

ADVA Optical Networking SE

Germany / Technology

Frankfurt

Bloomberg: ADV GR

ISIN: DE0005103006

Q2 2021 results

RATING**PRICE TARGET**

Return Potential

Risk Rating

ADD**€ 14.40**

6.2%

High

MARGINS SET TO REMAIN STRONG DESPITE PARTS SHORTAGES

ADVA's Q2/21 sales climbed 3.0% to €149.4m (FBe: €150.1m; Q2/20 €145.0m) while proforma EBIT came in at €14.4m (FBe €12.0m; Q2/20: €10.1m). The company has never been more profitable during its second quarter. Digitisation continued to drive higher order intake and the end-June order backlog was at a record level. However, sales were constrained by component shortages. Management estimates that without this limiting factor, Q2/21 sales would have been €10-15m above the reported number. In Q2/21 sales were more evenly distributed between ADVA's three technology segments - cloud interconnect, cloud access and network synchronisation - than in 2020. Last year cloud interconnect (70% of 2020 revenues) was the main driver of sales and order growth while the cloud access business was weak due to the recession caused by the pandemic. Demand for cloud access solutions has revived in line with the economic recovery. Meanwhile, network synchronisation remains the smallest but fastest growing of ADVA's technology segments. The cloud access and network synchronisation segments are higher margin than cloud interconnect and this contributed to a widening of ADVA's gross margin to 38.3% in Q2/21 (Q2/20: 34.6%). Margins are also benefitting from a shift in the business model towards secure networks outside the classic network operator infrastructure, software and services, and more profitable growth verticals such as governments and education. ADVA succeeded in widening its gross margin in Q2/21 despite not passing a mid-single digit €m increase in component/supply chain costs on to customers. The components shortage is likely to continue during H2/21, but management stated in the Q2/21 report: "We feel certain that we can maintain...attractive margins if demand continues to be strong." We expect the change in ADVA's sales mix to widen the group's proforma operating margin from 6.0% in 2020 to 11.1% in 2025. We have raised our price target to €14.40 (previously: €13.00) to reflect upward forecast revisions following Q2/21 figures which were above our projections. Our recommendation goes from Buy to Add because the upside to our price target is < 25%. (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 26 Jul 2021

Closing Price	€ 13.56
Shares outstanding	50.66m
Market Capitalisation	€ 686.88m
52-week Range	€ 6.02 / 13.56
Avg. Volume (12 Months)	142,752

Multiples	2020	2021E	2022E
P/E	33.7	16.9	15.4
EV/Sales	1.2	1.2	1.0
EV/EBIT	25.1	14.5	11.9
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	14.8%
Janus Henderson Group PLC	4.5%
Dimensional Fund Advisors LP	3.1%
Highclere International Advisors	3.0%
Free float and other	74.6%

**Figure 1: Q3/21E forecast and Q2/21 results**

€000's	Q3/21E	Q3/20A	Δ%	Q2/21A	Q2/21E	Δ%	Q2/20A	Δ%
Sales	151,000	146,676	2.9%	149,354	150,100	-0.5%	145,024	3.0%
Proforma gross profit	55,870	51,930	7.6%	57,274	54,486	5.1%	50,204	14.1%
margin (%)	37.0%	35.4%	-	38.3%	36.3%	-	34.6%	-
Proforma selling/mkting expenses	-15,100	-13,991	-	-15,240	-15,010	-	-14,124	-
% sales	-10.0%	-9.5%	-	-10.2%	-10.0%	-	-9.7%	-
Proforma G&A expenses	-9,362	-9,666	-	-9,137	-9,456	-	-8,370	-
% sales	-6.2%	-6.6%	-	-6.1%	-6.3%	-	-5.8%	-
Proforma net R&D expenses	-19,328	-18,054	-	-19,312	-18,762	-	-18,029	-
% sales	-12.8%	-12.3%	-	-12.9%	-12.5%	-	-12.4%	-
Other op. income and expenses	755	834	-9.5%	830	750	10.6%	426	n.a.
% sales	0.5%	0.6%	-	0.6%	0.5%	-	0.3%	-
Proforma EBIT	12,835	11,053	16.1%	14,415	12,008	20.0%	10,107	n.a.
margin (%)	8.5%	7.5%	-	9.7%	8.0%	-	6.9%	-
Reported EBIT	11,322	9,768	15.9%	13,036	10,505	24.1%	8,658	n.a.
margin (%)	7.5%	6.7%	-	8.7%	7.0%	-	6.0%	-

Source: ADVA Optical Networking SE; First Berlin Equity Research estimates

Q2/21 sales were close to our forecast but proforma EBIT was 20% above our projection due to a more rapid shift to a higher margin product mix than we had modelled. Full-year 2021 guidance given at the end of February was for sales of €580m-€610m and a proforma EBIT margin of 6%-9%. In the Q1/21 report management raised the upper end of proforma EBIT margin guidance to 10% while leaving the lower end of the range unchanged at 6%. In the Q2/21 report management left sales guidance unchanged but narrowed the proforma EBIT guidance range to 7-10%. The proforma EBIT margin after six months was 9.3%. The rationale for the wide 6-10% proforma EBIT margin range given at the Q1/21 stage was supply chain risk stemming from semiconductor shortages. Management states that this risk is still "high" but believe that a FY2021 proforma EBIT margin below 7% is now unlikely. Management has also stated they believe the components shortage "will begin easing towards the end of the year" and that "we feel certain that we can maintain our ability to deliver with attractive margins if demand continues to be strong."

Software and services accounted for 26% of Q1/21 sales – up from 20% in FY2019. As figure 2 below shows, the sequential 3.4% growth in group sales in Q2/21 was driven by the Americas where strong order intake since the beginning of the year translated into a 13.7% jump in sales. Software and services accounted for 24% of group Q2/21 sales, down from the unusually high figure of 26% in Q1/21 but above the FY2020 and FY2019 figures of 23% and 20% respectively. The Q2/21 proforma gross margin of 38.3% was unchanged on the Q1/21 figure: The overall shift in the sales mix towards higher margin business thus cancelled out the sequential decline in software and service income and also the negative impact of higher Americas sales which are in general less profitable than EMEA sales.

Figure 2: Geographic sales breakdown

€ 000's	Q1/20	Q2/20	Q3/20	Q4/20	FY/20	Q1/21	Q2/21
Europe, Middle East and Africa	65,300	77,200	79,400	86,900	308,800	96,200	95,651
y-o-y change (%)	-4.4%	8.1%	2.1%	6.6%	3.3%	47.3%	23.9%
sequential change (%)	-19.9%	18.2%	2.8%	9.4%	3.3%	10.7%	-0.6%
Americas	55,500	54,700	52,400	39,000	201,600	36,700	41,745
y-o-y change (%)	14.9%	5.0%	-5.8%	-32.5%	-5.7%	-33.9%	-23.7%
sequential change (%)	-4.0%	-1.4%	-4.2%	-1.5%	-5.7%	-5.9%	13.7%
Asia Pacific	11,900	13,200	14,800	14,700	54,600	11,600	11,316
y-o-y change (%)	2.6%	36.1%	35.8%	24.6%	24.1%	-2.5%	-14.3%
sequential change (%)	0.8%	10.9%	12.1%	-0.7%	24.1%	-21.4%	-2.4%
Total	132,700	145,100	146,600	140,600	565,000	144,500	149,300
y-o-y change (%)	3.5%	8.9%	1.6%	-6.9%	1.5%	8.9%	2.9%
sequential change (%)	-12.2%	9.3%	1.0%	-4.1%	1.5%	2.8%	3.4%

Source: ADVA Optical Networking SE



In Q2/21 6.9% growth in y-o-y operating costs outpaced 3.0% y-o-y sales growth but the improvement in the proforma gross margin to 38.3% (Q2/21: 34.6%) meant that the proforma EBIT margin widened to 9.7% (Q2/21:7.0%). On a sequential basis operating costs grew by 0.9% compared with 3.4% for sales and so the proforma EBIT margin expanded to 9.7% (Q1/21: 8.9%) although the gross margin was flat at 38.3%.

Strengthening cashflows have eliminated ADVA's net debt position (excluding pensions) over the past year. Net debt including leases but excluding pensions was €-3.9m at the end of Q2/21 (Q2/20: €44.9m). Including pensions this figure was €5.4m, equivalent to net gearing of 2% (Q2/20: €53.0m, equivalent to net gearing of 19%).

Multiple medium term sales growth and margin expansion drivers 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. Meanwhile, security concerns are increasingly causing customers to shun Huawei, thereby creating further opportunities for ADVA. Major sales growth and margin expansion drivers identified by ADVA are summarised below:

- Sales share of software and services business to rise from 20% in 2020 to 30% in 2023;
- Sales share arising from ADVA's verticalisation initiative, including components such as pluggable aggregation devices, to rise from ca. 2% in 2020 to 15% by 2025;
- Accelerating traction in growth verticals to raise share of higher-margin sales with non-communication service provider customers from 30% in 2020 to 40% by 2023;
- 5G roll-out to drive rapid growth in ADVA's market-leading network synchronisation business area (ca. 5% of 2020 sales);
- Market share gains from Huawei.

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 expects it to account for 30% of the total in 2023 with the Ensemble edge networking software suite as an important growth driver.

Components and pluggable aggregation devices such as the MicroMux/NanoMux product families accounted for around 2% of sales in 2020. ADVA are targeting 15% of sales within five years as these devices cater to a largely unserved niche market - namely smooth upgrades to legacy infrastructure within tight space and cost constraints. The average gross margin on these products is likely to be well above the 2020 group proforma figure of 35.2%. ADVA's development of new products in this area should also furnish it with components it previously sourced externally – thereby boosting margins further.

ADVA is also seeing accelerating traction in verticals including energy, government and OEMs. Business with the first two customer groups is benefitting from the increasing priority accorded to network security amid rising geopolitical tensions. Meanwhile, OEMs such as switching and routing manufacturers are likely to be customers for ADVA's expanded range of pluggable aggregation devices. Communications service providers accounted for ca. 70% of ADVA's sales in 2020. Business with this customer group is generally lower margin than with non-communications service providers. Management expects rapidly growing business with the above-mentioned verticals to boost the share of group sales made to non-communications service provider customers from 30% in 2020 to 40% by 2023.



Network synchronisation, which accounted for 5% of 2020 sales, is ADVA's most profitable business area. Management has not given a percentage of sales target for this segment, but growth is likely to be brisk given its clear market leading position and the importance of synchronisation in 5G networks.

During the capital markets day in March, ADVA's management quantified the Huawei market opportunity over the following 24 months at €150m-€200m in EMEA and at 10's of USDm in the Americas.

Price target raised €13.00 to €14.40; recommendation lowered from Buy to Add

Following stronger Q2/21 results than we forecast, we have raised our FY2021 and FY2022 forecasts as shown in figure 3 below. Our FY2021 sales forecast is now slightly above the mid-point of management guidance of €580-€610m. We have raised our FY2021 proforma gross margin forecasts from 36.3% to 37.8%. Our new forecast is below the H1/21 figure of 38.3% because we expect the Americas, which generate lower margins than EMEA, to increase its share of sales during H2/21. Our FY2022 sales forecast is based on the assumption that the components shortage eases towards the end of this year and that pent-up demand translates into an acceleration of sales growth to 12.8%. We continue to model a 2020-2025 sales CAGR of 9.7% but now expect a widening of the proforma operating margin to 11.1% (previously: 10.1%) by the end of this period. We have raised our price target from €13.00 to €14.40 to reflect the upward revision to our forecasts. Our recommendation goes from Buy to Add because the upside to our price target is < 25%.

Figure 3: Changes to our forecasts

€000's	2021E			2022E		
	New	Old	Δ%	New	Old	Δ%
Sales	598,827	595,000	0.6%	675,205	675,205	0.0%
Proforma gross profit	226,239	216,169	4.7%	263,330	253,202	4.0%
margin (%)	37.8%	36.3%	-	39.0%	37.5%	-
Proforma sales & mktng	-61,427	-58,772	-	-77,649	-77,649	-
% sales	-10.3%	-9.9%	-	-11.5%	-11.5%	-
Proforma G&A	-36,505	-36,626	-	-41,863	-41,863	-
% sales	-6.1%	-6.2%	-	-6.2%	-6.2%	-
Proforma net R&D	-77,820	-75,375	-	-82,375	-78,999	-
% sales	-13.0%	-12.7%	-	-12.2%	-11.7%	-
Other operating income	3,021	2,975	1.5%	3,376	3,376	0.0%
% sales	0.5%	0.5%	-	0.5%	0.5%	-
Proforma EBIT	53,508	48,371	10.6%	64,820	58,068	11.6%
margin (%)	8.9%	8.1%	-	9.6%	8.6%	-
Reported EBIT	47,457	42,359	12.0%	57,997	51,245	13.2%
margin (%)	7.9%	7.1%	-	8.6%	7.6%	-
Net profit	40,724	36,134	12.7%	44,789	39,399	13.7%
margin (%)	6.8%	6.1%	-	6.6%	5.8%	-
EPS (€)	0.80	0.71	12.5%	0.88	0.78	13.3%

Source: First Berlin Equity Research estimates



VALUATION MODEL

DCF valuation model								
All figures in EUR '000	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Net sales	598,827	675,205	743,131	816,285	897,421	981,641	1,065,457	1,146,738
NOPLAT	43,846	47,237	65,454	72,033	79,193	86,625	94,021	101,194
+ depreciation & amortisation	-66,562	-69,384	-70,575	-77,351	-85,040	-93,020	-100,963	-108,665
Net operating cash flow	110,408	116,621	136,029	149,384	164,233	179,645	194,984	209,859
- total investments (CAPEX and WC)	-64,671	-79,093	-83,842	-90,098	-103,432	-112,445	-117,551	-124,691
Capital expenditures	-58,691	-68,510	-74,430	-81,594	-89,660	-97,746	-105,603	-113,104
Working capital	-5,979	-10,583	-9,412	-8,503	-13,772	-14,698	-11,948	-11,587
Free cash flows (FCF)	45,738	37,529	52,187	59,287	60,801	67,201	77,433	85,168
PV of FCF's	43,901	32,748	41,400	42,757	39,864	40,055	41,959	41,956

All figures in thousands	
PV of FCFs in explicit period (2021E-2035E)	506,966
PV of FCFs in terminal period	223,242
Enterprise value (EV)	730,208
+ Net cash / - net debt	-5,357
+ PV cash proceeds of future option exercise	77,736
Shareholder value	802,586
Current shares outstanding	50,655
+ PV no shares issued against future option exercise	5,080
Proforma no shares	55,735
Fair value per share in EUR	14.40

WACC		Terminal growth rate							
		1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	
Cost of equity	13.0%	6.00%	25.33	26.23	27.39	28.94	31.10	34.35	39.76
Pre-tax cost of debt	1.5%	7.00%	21.06	21.50	22.03	22.69	23.54	24.67	26.26
Tax rate	30.0%	8.00%	18.09	18.31	18.57	18.87	19.25	19.72	20.32
After-tax cost of debt	1.1%	9.00%	15.91	16.01	16.14	16.28	16.46	16.66	16.92
Share of equity capital	75.0%	10.00%	14.23	14.28	14.33	14.40	14.48	14.56	14.67
Share of debt capital	25.0%	11.00%	12.89	12.91	12.93	12.96	12.99	13.02	13.06
		12.00%	11.81	11.81	11.81	11.82	11.82	11.83	11.83
Fair value per share in EUR	14.40	13.00%	10.91	10.90	10.90	10.89	10.88	10.87	10.86

* for layout purposes the model shows numbers only to 2028, but runs until 2035



INCOME STATEMENT

All figures in EUR '000	2017A	2018A	2019A	2020A	2021E	2022E
Revenues	514,471	501,981	556,821	564,958	598,827	675,205
Cost of goods sold	-348,251	-320,253	-365,908	-368,416	-375,294	-414,926
Gross profit	166,220	181,728	190,913	196,542	223,533	260,279
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
Operating income (EBIT)	4,403	14,989	12,003	27,473	47,457	57,997
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
Pre-tax income (EBT)	-191	12,485	8,929	24,819	45,389	56,705
Income taxes	-4,037	-2,807	-1,884	-4,505	-4,665	-11,916
Minority interests	0	0	0	0	0	0
Net income / loss	-4,228	9,678	7,045	20,314	40,724	44,789
Diluted EPS (in €)	-0.09	0.19	0.14	0.40	0.80	0.88
EBITDA	51,267	64,356	76,732	94,035	114,020	127,381
Ratios						
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%
Expenses as % of revenues						
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%
Y-Y Growth						
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
Assets						
Current assets, total	232,639	257,216	269,240	247,575	306,839	354,752
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
Non-current assets, total	231,249	229,322	267,122	252,397	245,360	245,845
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
Total assets	463,888	486,538	536,362	499,972	552,198	600,598
Shareholders' equity & debt						
Current liabilities, total	188,985	145,576	159,140	130,638	166,327	182,873
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
Long-term liabilities, total	47,882	96,321	121,430	106,116	83,611	73,728
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
Shareholders' equity	227,021	244,641	255,792	263,218	302,260	343,997
Total consolidated equity and debt	463,888	486,538	536,362	499,972	552,198	600,598
Ratios						
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
Income before tax	-191	12,485	8,929	24,819	45,389	56,705
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
Operating cash flow	27,134	60,360	66,891	97,143	102,568	105,012
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
Free cash flow	-27,439	12,092	6,419	38,755	43,877	36,502
Acquisitions & disposals, net	-36,213	0	0	0	0	0
Other	248	207	169	34	0	0
Investment cash flow	-90,538	-48,061	-60,303	-58,354	-58,691	-68,510
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
Financing cash flow	36,922	-8,226	-14,532	-26,766	-14,742	-15,733
FOREX & other effects	-13	203	-445	-1,405	0	0
Net cash flows	-26,495	4,276	-8,389	10,618	29,135	20,769
Cash, start of the year	84,871	58,376	62,652	54,263	64,881	94,016
Cash, end of the year	58,376	62,652	54,263	64,881	94,016	114,785
EBITDA/share (in €)	1.02	1.28	1.44	1.86	2.24	2.50
Y-Y Growth						
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%

Imprint / Disclaimer

First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

First Berlin Equity Research GmbH is one of the companies monitored by BaFin with regard to its compliance with the requirements of Section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) Market Abuse Regulation (MAR) and Markets in Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Commission Delegated Regulation and Markets in Financial Instruments Regulations (MiFIR).

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

Amtsgericht Berlin Charlottenburg HR B 103329 B

UST-Id.: 251601797

Ggf. Inhaltlich Verantwortlicher gem. § 6 MDStV

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

The production of this recommendation was completed on 27 July 2021 at 11:00

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

Copyright© 2021 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MIFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set forth in accordance with Article 34 (2) lit. (b) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 lit. (b) of such article shall be designed to ensure that relevant persons engaged in different business activities involving a conflict of interests carry on those activities at a level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

In addition, First Berlin shall pursuant to Article 5 of the Commission Delegated Regulation (EU) 2016/958 disclose in their recommendations all relationships and circumstances that may reasonably be expected to impair the objectivity of the financial analyses, including interests or conflicts of interest, on their part or on the part of any natural or legal person working for them under a contract, including a contract of employment, or otherwise, who was involved in producing financial analyses, concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates.

With regard to the financial analyses of ADVA Optical Networking SE the following relationships and circumstances exist which may reasonably be expected to impair the objectivity of the financial analyses: The author, First Berlin, or a company associated with First Berlin reached an agreement with the ADVA Optical Networking SE for preparation of a financial analysis for which remuneration is owed.

Furthermore, First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest:

- The author, First Berlin, or a company associated with First Berlin owns a net long or short position exceeding the threshold of 0,5 % of the total issued share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;

- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

With regard to the financial analyses of ADVA Optical Networking SE the following of the aforementioned potential conflicts of interests or the potential conflicts of interest mentioned in Article 6 paragraph 1 of the Commission Delegated Regulation (EU) 2016/958 exist: The author, First Berlin, or a company associated with First Berlin reached an agreement with the ADVA Optical Networking SE for preparation of a financial analysis for which remuneration is owed.

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014).

First Berlin notes that it has concluded a contract with the issuer to prepare financial analyses and is paid for that by the issuer. First Berlin makes the financial analysis simultaneously available for all interested security financial services companies. First Berlin thus believes that it fulfils the requirements of section 64 WpHG for minor non-monetary benefits.

PRICE TARGET DATES

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 ¹	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%

¹ 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	5 November 2019	€7.01	Add	€8.60
3	24 February 2020	€7.06	Add	€8.00
4	28 April 2020	€5.79	Add	€7.10
5	27 July 2020	€7.07	Add	€8.00
6	27 October 2020	€6.34	Buy	€8.20
7	12 January 2021	€8.05	Buy	€11.00
8	2 March 2021	€9.63	Buy	€12.50
9	27 April 2021	€10.04	Buy	€13.00
10	Today	€13.56	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.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

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

EXCLUSION OF LIABILITY (DISCLAIMER)

RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.

NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA and/or Canada.