16. February 2015

Europa | Germany | Auto Supplier



### **Update**

### **BUY**

Target Price: EUR 35.40

Industry: Country: ISIN: Bloomberg: Reuters: Website:	Automotive Supplier Germany DE0005558696 PGNG.DE PGN GR www.paragon.ag			
Last Price: Price 52 W.: Market Cap. (EURm) No. of Shares (in m)	<b>High</b> 36.40	24.61 <b>Low</b> 14.05 101.28 4.11		
Shareholders Klaus-Dieter Frers		51.32%		
Free Float		48.68%		
Performance				
4 Weeks		-24.75%		
13 Weeks		-2.01%		
26 Weeks		27.26%		
52 Weeks		79.20%		
YTD		-20.03%		
Dividend	in EUR	in %		
2011	0.25	1.02%		
2012	0.35	1.42%		
2013	0.25	1.02%		
2014	0.25	1.02%		

### Analyst

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### paragon AG

Voltabox business as key growth driver

- As December 2015, paragon´ orders were up +7.8% compared to the previous year, confirming the positive trend. In its financial guidance for FY2016, the company forecasted an increase in revenues and EBIT margin by around +8% and +9% respectively. Key growth drivers are expected to be the electromobility business, the internationalization of the battery systems in the US and air quality solutions for the Chinese market.
- The business division Voltabox Deutschland, in details, successfully placed recently order for li-ion starter batteries serial production, which effects in figures are expected from mid-2016. Revenues from the electromobility business are forecasted in more than €15m. This development will set the company more independent from the overall automotive industry. With regard to the Asia market, the focus on air quality solutions, represent a good opportunity to gain market share, given also the higher attention for air pollution and smog issues.
- As effect of the investments in product development, the company presented on January 2016 its further progresses in the MirrorPilot smartphone integration solution for vehicles (Cockpit division). This connectivity platform will allow mobiles and devices to communicate with vehicles, digitally transforming car driving experience and anticipating drivers' future needs.
- Although difficulties in the automotive industry our expectation is for a stable growth in paragon business, driven by the body kinematics and electromobility (increasing its share in group revenues). The management assumed in the guidance no significant impact from the VW scandal. Therefore, we reviewed our estimates assuming a noteworthy increase in revenues till 2017E (net sales CAGR 2014-2017E: +17.1%) and a double digit operating margin (around 10%). Following our model, we revised up our 12-months target price for paragon AG to 35.40€ per share (prior €29.14). We assumed also a reduction in the debt/equity ratio from 2016.

### **■** Key Figures

EURm	2012	2013	2014	2015E	2016E	2017E
Net sales	70.4	73.9	79.0	100.1	112.5	126.9
EBITDA	11.7	12.2	10.5	15.6	17.7	20.3
EBIT	7.8	7.9	6.2	10.2	11.7	13.4
Net income	4.6	3.9	2.8	5.4	6.5	7.8
EPS	1.1	1.0	0.7	1.3	1.6	1.9
BVPS	3.2	3.9	4.2	5.3	6.6	8.3
RoE	40.6%	27.3%	16.8%	28.1%	26.7%	25.3%
EBIT margin	11.0 %	10.7 %	7.9 %	10.2 %	10.4 %	10.6 %
P/E	21.9x	25.7x	36.5x	18.6x	15.5x	13.0x
P/BVPS	7.8x	6.4x	5.9x	4.7x	3.7x	3.0x
EV/EBITDA	11.9x	11.4x	13.2x	8.9x	7.8x	6.9x

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### 1 Company Profile

paragon AG was founded in 1988 as an electronics manufacturer. The company's headquarters are located in Delbruck (North Rhine-Westphalia). Other Company's divisions are based in Suhl, St. Georgen, Bexbach and Nuremberg (production or development). The paragon AG has also started to build a battery production plant in Texas (USA), as well as another factory is currently being built in Kunshan (greater Suzhou region), which will be fully operative in Autumn 2015. The Group currently employs a staff of 452 permanent and 58 temporary workers.

### 1.1 Products and Market Share

Founded as a contract manufacturer for electronics, paragon is now a pure Tier 1 automotive supplier. Its main focus relies on auto electronics for interior products to enhance the health, comfort, communication and efficiency. The product catalog includes more than 170 products with a capacity of over 20 million units produced per annum, in addition to its 250 patents owned.

Divisions		
Sensors	Acoustics	Electromobility
Air quality sensor AQS Air improvement system Air treatment system Clutck travel sensor All gear sensor Start-stop sensor	Microphone Seatbelt microphone blet mic	Energy Storage Powerpack Motor Controller MoDrive DC/DC Converter DCCon Onboard Charger ChargeON
Cockpit	kinematics	
Interfaces Cradles & Consoles cTablet docking station Instruments Controls Reversing camera system Stepper Motors	Aerodynamic Comfort Convertible tops Safety	

Source: Company, Dr. Kalliwoda Research GmbH @ Copyright 2015

Many of paragon's products own its unique features, such as the Voltabox battery systems, when they come to fruition in the enhancement of electromobility for commercial vehicles. The sensors, besides, can be softer and simultaneously faster gearshift, as well as for the vehicle manufacturer resulting in economic benefits, where a separate reverse gear sensor is no longer required.

### 1.2 Clients

paragon AG maintains long-term customer relationship, which is translated in the fact that its over 170 products are currently demanded by 23 customers for 172 vehicle models, where the largest automotive producers, Audi, VW, Daimler, BMW and Porsche, cover approximately about 80% of total sales (as of March 2015). Even though the company is increasingly receiving new orders from new products and developed applications, such as CO<sup>2</sup> sensors, wireless charging products or new innovative belt microphones.

### 2 SWOT

### **Strengths**

- Combination of innovation and integration of force through company-wide culture of innovation with a focus in developing new products, while observing the product integration into the overall system for the automobile manufacturers; by First-Mover-Advantage and high success rate of bringing products to the market. Over 170 products and 250 patents.
- Products with unique features in niche markets with high quantities in automated manufacturing.
   Therefore high margins and strong market position in several areas.
- **Direct supplier** with many years of customer loyalty, knowing what customers want, means entry-market barriers.

### **Opportunities**

- Increasing use of paragon products in the compact and mid-range through new technologies and efficient production with a high degree of automation and economies of scale, eg. Air quality.
- •Growth and diversification through the field of electric mobility by expanding the customer base to smaller commercial vehicles in domestic and urban areas, where applications are already in use for electric mobility. With this regard, more distribution channels are sought.
- •Reduction of product-specific integration costs for the customer through development of applications to support the vehicle installation can be a significant competitive advantage.

### Weaknesses

- High business risk due to strong sales focus on three German automotive manufacturers in the premium area, tempered by long-term customer relationships under contracts, all model series, and the relatively small dependence of premium manufacturers.
- Low negotiating power with customers and suppliers in the low-selling environment of numerous competitors mitigated by the relatively higher willingness to pay the premium end-user customers.
- Strong competition with high pressure to innovate, since more than half of key innovations are taking place in the field of electronics.

### Risks

- Products are not expected to develop their potential and the number of units produced cannot cover the costs. paragon AG tries to avoid this by an intensive dialogue with automobile manufacturers.
- Competitor may displace paragon of revenueimportant market niches.
- An unexpected slump in the automobile industry may lead to liquidity difficulties at paragon.

### 3 Valuation

We have evaluated paragon AG with a traditional DCF model, which incorporates our outlook and forecasts. The final result is a 12-month price target of €35.40.

### a. WACC

The discount rate was calculated by deriving the weighted cost of capital. We assumed that the target capital structure will not change in the subsequent business years. Risk free rate is based on the average profitability of the 10-year German government bond. Figuring a risk prime follows the capital asset pricing model (CAPM) and covers in particular the systemic risks (market risk prime exp. company specific risk).

WACC assumptions	
Growth propositions	
Long-term grow th rate	2.0%
Equity	
Long-term risk free rate	0.3%
Market risk premium	8.5%
Beta	1.50
Equity costs	12.9%
De bt	
Debt costs (before tax)	6.0%
Taxe rate on debt interest	30.0%
Debt costs (after tax)	4.2%
Equity value	17.2
Debt Value	35.9
Gearing	208.5%
WACC	7.0%

### b. DCF

We have considered the standard Discounted Cash Flow model to value paragon AG, adding the following assumptions:

- Revenues: the forecasted revenues are based on the growing performance of the overall products and especially from the electromobility segment. The revenues are anticipated to expand rapidly, with the most notable period 2017-2019, in which we expected a peak of €127m assumed new contracts from Voltabox Germany.
- **Terminal growth rate**: after a 3-year period of rapid expansion, the growth rate is forecasted to drop to of 1.9% in the terminal period, which is in line with the long term inflation rate.
- **EBIT margin:** we assumed a stable margin of 10.5% starting from the year 2017.
- Fair value: we calculated a fair value of equity of €136m after deducting €38m of net debt, which correspond to the fair value per share of €3540.

### DCF-Analysis

### Discounted-Cash-Flow-Modell (Basis 2/2015)

in EUR Mio.	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Net sales	100.11	112.52	126.92	136.19	142.86	148.00	151.26	154.10
(y-o-y change)	26.7%	12.4%	12.8%	7.3%	4.9%	3.6%	2.2%	1.9%
EBIT	10.19	11.67	13.41	14.38	15.08	15.61	15.95	16.25
(EBIT margin)	10.1%	10.3%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
NOPLAT	7.14	8.17	9.39	10.07	10.55	10.93	11.17	11.38
+ Depreciation and Amortization	5.40	6.07	6.85	7.35	7.71	7.99	8.16	8.32
= Net operating cash flow	12.54	14.24	16.24	17.41	18.26	18.91	19.33	19.69
- Total investments (Capex and WC)	-18.50	-9.61	-10.73	-9.63	-8.97	-8.34	-7.59	-5.31
Capital expenditure	-16.13	-7.80	-8.82	-8.71	-8.33	-8.10	-7.57	-5.23
Working capital	-2.37	-1.81	-1.91	-0.92	-0.64	-0.24	-0.02	-0.08
= Free cash flow (FCF)	-5.96	4.63	5.51	7.79	9.29	10.58	11.74	14.38
PV of FCF's	-5.86	4.36	4.85	6.41	7.14	7.60	7.88	9.03

PV of FCFs in explicit period	41.41
PV of FCFs in terminal period	132.75
Enterprise value (EV)	174.16
+ Net cash / - net debt	-38.00
+ Investitionen / - Minderheiten	0.00
Shareholder value	136.16
Number of shares outstanding (m)	4.11

Number of shares outstanding (m)	4.11		
WACC	7.0%		
Cost of equity	12.9%		
Pre-tax cost of debt	6.0%		
Normal tax rate	30.0%		
After-tax cost of debt	4.2%		
Share of equity	32.0%		
Share of debt	68.0%		
Fair value per share in € (today)	33.09		
Fair value per share in € (in 12 months)	35.40		

Sensi	tivitäts	analyse	e Terminal EBIT-Marge					
		7.5%	8.5%	9.5%	10.5%	11.5%	12.5%	13.5%
	4.0%	73.14	83.47	93.80	104.14	114.47	124.80	135.13
	5.0%	46.81	53.38	59.94	66.51	73.07	79.64	86.20
	6.0%	33.21	37.87	42.52	47.17	51.83	56.48	61.14
	7.0%	24.88	28.39	31.89	35.40	38.91	42.42	45.93
	8.0%	19.22	21.98	24.73	27.48	30.24	32.99	35.74
	9.0%	15.13	17.35	19.57	21.79	24.01	26.23	28.45

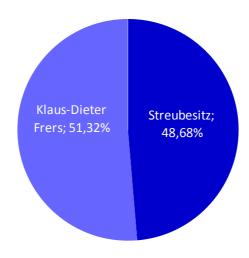
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### 4 Outlook

Following Q3/15 positive trend in figures, we believe that paragon AG will maintain its growing tendency in 2016 with better results in the body kinematics and electromobility businesses. It is estimated that the contribution of Voltabox, boosted by its li-ion starter batteries, will reach more than €15m in the next fiscal year. This represents a significant share in group sales, and reducing by this way the dependence from the pure automotive volumes. New achievements in digital systems will enable paragon to have a role in the entertainment electronics for digitally transforming cars.

Given contracts wins during the recent quarters, we expect results in the upcoming figures form the second part of the year. Thus, paragon will initiate to take benefits of its heavy investments in product development and facilities built in Germany, the US and China. In the Asia region paragon intend to focus in great demand solutions for clean air in the vehicles interior.

### 5 Shareholder's Structure



### 6 Profit and Loss Statement

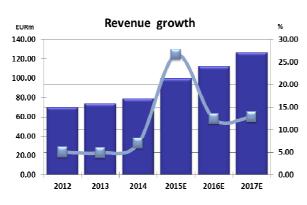
Profit and Loss statement - paragon AG								
	Fiscal year							
in mEUR	2012	2013	2014	2015E	2016E	2017E		
Net sales	70.45	73.88	79.04	100.11	112.52	126.92		
Change in inventories	0.57	0.26	0.79	0.32	0.31	0.28		
Capitalised assets	2.03	1.68	5.15	0.50	0.50	0.50		
Total Output	73.04	75.81	84.98	100.92	113.33	127.70		
Cost of goods sold	-36.95	-36.27	-41.85	-49.65	-56.10	-63.85		
Gross profit	36.09	39.54	43.13	51.27	57.23	63.85		
Other operating income	2.02	1.10	1.35	1.38	1.40	1.43		
Personnel costs	-18.85	-19.60	-21.76	-25.90	-28.97	-32.51		
Depreciation & Amortization	-3.89	-4.31	-4.27	-5.40	-6.07	-6.85		
Write-downs	-0.14	-0.27	-0.02	0.00	0.00	0.00		
Other operating expenses	-7.45	-8.54	-12.20	-11.15	-11.93	-12.51		
EBIT	7.78	7.92	6.25	10.19	11.67	13.41		
Net financial results	-1.08	-1.49	-1.96	-2.41	-2.36	-2.31		
EBT	6.70	6.43	4.29	7.78	9.31	11.10		
Income taxes	-2.07	-2.49	-1.51	-2.33	-2.79	-3.33		
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00		
Net income / loss	4.64	3.95	2.78	5.45	6.52	7.77		
EPS	1.13	0.96	0.67	1.32	1.58	1.89		
DPS	0.00	0.00	0.00	0.00	0.00	0.00		
Change y-o-y								
Net sales	n.a	4.87%	6.98%	26.66%	12.40%	12.80%		
Total Output	n.a	3.80%	12.09%	18.76%	12.30%	12.68%		
Cost of goods sold	n.a	-1.85%	15.39%	18.65%	12.98%	13.82%		
Gross profit	n.a	9.58%	9.07%	18.86%	11.63%	11.57%		
Other operating income	n.a	-45.56%	23.06%	2.00%	2.00%	2.00%		
Personnel costs	n.a	3.98%	10.98%	19.02%	11.86%	12.24%		
Depreciation & Amortization	n.a	10.91%	-1.02%	26.66%	12.40%	12.80%		
Write-downs	n.a	98.52%	n.a	n.a	n.a	n.a		
Other operating expenses	n.a	14.59%	42.85%	-8.53%	6.91%	4.94%		
EBIT Net financial results	n.a	1.88%	-21.13%	63.11%	14.52%	14.87%		
inet financial results EBT	n.a	38.35%	31.68%	22.94%	-2.07%	-2.12%		
Income taxes	n.a	-3.99% 20.34%	-33.36% -39.15%	81.50% 54.39%	19.66% 19.66%	19.18% 19.18%		
Minority interests	n.a n.a	20.34 % n.a	-59.15 /6 n.a	04.3970 n.a	n.a	n.a		
Net income / loss	n.a	-14.82%	-29.71%	96.28%	19.66%	19.18%		
EPS	n.a	-14.82%	-29.71%	96.28%	19.66%	19.18%		
DPS	n.a	n.a	n.a	n.a	n.a	n.a		
Share in total revenues								
Net sales	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %		
Total Output	103.68 %	102.62 %	107.52 %	100.82 %	100.72 %	100.62 %		
Cost of goods sold	-52.45 %	-49.09 %	-52.95 %	-49.60 %	-49.86 %	-50.31 %		
Gross profit	51.23 %	53.53 %	54.57 %	51.21 %	50.86 %	50.31 %		
Other operating income	2.86 %	1.48 %	1.71 %	1.38 %	1.25 %	1.13 %		
Personnel costs	-26.76 %	-26.54 %	-27.53 %	-25.87 %	-25.74 %	-25.62 %		
Depreciation & Amortization	-5.51 %	-5.83 %	-5.40 %	-5.40 %	-5.40 %	-5.40 %		
Write-downs	-0.19 %	-0.36 %	-0.02 %	0.00 %	0.00 %	0.00 %		
Other operating expenses	-10.58 %	-11.56 %	-15.43 %	-11.14 %	-10.60 %	-9.86 %		
EBIT Not financial recults	11.04 %	10.72 %	7.91 %	10.18 %	10.37 %	10.56 %		
Net financial results EBT	-1.53 %	-2.02 %	-2.48 %	-2.41 %	-2.10 %	-1.82 %		
Income taxes	9.51 % -2.93 %	8.71 % -3.36 %	5.42 % -1.91 %	7.77 % -2.33 %	8.28 % -2.48 %	8.74 % -2.62 %		
Minority interests	0.00 %	0.00 %	0.00 %	-2.33 % 0.00 %	-2.48 % 0.00 %	-2.62 % 0.00 %		
	0.00 /6	0.00 /0	0.00 /0	0.00 /0	0.00 /0	0.00 /0		

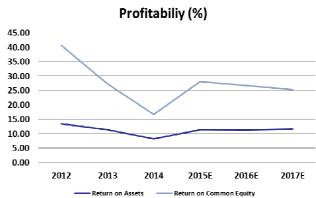
### **7** Balance Sheet

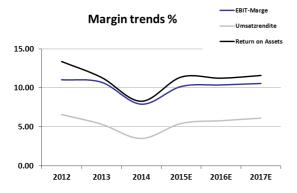
Balance Sheet - paragon AG							
	Fiscal year						
in mEUR	2012	2013	2014	2015E	2016E	2017E	
Assets							
Cash and cash equivalents	14.08	17.65	13.26	10.86	12.51	15.56	
Inventories	7.31	7.47	6.91	10.88	12.30	13.99	
Trade accounts and notes receivables	1.79	6.04	9.76	9.87	11.10	12.52	
Other current assets	2.20	1.95	2.40	3.00	3.83	4.57	
Current assets	25.39	33.10	32.34	34.62	39.73	46.64	
Property, plant and equipment	13.54	12.98	20.18	28.43	28.69	28.94	
Sonstige immaterielle Vermögenswerte	4.91	5.60	9.44	11.91	13.39	15.10	
Firmenwert	0.00	0.00	0.00	0.00	0.00	0.00	
Other assets	0.12	0.25	0.47	0.59	0.66	0.75	
Deferred tax assets	0.00	0.00	0.00	0.00	0.00	0.00	
Non-current assets	18.58	18.83	30.08	40.93	42.74	44.79	
Total assets	43.97	51.94	62.42	75.55	82.47	91.43	
Liabilities							
Trade payables	3.04	3.36	6.12	7.26	8.20	9.34	
Other liabilities	8.13	5.91	4.54	5.71	6.41	7.23	
Short-term financial debt	2.39	2.86	5.50	11.10	10.95	10.80	
Provisions	0.30	0.06	0.09	0.21	0.15	0.19	
Current liabilities	13.86	12.18	16.24	24.27	25.71	27.56	
Long-term financial debt	12.26	20.21	24.71	25.07	24.57	24.07	
Special benefits	2.09	1.50	1.27	1.60	1.80	2.03	
Pension obligations	2.73	1.22	1.88	1.87	2.03	2.56	
Deferred tax liabilities	0.00	0.94	1.12	1.12	1.12	1.12	
Long-term liabilities	17.08	23.86	28.98	29.66	29.52	29.78	
Total liabilities	30.94	36.04	45.23	53.94	55.23	57.34	
Shareholders equity	13.03	15.89	17.20	21.62	27.24	34.09	
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00	
Total equity and liabilities	43.97	51.94	62.42	75.55	82.47	91.43	

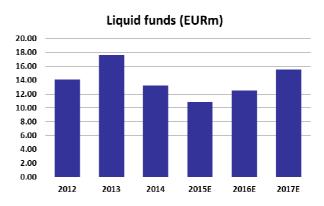
### 8 Cash Flow Statement

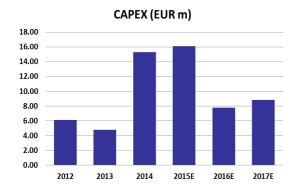
		Fiscal year					
in mEUR	2011	2012	2013	2014	2015E	2016E	
Net income	5.34	4.64	3.95	2.78	5.45	6.52	
Depreciation	4.07	3.89	4.31	4.27	5.40	6.07	
Change of working capital	1.20	-1.62	-3.42	-2.24	-2.37	-1.81	
Others	-2.02	-1.10	0.27	0.22	0.11	-0.06	
Net operating cash flow	8.58	5.80	5.10	5.03	8.59	10.72	
Cash flow from investing	-3.32	-6.15	-4.81	-15.30	-16.13	-7.80	
Free cash flow	5.26	-0.35	0.29	-10.27	-7.54	2.92	
Cash flow from financing	-3.72	-0.90	3.27	5.89	5.13	-1.27	
Change in cash	1.54	-1.25	3.56	-4.38	-2.40	1.65	
Cash, start of the year	13.79	15.33	14.08	17.65	13.26	10.86	
Cash, end of the year	15.33	14.08	17.65	13.26	10.86	12.51	

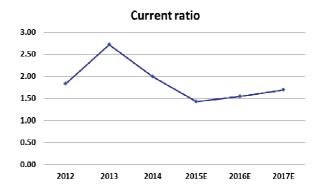












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