Plastauto; Propel Plastic Products	Manufactures and sells injection molded plastic components for the automotive industry.	Automotive Suppliers	308.4	287.7	2.5x	NM
Feb-23	Iber-Oleff Brasil Ltda.	Autometal Ltda.	Manufactures kinematics and functional components for automotive interiors and home appliances.	Automotive Suppliers	21.9	21.9	0.8x	NM
Jan-23	Saddles International Automotive	Samvardhana Motherson International Limited	Manufactures seat covers for the automotive industry.	Automotive Suppliers	25.4	49.8	1.3x	NM
Jan-23	PT. Trimitra Chitrahasta	PT Dharma Polimetal Tbk	Designs and manufactures custom tools, dies, jigs, and fixtures for automobiles and motorcycles.	Automotive Suppliers	14.5	19.9	NM	NM
Jan-23	Borgers SE & Co. KGaA	Autoneum Management AG	Company through its subsidiaries, develops and manufactures components for automobiles.	Automotive Suppliers	125.7	125.7	NM	NM
Jan-23	Prettl SWH GmbH	Foxconn Interconnect Technology	Prettl SWH GmbH designs and assembles electric mobility solutions for the automotive industry.	Embedded Systems	204.2	204.2	NM	NM



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Sizeable Private Placement Transactions

Date	Target	Description	Vertical	Money Raised	Round Number
Dec-23	CalAmp Corp.	The company offers, Software & Subscription Services and Telematics Products.	Fleet Management	45.0	2
Dec-23	iMotion Automotive Technology (Suzhou) Co., Ltd.	The company develops, manufactures, and sells autonomous driving (AD) products and solutions in the People's Republic of China.	Autonomous Tech	66.5	9
Dec-23	Jiangsu Rongtai Industry Co., Ltd.	The company's products include automotive steering systems, new energy automotive three-electric system, automotive transmission system and others.	Embedded Systems	147.1	1
Nov-23	EACON Mining Technology	EACON Mining Technology, an autonomous driving technology company, manufactures and sells self-driving solutions for the mining industry.	Autonomous Tech	55.5	1
Nov-23	Windrose Technology	Windrose Technology manufactures self-driving trucks. The company was founded in 2022 and is headquartered in Hefei, China.	Autonomous Tech	100.0	2
Nov-23	Proton Automotive Technology	Proton Automotive Technology develops new energy intelligent connected vehicles. The company is headquartered in China.	EV OEM	75.2	1
Oct-23	Zhizi Automotive Technology Co., Ltd.	Zhizi Automotive Technology Co., Ltd. is a new energy intelligent commercial vehicle company.	EV OEM	75.2	1
Oct-23	Pony.ai, Inc.	Pony.ai, Inc. develops and operates full-stack autonomous driving solutions for mobility.	Autonomous Tech	100.0	8
Oct-23	DiDi Autonomous Driving	DiDi Autonomous Driving manufactures autonomous vehicles for rideshares. The company was founded in 2016 and is based in Beijing, China.	Autonomous Tech	149.0	3
Oct-23	Nullmax	Nullmax develops autonomous-driving solutions to provide visual perception, AI planning and decision, and end-to-end autonomous-driving solutions.	Autonomous Tech	106.8	3
Oct-23	Autonomous a2z Co., Ltd.	Autonomous a2z Co., Ltd. develops and operates artificial intelligence (AI) based autonomous driving solution in South Korea.	Autonomous Tech	254.0	2
Sep-23	BDStar Intelligent & Connected Vehicle Technology Co., Ltd.	The company engages in the design, development, production, and testing of smart cockpits, smart driving, and connected terminals.	Connected Vehicle Tech	34.7	4
Aug-23	T2 Inc.	T2 Inc. engages in the development of automated driving systems and is a transportation service business using level 4 automated driving trucks.	Autonomous Tech	24.0	2
Aug-23	Huizhou Foryou General Electronics Co., Ltd.	The company engages in the development, manufacture, and sale of in-vehicle infotainment system, navigation system, and car safety electronic products.	Embedded Systems	56.7	2
Aug-23	SiliconRoad Semiconductor Ltd.	The company offers automotive driverless lidar, optical communication and optical modules, radio frequency, ADAS Lidar, RF instrumentation products.	Autonomous Tech	37.3	1
Jul-23	Harbin VITI Electronics Co., Ltd.	Harbin VITI Electronics Co., Ltd. researches and develops, manufactures, and sells automobile electronic products for cars and buses in China.	Embedded Systems	20.9	2
Jul-23	Aurora Innovation, Inc.	Aurora Innovation, Inc. operates as a self-driving technology company in the United States.	Autonomous Tech	600.0	7
Jul-23	HoloMatic Technology (Beijing) Co., Ltd.	The company develops and offers autonomous driving solutions based on cutting-edge artificial intelligence and automotive industry technologies.	Autonomous Tech	41.8	7



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Sizeable Private Placement Transactions

Date	Target	Description	Vertical	Money Raised	Round Number
Jul-23	Concierge Blindado Servicios Automotivos Ltda.	The Company designs and develops tracking, telemetry, and fleet management software.	Fleet Management	20.8	3
Jun-23	Everest Fleet Pvt Ltd	Everest Fleet Pvt Ltd provides vehicle fleet management services.	Fleet Management	20.0	2
Jun-23	Hiconics Eco-energy Technology Co., Ltd.	The company offers automotive powertrain systems, motor controllers, EV chargers, auxiliary power systems, and components; and other products.	Battery Tech	205.2	2
Jun-23	THE MIDONG Co., Ltd.	THE MIDONG Co., Ltd. engages in the development and sale of vehicle black boxes in South Korea.	Connected Vehicle Tech	15.7	5
Jun-23	FERNRIDE GmbH	FERNRIDE GmbH develops and operates an autonomous driving platform that can remotely operate and monitor vehicles from anywhere.	Autonomous Tech	31.0	1
Jun-23	NAVER LABS Corp.	NAVER LABS Corp. provides research and development of navigation technology for autonomous driving, robotics, and artificial intelligence.	Autonomous Tech	53.7	6
May-23	DealerCue Automotive Corp	DealerCue Automotive Corp. offers an end-to-end inventory management platform for automotive dealers.	Dealership Software	6.0	2
May-23	Analog Inference, Inc.	Analog Inference, Inc. develops artificial intelligence (AI) chips that are used in video analytics, autonomous driving, and other applications.	Autonomous Tech	44.4	3
May-23	Voyager Technology Inc.	Voyager Technology Inc. produces and sells automotive electronics systems. The company was founded in 2013 and is based in Shanghai, China.	Autonomous Tech	14.4	2
May-23	Mogo Auto	Mogo Auto develops and operates an autonomous driving company.	Autonomous Tech	83.9	1
Apr-23	42dot Inc.	42dot Inc. develops mobility platform that offers the transition to autonomous transportation-as-a-service (aTaaS) with self-driving ground and airborne vehicles.	Autonomous Tech	314.3	3
Apr-23	Phantom Auto Inc.	Phantom Auto Inc., develops software for the remote operation of autonomous vehicles.	Autonomous Tech	25.2	3
Apr-23	Global Technology	Global Technology offers automotive intelligent driving systems.	Autonomous Tech	58.0	4
Apr-23	Shenzhen Muyewei Microelectronics Technology Co., Ltd.	It offers automotive ADAS technology with automotive millimeter-wave radar sensors and iterative updates that made car driving and travel safer.	Autonomous Tech	14.5	1
Apr-23	Shanghai Weihe Information Technology Co., Ltd.	An automotive technology company, provides electronic control system development and testing tool chains and services for the global automotive industry.	Embedded Systems	14.5	1
Apr-23	Lightmetrics Technologies Private Limited	The company uses artificial intelligence (AI) and analyses video feeds from the camera installed in vehicles.	Connected Vehicle Tech	8.5	1
Mar-23	Chargetrip B.V.	Chargetrip B.V. designs and develops a software platform for electric vehicle (EV) drivers and the EV industry.	Connected Vehicle Tech	10.7	2
Mar-23	Ningbo Joyson Electronic Corp.	It offers cockpit/automotive connectivity systems, intelligent driving, and new energy management products, as well as software and related services.	Connected Vehicle Tech	43.7	7



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Sizeable Private Placement Transactions

Date	Target	Description	Vertical	Money Raised	Round Number
Mar-23	PxE Computational Imaging Ltd	PxE Computational Imaging Ltd designs and develops 3D imaging technology to augment standard CMOS camera architecture	Autonomous Tech	5.4	1
Mar-23	Genesys Microelectronics	Genesys Microelectronics manufactures automotive smart cockpit and ADAS chips. The company was founded in 2022 and is based in Shanghai, China.	Embedded Systems	29.0	3
Mar-23	Namsung America Inc.	The company focuses on ADAS, engine ignition and security control, intelligent systems, vehicle network integration and GPS navigation.	Safety Systems	8.2	1
Mar-23	Moove.ai, Inc.	Moove.ai, Inc. uses cloud data and processing platforms to build solutions with societal impact around vehicle data.	Connected Vehicle Tech	7.8	1
Mar-23	Envisics Limited	Develops holographic projection systems and computation algorithms for head-up display and head mounted display applications.	Safety Systems	50.0	2
Feb-23	Hubei Siengine Technology Co., Ltd.	Hubei Siengine Technology Co., Ltd. designs, develops, and sells automotive electronic chips.	Embedded Systems	72.1	2
Feb-23	Ghost Autonomy Inc.	Ghost Autonomy Inc. designs and develops a self-driving kit that allows passenger vehicles to drive autonomously on highways.	Autonomous Tech	50.0	4
Feb-23	Hang Zhou MindFlow Technology.Co.,Ltd.	Hang Zhou MindFlow Technology.Co.,Ltd. develops AI data processing platform designed to provide data labelling services for autonomous driving companies.	Autonomous Tech	7.4	1
Jan-23	Freetech Intelligent Systems Co., Ltd.	Freetech Intelligent Systems Co., Ltd. develops advanced driver assistance systems (ADAS), driving solutions, and other products.	Autonomous Tech	29.6	3
Jan-23	Flash UpdatePromise Holdings, LLC	Flash UpdatePromise Holdings, LLC develops communication technology for automobile dealers.	Dealership Software	17.1	1
Jan-23	Oxbotica Limited	Oxbotica Limited develops autonomous vehicle software solutions.	Autonomous Tech	140.0	4



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AutoTech Expertise

GCG's Automotive & AutoTech team has vast industry background and expertise formed by working with clients across numerous sub-verticals including Automotive Suppliers, Automotive Testing, Tooling & Components, Automotive Marketing Software, Enterprise Solutions Software, Automotive Software, Autonomous Driving, Telematics, and Safety & Security Systems. With experience serving private and public company sales, acquisition advisory, public and private equity financings, and fairness opinions, GCG has a deep understanding of the trends and dynamics affecting this increasingly global industry.

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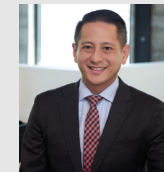
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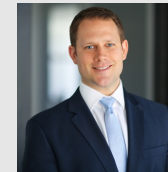
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Bob Coury
Managing Director
Chief Executive Officer
rcoury@greenwichgp.com
M: (313) 919-3811



Jeff Cruz
Managing Director
Technology Leader
jcruz@greenwichgp.com
M: (415) 699-9020



Brian Hock
Managing Director
Automotive Leader
bhock@greenwichgp.com
M: (586) 944-4350