

# ADVA Optical Networking SE

Germany / Technology  
 Frankfurt  
 Bloomberg: ADV GR  
 ISIN: DE0005103006

Proposed  
 ADVA/Adtran merger

**RATING**  
**PRICE TARGET** **ADD**  
 € 14.40  
 Return Potential 5.0%  
 Risk Rating High

## DOUBLING DOWN ON EDGE NETWORKING

The proposed merger of ADVA and Adtran brings together two fibre optic edge networking specialists in the second year of an edge network investment boom which looks set to continue into the second half of this decade. Combined last twelve months sales and adjusted EBITDA of the two companies are USD1.2bn and USD131m respectively. The shift towards home-based work and leisure caused by the pandemic acted as the initial trigger for accelerating investment at the network edge. The roll-out of 5G, the growth of the Internet of Things, the replacement of Huawei infrastructure and government stimulus programmes are now adding fuel to the boom. ADVA and Adtran are both edge networking specialists but Adtran is focused on the “first mile” of the network (from the end-user’s perspective) with state-of-the-art solutions for residential access, while ADVA is offering first-mile solution for enterprise users and is strong in the “second mile”. There is little product overlap between the two companies. Synergies arising from the merger, estimated by management at USD52m pretax are expected mainly from savings on component purchasing. This figure does not include cross-selling benefits which should be substantial given the complementarity of the two companies’ product ranges and geographic strengths (ADVA in Europe and Adtran in the US). Under the merger’s proposed terms, each ADVA shareholder will receive shares in the new company equivalent to 0.82x the value of each Adtran share. Adtran shares will be converted one-to-one into shares in the new entity. ADVA and Adtran shareholders will receive 46% and 54% respectively in the new company. The merger is dependent on a minimum acceptance of 70% of outstanding ADVA shares as well as regulatory approval. Closure is expected in Q2 or Q3 2022 if these conditions are met. Pending closure, our forecasts are for ADVA on a standalone basis. At the current Adtran share price, ADVA shareholders will receive shares in the new company worth €14.41 per existing ADVA share. Given the merger’s compelling business logic, we see little risk that the transaction will not go ahead. We maintain our Add recommendation and €14.40 price target. (p.t.o.)

### FINANCIAL HISTORY & PROJECTIONS

	2017	2018	2019	2020	2021E	2022E
Revenue (€m)	514.47	501.98	556.82	564.96	598.83	675.21
Y-o-y growth	-9.2%	-2.4%	10.9%	1.5%	6.0%	12.8%
EBIT (€m)	4.40	14.99	12.00	27.47	47.46	58.00
EBIT margin	0.9%	3.0%	2.2%	4.9%	7.9%	8.6%
Net income (€m)	-4.23	9.68	7.05	20.31	40.72	44.79
EPS (diluted) (€)	-0.09	0.19	0.14	0.40	0.80	0.88
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-27.44	12.09	6.42	38.76	43.88	36.50
Net gearing	19.4%	13.2%	26.9%	13.0%	-3.2%	-13.5%
Liquid assets (€m)	58.38	62.65	54.26	64.88	94.02	114.78

### RISKS

Risks include but are not limited to: higher prices and restricted availability of components due to the semiconductor crisis, currency risk (particularly USD appreciation/GBP depreciation).

### COMPANY PROFILE

ADVA develops, manufactures, and sells optical networking solutions to deliver data, storage, voice, and video services. To date, the company’s networking solutions have been deployed in more than 10,000 enterprises and more than 300 carrier networks around the world. Founded in 1994 and headquartered in Munich, Germany, ADVA had 1,908 employees at the end of June 2021.

### MARKET DATA

As of 01 Sep 2021

Closing Price	€ 13.72
Shares outstanding	51.10m
Market Capitalisation	€ 701.09m
52-week Range	€ 6.02 / 14.00
Avg. Volume (12 Months)	160,203

Multiples	2020	2021E	2022E
P/E	34.8	17.5	15.9
EV/Sales	1.3	1.2	1.1
EV/EBIT	26.2	15.2	12.4
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



### COMPANY DATA

As of 30 Jun 2021

Liquid Assets	€ 85.02m
Current Assets	€ 290.72m
Intangible Assets	€ 186.96m
Total Assets	€ 542.40m
Current Liabilities	€ 153.09m
Shareholders' Equity	€ 291.69m

### SHAREHOLDERS

EGORA Group	14.6%
Janus Henderson Group PLC	4.4%
Morgan Stanley	3.2%
Dimensional Fund Advisors LP	3.1%
Free float and other	74.7%



**Multiple drivers of the edge networking investment boom** The advent of the Internet of Things, 5G mobile telephony and fibre deep initiatives are ending the dominance of centralised cloud computing and driving a wave of investment at the network edge. ADVA is very well placed to benefit having made timely investments in the requisite technology in the form of both acquisition activity and R&D spending. ADVA's higher margin software and services business climbed from below 20% to 23% of sales during the course of 2020 and reached 25% of sales in H1/21. Management expect it to account for 30% of the total in 2023 with the Ensemble edge networking software suite as an important growth driver. Meanwhile, the 5G roll-out is driving rapid growth in ADVA's market-leading network synchronisation business area (ca. 5% of 2020 sales). In addition, security concerns are increasingly causing customers to shun Huawei, thereby creating further opportunities for both ADVA and Adtran.

**ADVA's "second mile" meets Adtrans' "first mile" edge networking business** ADVA's edge networking business is largely focused on the "second mile", i.e. that part of the edge network which is at some remove from the end user. Adtrans' "first mile" business spans from the cloud edge (data centre) to the subscriber edge (customer premises) and serves both residential internet and enterprise cloud services markets. The company's international customer base includes tier 1, 2 and 3 service providers as well as alternative service providers such as utilities, municipalities and fibre overbuilders, cable/multiple system operators, small and medium sized businesses and distributed enterprises. Adtrans' Access & Aggregation segment (62% of 2020 revenue) connects communication service providers' network infrastructure to subscribers while the Subscriber Solutions & Experience segment (33% of 2020 revenue) terminates service providers' infrastructure at customer's premises while providing an immersive and interactive experience for the subscriber. In 2020 three customers - CenturyLink, Deutsche Telekom, and KGP Logistics - each accounted for more than 10% of Adtran's total revenue of USD507m.

**We maintain our Add recommendation and €14.40 price target** Under the proposed terms of the merger, ADVA and Adtran shareholders will receive 46% and 54% respectively in the new company. We think the factors set out in figure 1 below are likely to have been influential in setting the terms of the merger proposal. At the current Adtran share price, ADVA shareholders will receive shares in the new company worth €14.41 per existing ADVA share. Given the merger's compelling business logic and support from the management and supervisory boards of both companies, we see little risk that the transaction will not go ahead. We maintain our Add recommendation and €14.40 price target.



**Figure 1: Likely influential factors in setting the terms of the merger proposal**

	<b>ADVA</b>	<b>Adtran</b>
Market cap.* (USDm)	740	1,053
Net debt/(cash) 30.06.21**	6	-55
LTM adjusted EBITDA (USDm)	92	31
Consensus average annual revenue growth 2020-22***	7.6%	11.0%
Consensus adjusted EBITDA margin development 2020-22***	8.7%-15.7%	5.6%-11.1%

\* based on 3 month VWAP to 27.08.2021

\*\* including pensions and leasing liabilities

\*\*\* Bloomberg data

Source: First Berlin Equity Research, ADVA Optical Networking SE, Adtran Inc.



## INCOME STATEMENT

All figures in EUR '000	2017A	2018A	2019A	2020A	2021E	2022E
<b>Revenues</b>	<b>514,471</b>	<b>501,981</b>	<b>556,821</b>	<b>564,958</b>	<b>598,827</b>	<b>675,205</b>
Cost of goods sold	-348,251	-320,253	-365,908	-368,416	-375,294	-414,926
<b>Gross profit</b>	<b>166,220</b>	<b>181,728</b>	<b>190,913</b>	<b>196,542</b>	<b>223,533</b>	<b>260,279</b>
Sales and marketing expenses	-62,889	-63,569	-72,828	-60,803	-64,120	-80,686
General and administrative expenses	-36,260	-35,024	-35,126	-35,897	-36,712	-42,096
Research and development expenses	-69,037	-76,588	-75,186	-74,997	-78,265	-82,877
Net other operating income	6,369	8,442	4,230	2,628	3,021	3,376
<b>Operating income (EBIT)</b>	<b>4,403</b>	<b>14,989</b>	<b>12,003</b>	<b>27,473</b>	<b>47,457</b>	<b>57,997</b>
Net interest income/(expense)	-785	-1,408	-2,304	-2,607	-2,068	-1,292
Other financial gains and losses, net	-3,809	-1,096	-770	-47	0	0
<b>Pre-tax income (EBT)</b>	<b>-191</b>	<b>12,485</b>	<b>8,929</b>	<b>24,819</b>	<b>45,389</b>	<b>56,705</b>
Income taxes	-4,037	-2,807	-1,884	-4,505	-4,665	-11,916
Minority interests	0	0	0	0	0	0
<b>Net income / loss</b>	<b>-4,228</b>	<b>9,678</b>	<b>7,045</b>	<b>20,314</b>	<b>40,724</b>	<b>44,789</b>
<b>Diluted EPS (in €)</b>	<b>-0.09</b>	<b>0.19</b>	<b>0.14</b>	<b>0.40</b>	<b>0.80</b>	<b>0.88</b>
<b>EBITDA</b>	<b>51,267</b>	<b>64,356</b>	<b>76,732</b>	<b>94,035</b>	<b>114,020</b>	<b>127,381</b>
<b>Ratios</b>						
Gross margin	32.3%	36.2%	34.3%	34.8%	37.3%	38.5%
EBITDA margin on revenues	10.0%	12.8%	13.8%	16.6%	19.0%	18.9%
EBIT margin on revenues	0.9%	3.0%	2.2%	4.9%	7.9%	8.6%
Net margin on revenues	-0.8%	1.9%	1.3%	3.6%	6.8%	6.6%
Tax rate	2113.6%	-22.5%	-21.1%	-18.2%	-10.3%	-21.0%
<b>Expenses as % of revenues</b>						
Sales and marketing expenses	12.2%	12.7%	13.1%	10.8%	10.7%	11.9%
General and administrative expenses	7.0%	7.0%	6.3%	6.4%	6.1%	6.2%
Research and development expenses	13.4%	15.3%	13.5%	13.3%	13.1%	12.3%
<b>Y-Y Growth</b>						
Revenues	-9.2%	-2.4%	334.5%	1.5%	6.0%	12.8%
Operating income	-77.3%	240.4%	1282.8%	128.9%	72.7%	22.2%
Net income/ loss	n.m.	n.m.	580.0%	188.3%	100.5%	10.0%



## BALANCE SHEET

All figures in EUR '000	2017A	2018A	2019A	2020A	2021E	2022E
<b>Assets</b>						
<b>Current assets, total</b>	<b>232,639</b>	<b>257,216</b>	<b>269,240</b>	<b>247,575</b>	<b>306,839</b>	<b>354,752</b>
Cash and cash equivalents	58,376	62,652	54,263	64,881	94,016	114,785
Receivables	81,327	97,936	96,193	83,880	101,801	114,785
Contract assets	0	320	654	442	479	540
Inventories	81,694	85,734	105,355	90,124	101,801	114,785
Tax assets	1,438	1,675	1,857	390	413	466
Other current assets	9,804	8,899	10,918	7,858	8,329	9,391
<b>Non-current assets, total</b>	<b>231,249</b>	<b>229,322</b>	<b>267,122</b>	<b>252,397</b>	<b>245,360</b>	<b>245,845</b>
Right of use assets	0	0	31,985	25,386	18,943	11,677
Property, plant & equipment	26,898	29,052	32,622	31,235	32,935	37,136
Intangible assets	189,996	189,850	192,760	185,949	182,821	185,011
Deferred tax assets	10,614	7,315	6,336	7,233	7,667	8,644
Other non-current assets	3,741	3,105	3,419	2,594	2,994	3,376
<b>Total assets</b>	<b>463,888</b>	<b>486,538</b>	<b>536,362</b>	<b>499,972</b>	<b>552,198</b>	<b>600,598</b>
<b>Shareholders' equity &amp; debt</b>						
<b>Current liabilities, total</b>	<b>188,985</b>	<b>145,576</b>	<b>159,140</b>	<b>130,638</b>	<b>166,327</b>	<b>182,873</b>
Lease liabilities	0	0	6,082	5,807	5,807	5,807
Financial liabilities	79,061	19,400	19,221	15,492	25,000	23,000
Accounts payable	39,193	63,195	73,398	44,151	64,673	72,922
Advance payments received	93	0	0	0	0	0
Current provisions	21,994	15,005	14,379	14,407	16,840	20,248
Tax liabilities	6,446	5,067	1,686	1,808	1,916	2,161
Contract liabilities	0	14,061	12,448	16,377	17,359	19,573
Refund liabilities	0	511	709	633	599	675
Deferred revenues	15,062	0	0	0	0	0
Other current liabilities	27,136	28,337	31,217	31,963	34,133	38,487
Other current liabilities	42,198	28,848	31,926	32,596	34,732	39,162
<b>Long-term liabilities, total</b>	<b>47,882</b>	<b>96,321</b>	<b>121,430</b>	<b>106,116</b>	<b>83,611</b>	<b>73,728</b>
Lease liabilities	0	0	28,348	21,998	21,998	21,998
Financial liabilities	17,500	70,084	61,758	47,129	22,442	7,563
Provisions for pensions	5,822	5,531	7,756	8,545	8,982	10,128
Other provisions	1,478	1,453	1,380	1,558	1,651	1,862
Deferred tax liabilities	12,502	10,828	12,307	13,522	14,372	16,205
Other non-current liabilities	10,580	8,425	9,881	13,364	14,165	15,972
<b>Shareholders' equity</b>	<b>227,021</b>	<b>244,641</b>	<b>255,792</b>	<b>263,218</b>	<b>302,260</b>	<b>343,997</b>
<b>Total consolidated equity and debt</b>	<b>463,888</b>	<b>486,538</b>	<b>536,362</b>	<b>499,972</b>	<b>552,198</b>	<b>600,598</b>
<b>Ratios</b>						
Net debt	44,007	32,363	68,902	34,090	-9,787	-46,289
Net gearing	19.4%	13.2%	26.9%	13.0%	-3.2%	-13.5%
Book value per share (in €)	4.56	4.90	5.11	5.24	5.97	6.79
Return on equity (ROE)	-1.8%	4.1%	2.9%	2.7%	14.4%	13.9%



## CASH FLOW STATEMENT

All figures in EUR '000	2017A	2018A	2019A	2020A	2021E	2022E
<b>Income before tax</b>	<b>-191</b>	<b>12,485</b>	<b>8,929</b>	<b>24,819</b>	<b>45,389</b>	<b>56,705</b>
Depreciation and amortisation	46,864	49,367	62,191	64,729	66,562	69,384
Changes in working capital	-16,551	-2,207	-3,516	11,968	-5,979	-10,583
Income tax paid	-1,666	-2,351	-1,684	-2,099	-4,665	-11,916
Other adjustments	-1,322	3,066	971	-2,274	1,260	1,421
<b>Operating cash flow</b>	<b>27,134</b>	<b>60,360</b>	<b>66,891</b>	<b>97,143</b>	<b>102,568</b>	<b>105,012</b>
Investments in PP&E	-10,559	-14,029	-16,888	-13,648	-16,072	-20,406
Investments in intangibles	-44,014	-34,239	-43,584	-44,740	-42,619	-48,104
<b>Free cash flow</b>	<b>-27,439</b>	<b>12,092</b>	<b>6,419</b>	<b>38,755</b>	<b>43,877</b>	<b>36,502</b>
Acquisitions & disposals, net	-36,213	0	0	0	0	0
Other	248	207	169	34	0	0
<b>Investment cash flow</b>	<b>-90,538</b>	<b>-48,061</b>	<b>-60,303</b>	<b>-58,354</b>	<b>-58,691</b>	<b>-68,510</b>
Debt financing, net	37,184	-7,083	-8,500	-18,500	-14,742	-15,733
Lease liabilities	0	0	-4,488	-6,986	0	0
Equity financing, exercise of stock options	1,029	810	1,257	1,273	0	0
Dividends paid	0	0	0	0	0	0
Other	-1,291	-1,953	-2,801	-2,553	0	0
<b>Financing cash flow</b>	<b>36,922</b>	<b>-8,226</b>	<b>-14,532</b>	<b>-26,766</b>	<b>-14,742</b>	<b>-15,733</b>
FOREX & other effects	-13	203	-445	-1,405	0	0
<b>Net cash flows</b>	<b>-26,495</b>	<b>4,276</b>	<b>-8,389</b>	<b>10,618</b>	<b>29,135</b>	<b>20,769</b>
Cash, start of the year	84,871	58,376	62,652	54,263	64,881	94,016
<b>Cash, end of the year</b>	<b>58,376</b>	<b>62,652</b>	<b>54,263</b>	<b>64,881</b>	<b>94,016</b>	<b>114,785</b>
<b>EBITDA/share (in €)</b>	<b>1.02</b>	<b>1.28</b>	<b>1.44</b>	<b>1.86</b>	<b>2.24</b>	<b>2.50</b>
<b>Y-Y Growth</b>						
Operating cash flow	-55.8%	122.5%	10.8%	45.2%	5.6%	2.4%
Free cash flow	n.m.	n.m.	-46.9%	503.8%	13.2%	-16.8%
EBITDA/share	-13.2%	25.4%	12.8%	28.8%	20.5%	11.6%

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Anschrift:

First Berlin Equity Research GmbH  
Mohrenstr. 34  
10117 Berlin  
Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680

Fax: +49 (0) 30-80 93 9 687

E-Mail: [info@firstberlin.com](mailto:info@firstberlin.com)

Amtsgericht Berlin Charlottenburg HR B 103329 B

UST-Id.: 251601797

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First Berlin Equity Research GmbH

**Authored by: Simon Scholes, Analyst**

**All publications of the last 12 months were authored by Simon Scholes.**

**Company responsible for preparation: First Berlin Equity Research GmbH, Mohrenstraße 34, 10117 Berlin**

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**Person responsible for forwarding or distributing this financial analysis: Martin Bailey**

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Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

**AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY**

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

**ASSET VALUATION SYSTEM**

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

**ASSET RECOMMENDATION**

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy <sup>1</sup>	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

<sup>1</sup> The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

**RISK ASSESSMENT**

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

**RECOMMENDATION & PRICE TARGET HISTORY**

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	17 September 2019	€6.53	Buy	€8.50
2...1	↓	↓	↓	↓
2	24 February 2020	€7.06	Add	€8.00
3	28 April 2020	€5.79	Add	€7.10
4	27 July 2020	€7.07	Add	€8.00
5	27 October 2020	€6.34	Buy	€8.20
6	12 January 2021	€8.05	Buy	€11.00
7	2 March 2021	€9.63	Buy	€12.50
8	27 April 2021	€10.04	Buy	€13.00
9	27 July 2021	€12.96	Add	€14.40
10	Today	€13.72	Add	€14.40

**INVESTMENT HORIZON**

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.



### UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

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#### Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: <https://firstberlin.com/disclaimer-english-link/>

**SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main**

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