

Smart Eye

Sector: Autotech

Sensing a Lot of Interior Value

Redeye raises the fair value range of Smart Eye on the back of the big Interior Sensing opportunity and regulatory tailwind in the US. While we continue to view Interior Sensing mostly as optionality, we still sense a lot of potential interior value in it.

Major Interior Sensing opportunity

Smart Eye will leverage its DMS position to capture opportunities in Interior Sensing, which will be a significantly larger market than DMS. The strong Interior Sensing trend is yet another example of how fast the market can turn. It further demonstrates the importance of having a versatile, flexible, and customer-focused offering, like Smart Eye.

Positive regulatory trends in the US

We detect solid regulatory progress in the US. First, the SAFE Act for research of DMS in order to determine the need for a mandate, has been introduced in the Senate. Second, the Alliance for Automotive Innovation (AAI), representing ~99% of all new vehicles sold in US, on April 27 released its Level-2 DMS principles. AAI's (voluntary) principles require DMS as a standard feature in any vehicle that is equipped with an advanced Level 2 system.

Growing interest for AIS

During March, Smart Eye officially launched AIS. There is a lot of activity with 20 employees working on AIS and several pilots out. Customers are particularly enticed by the potential of saving up to EUR 3 000 per year and vehicle due to lower insurance premiums. Moreover, AIS lead times are only a few months, meaning AIS could be a major revenue driver for Smart Eye during the coming year.

Higher fair value range

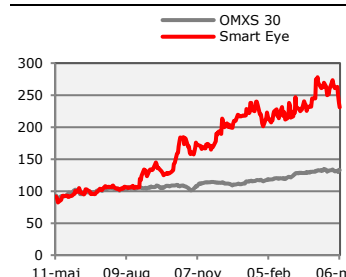
We raise our long-term ASP assumptions based on the major Interior Sensing potential. Our base case jumps to SEK 322 per share (270). Our new bear and bull case amounts to SEK 143 (126) and 376 (337). The first half of 2021 has been silent from a news flow perspective, but we expect the pace to pick up in H2.

KEY FINANCIALS (SEKm)	2019	2020	2021E	2022E	2023E	2024E
Net sales	50	65	102	292	681	1119
EBITDA	-87	-56	-42	71	377	657
EBIT	-106	-77	-65	37	340	616
EPS (adj.)	-7.0	-4.7	-3.9	2.1	20.0	28.7
EV/Sales	32.9	52.1	38.8	13.5	5.3	2.8
EV/EBITDA	-18.8	-60.9	-94.9	55.7	9.6	4.8
EV/EBIT	-15.5	-44.0	-61.1	107.2	10.6	5.1
P/E	-16.8	-46.5	-62.6	111.7	12.1	8.5

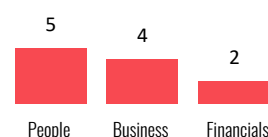
FAIR VALUE RANGE

BEAR	BASE	BULL
143.0	322.0	376.0

SEYE.ST VERSUS OMXS30



REDEYE RATING



KEY STATS

Ticker	SEYE.ST
Market	First North
Share Price (SEK)	243.0
Market Cap (MSEK)	4083
Net Debt 21E (MSEK)	-111
Free Float	84 %
Avg. daily volume ('000)	1

ANALYSTS

Jesper Henrikson
jesper.henrikson@redeye.se
Viktor Westman
viktor.westman@redeye.se

Sensing a Lot of Interior Value

The most interesting parts of the Q1 report was the focus on the major Interior Sensing potential (see further below) and the different strategic alternatives to take advantage of the big opportunities in this space. This is not the first time we sense something between the lines in the CEO statement, although we do not know whether it refers to e.g. partnerships, M&A, or something else. We did notice that Smart Eye was very secretive about this subject.

There are no changes in the expected value of SEK 2.2 bn for the 84 design wins (~300m per year, by our estimates), as can be seen in the table below. The total value of the platforms is estimated to SEK 6.3 bn, equal to SEK 900m per year (assuming a 7-year average model lifetime).

Estimated value of the design wins* (SEKm)					
Brand	exp. SOP	DW no.	Value of DW	Add. value of platforms	Total
German OEMs 1-3, European prem. OEM 1	2019-xxxx	1-17	375	450	825
Geely	2019	18	100	400	500
German OEM 2	2018-2019	19-23	200	300	500
German OEM 2	2019-2021	24-25	50	n/a	50
German OEM 1	2019-2020	26-29	125	n/a	125
Korean OEM	2020-xxxx	30-43	150	n/a	150
Japanese OEM 1 & European major OEM 1	2020-2021	44-45	150	150	300
Japanese OEM 1	2020-xxxx	46-53	200	n/a	200
Japanese OEM 2 & Japanese OEM 1	2021-2022	54-56	100	n/a	100
Chinese OEM 2	2021	57	50	n/a	50
US OEM 1, Europ. prem. OEM 2, two existing German OEMs	2022-xxxx	58-81	500	2000	2500
Korean OEM	2021	82-83	100	500	600
Chinese OEM 3	2022	84	50	300	350
Total		84	2150	4100	6250

* = Total sales are calculated over the full product life. We estimate a typical car lifetime to ~ 7 years. DW no. 2 & 17 are on the same platform as no. 19-23

The platform value of DW 1-17 was SEK 600m at first but has been adjusted after DWs 24-25 and 26-29 for existing customers were won

Source: Smart Eye, Redeye Research

Interior Sensing – a larger market than DMS

The main theme of the report was the Interior Sensing trend, which is yet another example of how fast the market preferences can change. It demonstrates the importance of having a versatile, flexible offering, whether it is hardware agnostic or based on three, or more, pillars. Smart Eye is preparing for situations where customers will request DMS together with Interior Sensing, i.e. both combined in the same RFQ - as in the recent US OEM won by Seeing Machines. This RFQ was an early first example of DMS and Interior Sensing combined. Excluding this particular small contract, the market is more in an RFI (Request for Information) stage rather than issuance of RFQs. Working with 12 of the 20 largest OEMs, we find it unlikely that there have been opportunities in combined DMS and OMS (Occupancy Monitoring Systems) that Smart Eye has not been aware of. Furthermore, Smart Eye adds being a leader in DMS provides a good base for winning in Interior Sensing.

By the way, in terms of the terminology, DMS and OMS will be different, complementing parts under the larger umbrella called Interior Sensing. This language is the same as e.g. Aptiv uses. In a blog last month, Aptiv wrote that as OMS evolves, it will be part of a broad Interior Sensing platform, providing e.g. personalization, advanced safety, infotainment, and even smart homes connectivity.

On the back of this potential, Smart Eye sides with Seeing Machines in stating that Interior Sensing has a larger market potential than DMS, which is primarily in terms of pricing (i.e. more than the DMS range of EUR 5-10) and not in volumes. Redeye takes a much more cautious approach due to the different competitive dynamics in Interior Sensing, which is demonstrated in the table below, displaying four different Interior Sensing wins based on two

different main technologies.

Interior Sensing: Design wins

OEM	Tier-2	Main technology
Major European OEM	Xperi Fotonation	Camera
Major US OEM	Vayyar	Radar
Global OEM	Acconeer	Radar
Small US OEM	Seeing Machines	Camera

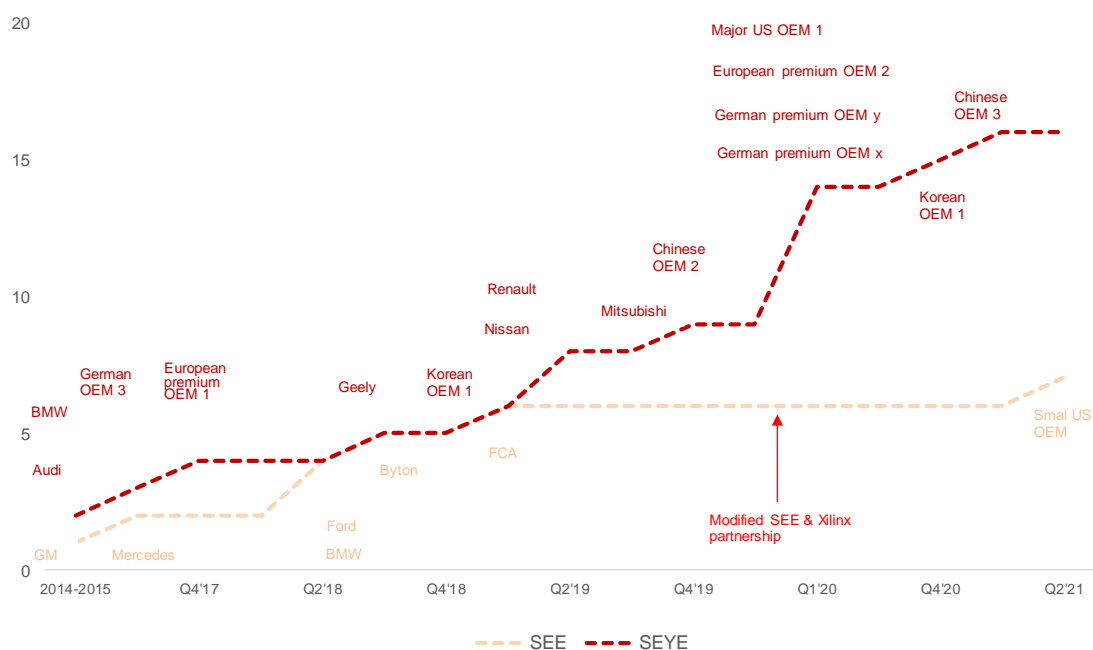
Source: Redeye Research, various industry sources

One possibly tough competitor in Interior Sensing is Xperi Fotonation. Xperi says that its Interior Sensing solution will be the first to ship, later in H2'21 (more comments on Xperi's design wins further below), adding that traditional DMS players (i.e. for example Smart Eye) are later to the game. According to Xperi, what it is doing is fairly unique and very hard as it requires coordinating several cameras.

Maintained commercial and technological leadership

The split of won DMS RFQs and OEMs versus Seeing Machines is relatively unchanged, as can be seen in the timeline with Redeye's guesses below. Seeing Machines recently won a contract for a small US OEM, which we guess is related to an electric vehicle start-up. There are several such firms, but the suggested tier-1 supplier is Magna, which would be in line with Magna's recent nomination. This deal is pure software (no chip). The contract marks Seeing Machines fourth US customer. In March 2020, Smart Eye won a major US OEM. According to Seeing Machines, Smart Eye's US contract is small and China-focused. In our view, these two perspectives seem incompatible, and consequently one of them must be wrong. Time will tell.

Accumulated n.o. wins by Smart Eye & Seeing Machines



Source: Redeye Research, Smart Eye, Seeing Machines & other various industry sources

Seeing Machines sees more and more RFQs especially during 2021 and Q1'22, one example being the movement in Japan. It especially has high hopes for its Qualcomm partnership, stating that Qualcomm is making material investments in pre-integrating Seeing Machines's software on its own software stack and platform. Seeing Machines also highlighted

Qualcomm's market share of 50-60% in infotainment: "...you'd have to have a view that, that would be incremental and positive". It added that the same thing applies for Omnivision.

Compared to Smart Eye's addressable market of 30-50m cars in 2026, Seeing Machines has a less conservative forecast of ~70m cars and ~70% DMS penetration in 2026. Even in a situation with two very sudden mandates in the US and China, we think 70m in 2026 is pretty aggressive, albeit far from impossible. We would argue that none of the two has significantly more insight in the market timing than the other. Seeing Machines boasts seven tier-1 partners, while the corresponding number for Smart Eye is undisclosed. However, the number of Smart Eye's OEM wins suggests its number of partners is adequate, and more importantly, gives it good chances of winning. One recent, crucial twist in the market, in our view, is that it will not be enough for Smart Eye to work with the best DMS tier-1s, but it also needs the ones that are leading in Interior Sensing, as suggested above in the Interior Sensing section. Thus far, we have no indications that the value chain and the market logic etc. would look materially different in Interior Sensing, in comparison to DMS.

In our last update, we discussed all the cultural factors and qualitative competitive advantages in Smart Eye's business and people (repeated in the table below), leading up to its commercial leadership. In the Q1 report, Smart Eye also clarified that: *"Our technological leadership is undisputed and the main reason for our success"*.

Smart Eye: Qualitative, cultural competitive advantages

1. A consistent and unmodified strategy and business model with a predictable road map and customer focus
2. Uninterrupted, long-term focus on the niche - not falling for various short-term temptations, e.g. giving exclusivity or betting the house on one partner's tech
3. Clear communication and a coherent story that conveys the same messages and does not change over time. This is important internally as well.
4. Strong ownership structure – no short-term mutual fund managers that know the prices of everything but the value of nothing.
5. Humble management and good leadership and culture overall. Several of the employees say Martin Krantz is the best CEO they have ever worked for.
6. Insider ownership and alignment of Management as well as employees, i.e. having employees with an owner's mentality.
7. Good capital allocation.
8. Low employee turnover and a tight team working together as one and having done so for an extensive period.

Source: Redeye Research, Smart Eye, Seeing Machines & other various industry sources

Some various positive data points

Here are a mix of other different market nuggets:

China's largest OEM, SAIC, will use Orin – Nvidia's autonomous vehicle computing platform. We believe the DMS will be from either Smart Eye or Cippa, as Cippa also recently won a major Chinese OEM. The China market is very different in terms of e.g. speed and competition. Barriers to entry are lower. It is easier to win business, but also easier to lose it. Not only dual but also multi-sourcing will be a lot more common in China.

Aside of SAIC, several premium OEMs like Volvo, Mercedes and BMW have chosen Nvidia Orin. Tesla is setting the trend in reducing the number of ECUs (Electronic Control Units) to a minimum. While Tesla's timing in semi-autonomous driving has been dead wrong, foresighted premium carmakers are still following suit and are therefore in the need of really high processing power, which we think in many cases leads them to Nvidia, although there will be plenty of other alternatives as well.

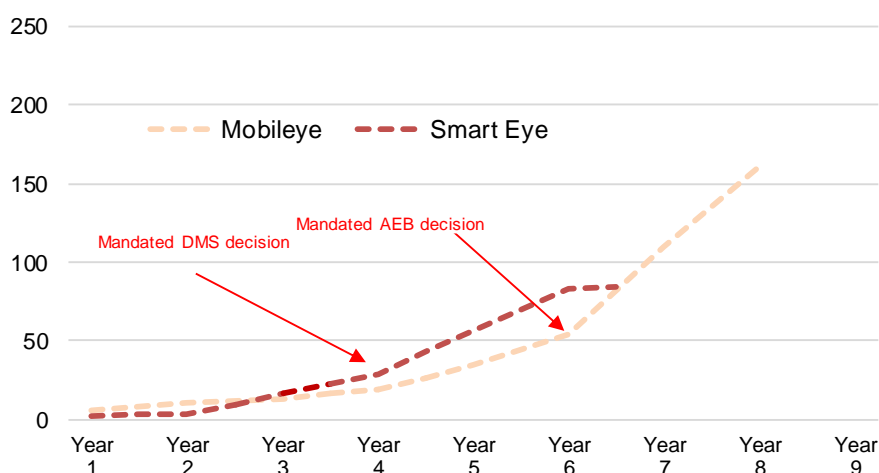
The merger of FCA and PSA into Stellantis will lead to R&D synergies of USD 5 bn as the company prepares its new, joint product strategy. FCA has come much longer in terms of level 2 and level 3 technology, where the DMS typically is involved, meaning we believe there is a risk that the Stellantis group would use the Seeing Machines-based DMS of FCA.

General Motors reiterated that it will have 23 Super Cruise models in 2023, and that 85% of the people that have tried Super Cruise strongly desires it for the next car purchase, alternatively even do not want to buy a car without it, indicating a high DMS take rate.

Slow 2021 start for the Mobileye curve

Following a strong 2020, in terms of new design wins, the first half of 2021 is roughly flat (from 83 to 84 nominations), as indicated in the graph below. However, there are still many months to go. We expect the news flow to pick up during H2'21.

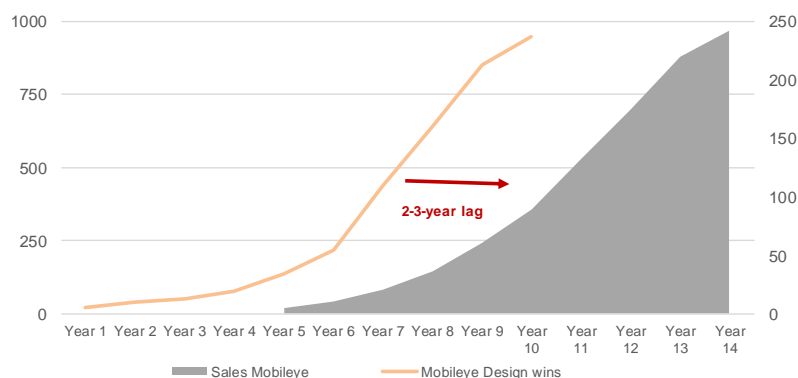
The Mobileye curve: Accumulated, total n.o. design wins



Source: Mobileye, Smart Eye, Redeye Research

As we have repeatedly stated before, design wins are leading indicators of future sales. A design win in year 1 leads to continuous revenue from year 4 to year 10. On top of that, one design win for one OEM is followed by additional design wins for the same OEM's platform with the same patterns. All in all, this creates a pretty robust growth, with a 2-3 year lag, which we have tried to demonstrate in the graph below, where one can see how Mobileye's accumulated 237 design wins led to sales of close to USD 1 bn four years later. Not exactly all of Smart Eye's design wins will enter production, but statistically at least 95% will. Smart Eye says it has still not lost any design wins, but some are postponed for external reasons. Our best guess is that these reasons are related to delays in semi-autonomous technology.

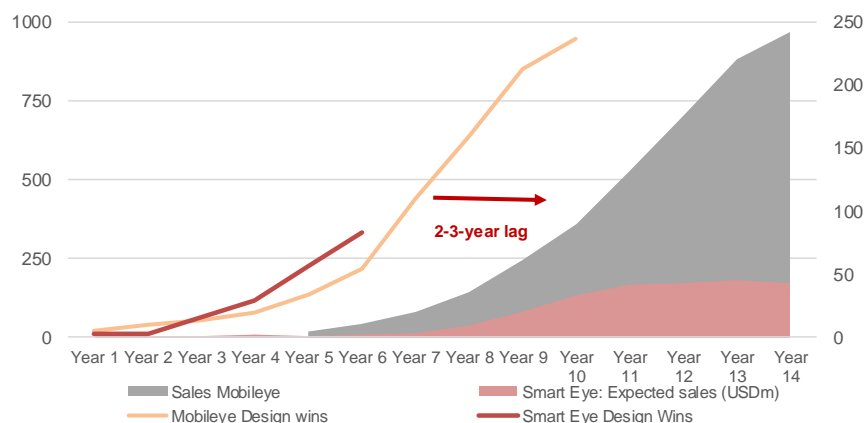
Mobileye: Sales (USDm) & design wins (n.o.)



Source: Mobileye, Intel, Redeye Research

In the graph below, we add Smart Eye's design wins and our expected future sales, comparing them to Mobileye. As can be seen in the graph, the ramp-up phases are similar, but out of prudence we discount a significant pressure on the pricing.

Mobileye & Smart Eye: Sales (USDm) & design wins (n.o.)



Source: Mobileye, Intel, Redeye Research

Positive regulation tendencies in the US

In US, the environment for regulation is improving slowly but surely. Propelled by the Tesla car crashes, politicians have introduced the SAFE Act in the Senate, hoping it will be part of the infrastructure reform legislation. The SAFE Act requires the Department of Transportation to research driver inattention and misuse of autonomous technology over two years, to decide whether there should be a DMS mandate for all new vehicles.

Furthermore, the Alliance for Automotive Innovation (AAI), a trade group representing virtually all major, global car OEMs (see the table below) and almost 99% of all new vehicles sold in the US, recently released its Level-2 DMS principles.

Selection of members of the AAI

OEM members in the Alliance for Automotive Innovation

BMW	KIA Hyundai	Mitsubishi	Subaru
Ford	Jaguar Land Rover	Nissan	Toyota
GM	Mazda	Stellantis	Volkswagen
Honda	Mercedes	Suzuki	Volvo

Source: Alliance for Automotive Innovation

AAI's DMS principles require DMS as a standard for level-2 cars (see the excerpt below), although the technology does not necessarily need to be camera-based. However, AAI proclaims an in-vehicle camera should be particularly considered for more advanced level 2+ systems, e.g. those with hands-off capabilities (lane centering/autosteer and adaptive cruise control). It should be noted that the principles are voluntary and therefore not comparable with regulation or NCAP ratings. However, they enforce the safety trend.

AAI principles: Standard DMS

Driver Monitoring as a Standard Feature

A driver monitoring system should be provided as a standard feature in any vehicle that is equipped with a Level 2 system in which both lane centering and ACC can be simultaneously engaged. The driver monitoring system should be active when the Level 2 feature is engaged.

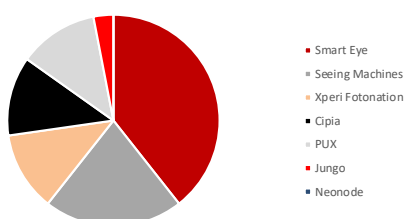
Source: Alliance for Automotive Innovation

There was no news from Europe, but it should be noted that the EU regulation requires DMS for all semi-autonomous cars launched from 2022, which we assume will be a relatively large portion of the total.

Intense competition in China

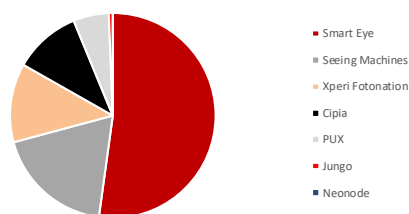
The competitive landscape in terms of design wins and won OEMs is largely unchanged (see the graphs below). Smart Eye has won the majority of the design wins, followed by Seeing Machines, with Xperi Fotonation and Cipia right behind. However, Xperi Fotonation says its design wins are related to three Asian players within trucks and commercial vehicles, i.e. minor volumes. This once again highlights what we have said before; the individual design wins are far from equal. Furthermore, Fotonation's fourth contract for a major European OEM is solely Interior Sensing.

Won OEMs per tier-2 DMS software supplier



Source: Redeye Research, various industry sources

Design wins per tier-2 DMS software supplier



Source: Redeye Research, various industry sources

The fourth largest player, Cipia, has a partnership with fellow Israeli company Mobileye for DMS software integration in ADAS chips. There are rumors of an imminent Cipia IPO with a valuation of USD 150-170m. USD 150m means the same average value per OEM end customer as Smart Eye. However, in relation to design wins, the suggested Cipia valuation range would indicate an unwarranted premium of 52-73% against Smart Eye. Cipia now has three Chinese OEMs, whereof at least one major OEM won recently, meaning its position and traction in China seems to be in line with Smart Eye. However, one major difference is that Cipia is using smaller, local, Chinese tier-1 partners, which we believe could prove risky.

In our last update, we included PUX Corporation¹, a partner of Renesas, although we do not know how advanced its solution is, in terms of eye tracking etc. PUX says it can detect head position (head tracking) and how open/closed the eyelids are. One of the owners of PUX, Morpho, has had a partnership with Denso since at least 2015, including e.g. drowsiness detection via facial expressions.

However, just like design wins differ, there are several less advanced solutions for driver monitoring as well. Some examples include torque sensors or flashing coffee cup lights that recommend the driver to take a break following an extensive driving session. While these solutions are sometimes labelled "driver monitoring", they are so rudimentary that we have disregarded them in our research.

¹ Besides these usual suspects, there is also a Japanese competitor called PUX that has developed image recognition software for DMS, below the radar, since 2013. PUX was established in 2012 by Panasonic, Nintendo and Morpho Inc. PUX claims that since 2018 it has been adopted in nine car models from four OEMs both in Japan and overseas. In March 2018, PUX said its DMS had been selected for three passenger car manufacturers through a major automobile equipment manufacturer. The fourth OEM is a Korean manufacturer of commercial vehicles. As of the end of September 2020, PUX had shipped 430 000 units, compared to 170 000 in October 2019. This looks like numbers that could come from one of the major Japanese OEMs, but we need to have a closer look at the matter. We have no indications that Smart Eye has lost any major RFQs in Japan, but the PUX case clearly calls for more, serious investigation.

Speaking of the level of technology, as mentioned in our last update, there are substantial tech barriers in developing auto-grade DMS. For example, Tobii, that controls the majority of the total eye tracking market, with sales more than six times larger than Smart Eye and Seeing Machines combined, tried to break into automotive a few years ago. The President of the Tobii Tech division at the time sounded pretty certain that Tobii would eventually play in automotive. However, as far as we know, the people involved now work on other, totally different projects.

A lot of activity in AIS

During March, Smart Eye officially launched AIS, opening up for pre-orders. Smart Eye said the launch has resulted in an increasing number of inquiries, although no numbers were mentioned. Nonetheless, we think there is a lot going on under the hood. Smart Eye e.g. has several pilots out in the market right now. We also note that 20 people are working on the AIS solution, i.e. relatively many.

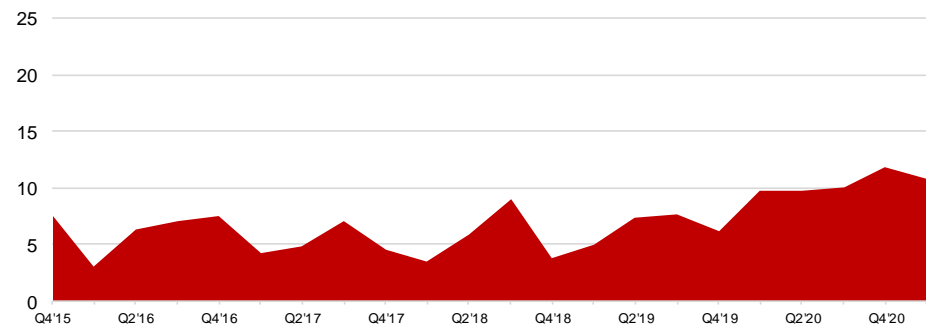
During the AIS presentation, Smart Eye mentioned an example of a customer estimating that it would be able to save up to EUR 3000 per year and vehicle from lower insurance premiums. We assume this figure relates to smaller pilots in Sweden, but the general value proposition should be similar in many other countries. From this aspect, it is interesting to note that there is a strong, growing interest outside the Chinese market. Still, we expect China to be the most significant AIS opportunity in both the short- and long run as the Chinese market is driven by regulation with high fines as well as governmental grants. In terms of relevant Chinese segments, we expect most smaller players to go for very simple solutions to tick the box. The larger and more serious players with higher standards and better financing are more relevant for Smart Eye.

Last, it is worth remembering that lead times are only a few months, meaning AIS could be a major revenue driver for Smart Eye during the company's next 1-2 years.

Q1: Solid license growth

Sales came in as expected, but costs were a lot lower, compared to the pre-Covid Q1'20, as Smart Eye has not yet fully ramped up following Covid savings. We see the same thing for competition and think it is a general market thing, where the industry is not quite back to where it was. Seeing Machines e.g. said it has challenges in doubling down on capacity fast enough and rebuild some business specialization necessary for winning new contracts as well as delivering on existing ones.

Smart Eye's Research Instruments sales (SEK 7m vs. 8m last year) are still hampered by the pandemic. Despite the launch from the second OEM, Automotive Solutions sales were only up SEK 1m to 11m compared to Q1'20 (see the graph below, on the next page). However, NRE and other revenues are down, meaning there is a solid, underlying license growth. One way to see this is in the gross margin that Smart Eye reported for the first time. It was high - 88%.

Automotive Solutions: Sales (SEKm)

Source: Smart Eye

Financial Estimates

We lower the operating loss for 2021 as Smart Eye is not quite yet back at the old OPEX levels (see the table below).

Forecast adjustments				
(SEKm)		2021E	2022E	2023E
Sales	Old	107	292	681
	New	102	292	681
% change		-4%	0%	0%
EBIT	Old	-74	37	340
	New	-65	37	340
% change		-12%	0%	0%
Profit before tax	Old	-74	36	340
	New	-65	36	340
% change		-12%	0%	0%
Earnings per share	Old	-4.38	2.12	20.02
	New	-3.88	2.12	20.02
% change		-12%	0%	0%

Source: Redeye Research, Smart Eye

Cash in the end of Q1 amounted to SEK 201m. We believe this could be enough to reach break-even.

We expect a few car model launches in H2'21, although no major ones. The strong Q4 sales are instead mostly related to an estimated SEK 10m in AIS sales.

Quarterly estimates (million SEK)											
SEKm	2019	Q1'20	Q2'20	Q3'20	Q4'20	2020	Q1'21	Q2'21	Q3'21	Q4'21	2021
Net sales	49.8	17.7	13.8	15.2	18.3	65.1	18.1	21.0	24.3	38.9	102.2
Sales growth (%)	-2%	52%	12%	24%	36%	31%	2%	51%	59%	112%	57%
EBIT	-105.7	-12.2	-22.9	-12.8	-19.4	-53.1	-18.4	-18.5	-18.4	-9.7	-65.0
EBITDA	-87.0	-7.2	-17.5	-7.1	-14.0	-31.5	-12.8	-12.8	-12.5	-3.7	-41.8
PTP	-106.3	-12.3	-23.0	-12.9	-19.4	-53.3	-18.4	-18.6	-18.5	-9.7	-65.2
EPS (SEK)	-7.0	-0.8	-1.5	-0.9	-1.2	-4.7	-1.1	-1.1	-1.1	-0.6	-3.9
EBIT margin (%)	-212%	-69%	-166%	-84%	-106%	-82%	-101%	-88%	-76%	-25%	-64%
EBITDA margin (%)	-108%	-22%	-88%	-29%	-59%	-31%	-70%	-44%	-38%	-8%	-33%
EPS growth (%)	54%	-52%	-13%	-46%	-48%	-53%	35%	-27%	31%	-53%	12%

Source: Redeye Research, Smart Eye

Investment Case

In pole position within eye tracking for mandated driver monitoring

Due to EU and Euro NCAP's decisions to mandate driver monitoring, the market for driver monitoring systems (DMS) is about to explode. This expected growth is a known fact for the stock market but we believe many do not understand Smart Eye's strong positioning. Smart Eye has devoted ~20 years of 100 percent focus to and investments in this very niche. The company is in pole position with an unmatched 84 design wins for 12 car OEMs. As for barriers to entry, the technology needs to cope with e.g. changing light conditions, tunnels, sunshine, darkness, vibrations etc. and at the same time never fail. Competition is therefore basically limited to one other tier-2 player aside of the tier-1 customers' own solutions. However, we believe it is unlikely that the customers in the long run are willing to put up with all investments and maintain the focus necessary for in house sourcing. Smart Eye states that, being platform independent and hardware agnostic, it has a competitive edge as its technology can be locked late in the development process.

Impatient & short term focused stock market

Smart Eye's first design wins with new customers are in general worth a lot more than what meets the eye as they are platform based. The platforms will usually (although not automatically) yield additional new car models for every year over the platforms' lives of about 10 years. In addition, each car model lives around seven years. For Smart Eye this creates a very foreseeable and stable revenue stream for many years to come as the large switching costs provide solid barriers to entry. The stock market however, as always, only sees the coming few quarters, meaning significant potential for patient, long term investors.

Design wins to move the share price

We expect a steady news flow going forward with design wins from already won procurements as well as RFQ's worth SEK billions in progress for the next quarters, which should drive the share price.

Valuation

Bear Case 143.0 SEK

The main differences in our bear case compared to our base case scenario are the following. In our reasonably pessimistic scenario we expect a 10 percent lower take rate (DMS penetration) growth across the board and a slower volume growth of 66% in Automotive Solutions, which is related to delays in legislation or setbacks or in the work of the other NCAP organizations around the world meaning a slower adoption rate. We believe that Smart Eye in a bear case still can defend its solid position and existing customers, with the exception of BMW. We see a decent traction in China, but we assume Smart Eye's overall win rate and long-term market shares drop to 20%. All in all, the factors mentioned above mean a total sales CAGR growth of 43% during 2021-2028. As for the fixed costs we expect Smart Eye to hold back on investing as the market breakthrough is delayed, meaning the growth in OPEX is only CAGR 19%, which translates into an EBIT margin of about 40% in 2023. We expect that the EBIT would then gradually reach 22% as a long-term, sustainable EBIT margin.

Base Case 322.0 SEK

Our base scenario (base case) is based on the following assumptions for 2021-2028. A discount rate of 9% is used in all three scenarios. In our base case we assume a CAGR volume growth for Automotive Solutions of about 71% leading up to about 24 million licenses, which we believe is equivalent to about 35% market share, which should be compared to the company's target of 40 percent on a likely much higher TAM than us. We assume that existing customers can account for over three fourths of the volumes. In addition, we assume that Smart Eye will win Volkswagen, which could in total add about 12 percentage points of the total vehicle market. Even though Smart Eye has a competitive offering and competition will remain limited we believe that its bargaining and pricing power against the huge tier 1 players are rather limited. We assume the DMS ASP will decrease by a CAGR of -9% per year. We assume stable DMS prices during the first years and a double-digit drop from EUR 7 to EUR 4 between 2025 and 2028. However, expect Interior Sensing to have about 65% higher pricing than DMS, meaning the blended ASP for 2028 is EUR 5. In Research Instruments we assume Smart Eye can grow 11%, in line with the market and thus keep its current market shares of 4-5%. All in all, the factors mentioned above mean a total sales CAGR growth of 48% during 2021-2028. As for the fixed costs we expect them to grow by a 22% CAGR growth, which translates to an EBIT margin of around 13% in 2022. However, in 2023 we expect the EBIT margin to be about 50%. EBIT will then after 2025 start dropping towards the long-term, sustainable EBIT margin of 34%.

Bull Case 376.0 SEK

The important differences in our bull case compared to our base case are the following: In our reasonably optimistic scenario we assume 10 percent faster growth in take rate penetration as in our base case, driven especially by standard fitment in mid class from rapid NCAP inclusions around the world and China where Smart Eye maintains a strong positioning, meaning close to 26 million licenses in 2028. We expect a 30% win rate in China of about 40% for non-Chinese OEMs. As for Research Instruments we expect that Smart Eye in bull case can grow faster than the market (18%) and increase its market share from 4 % to 10 %. All in all, the factors mentioned above mean a total sales CAGR growth of 50% during years 2021-2028. As for the fixed costs we expect Smart Eye to invest more in additional opportunities (most notably retrofit systems for Chinese commercial vehicles) encouraged by its success, which would imply a 23% CAGR growth in OPEX and EBIT margins that average 50% during 2023-2028. We expect that the EBIT margin could then reach 36% as a long-term, sustainable EBIT margin.

Catalysts

VW win

The Volkswagen procurement will be finished imminently. Volkswagen sells almost 11 million vehicles per year and is the World's second largest car OEM (second only to Toyota), meaning significant catalyst potential if Smart Eye would win Volkswagen.

IMPACT					
Downside			Upside		Time Frame
Significance	Likelihood	Significance	Likelihood		
Moderate	Possible	Major	Possible		

Design wins in China

We believe there are design wins overdue in China where Smart Eye's tier-1 partner has been selected and only paperwork remains before Smart Eye is officially nominated.

IMPACT					
Downside			Upside		Time Frame
Significance	Likelihood	Significance	Likelihood		
Moderate	Unlikely	Moderate	Highly likely		
					Short

Design wins and follow-up orders in general

The major key catalyst in general is won contracts from the many RFQ's worth in total SEK 6 billion, which should drive the share price. In addition, we expect follow-up orders from existing customers

IMPACT					
Downside			Upside		Time Frame
Significance	Likelihood	Significance	Likelihood		
Minor	Unlikely	Moderate	Highly likely		
					Short

Summary Redeye Rating

The rating consists of three valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 1 points. The maximum score for a valuation key is 5 points.

People: 5

Smart Eye is governed by an owner operator as the co-founder is the CEO, which is positive in many ways. Compensation is moderate and just. We especially like the tendency to include all employees in the stock option programs, which indicates a healthy HR policy that could explain the relatively low employee turnover. The solid growth trend during the years prior to the listing implies that so far investments have been savvy and execution essentially flawless. Overall the Management score is hampered by Smart Eye's short period on the stock market where e.g. there is not much history of Smart Eye's communication to the shareholders as a listed company. As mentioned Smart Eye is governed by owner operators where the founding family (Martin & Mats Krantz) together owns ~15% of the company. Overall, insiders in the Board as well as Management own a lot of shares and keep on adding to their positions. The founding family really has put their money where their mouths are. Thus, the ownership structure is in short very appealing. Our only concern is if there are enough financial muscles to back up the Company should there be need for future supplementary investments.

Business: 4

Smart Eye is the market leader in a viable niche within driver monitoring that is expected to grow at a CAGR of about 200 percent until 2025, especially driven by autonomous vehicles and traffic safety. Following an 18 year focus in automotive Smart Eye has established important relations with all potential tier 1 customers. Smart Eye's automotive focus and the recurring software licenses together imply sticky and predictable revenue for the foreseeable future. In addition, high barriers to entry mean limited competition. All in all, it is a great business.

Financials: 2

Our profitability rating is fully retrospective and requires consistent, positive earnings. As Smart Eye is not profitable at the moment it therefore cannot have a higher score for now. However, Smart Eye has a scalable business model with low costs, meaning the stage is set for a gradually increased rating ahead should the Company keep up its growth trend. The cash position and liquidity measurements of Smart Eye seems solid following a SEK 200 million private placement in 2019. However, Smart Eye loses some points as the company at the moment has negative earnings and cash flow. In addition, there is a risk in the cyclicality of the automotive industry as the customers must be able to afford to fully embrace the new driver monitoring technology. However, the amount of customers and their respective share of total sales is reasonably diversified.

INCOME STATEMENT	2019	2020	2021E	2022E	2023E
Net sales	50	65	102	292	681
Total operating costs	-137	-121	-144	-221	-303
EBITDA	-87	-56	-42	71	377
Depreciation	-2	-2	-2	-1	-2
Amortization	-17	-19	-21	-33	-35
Impairment charges	0	0	0	0	0
EBIT	-106	-77	-65	37	340
Share in profits	0	0	0	0	0
Net financial items	-1	0	0	0	0
Exchange rate dif.	0	0	0	0	0
Pre-tax profit	-106	-77	-65	37	340
Tax	0	0	0	0	0
Net earnings	-106	-78	-65	37	340

BALANCE SHEET	2019	2020	2021E	2022E	2023E
Assets					
<i>Current assets</i>					
Cash in banks	145	219	111	140	469
<i>Receivables</i>	32	29	42	102	231
Inventories	4	5	6	15	31
Other current assets	0	0	0	0	0
Current assets	181	253	160	257	731
<i>Fixed assets</i>					
Tangible assets	6	4	4	6	12
Associated comp.	0	0	0	0	0
Investments	0	0	0	0	0
Goodwill	0	0	0	0	0
Cap. exp. for dev.	0	0	0	0	0
0 intangible rights	110	130	171	196	221
0 non-current assets	0	0	0	0	0
Total fixed assets	116	134	176	201	233
Deferred tax assets	0	0	0	0	0
Total (assets)	297	386	335	458	964
Liabilities					
<i>Current liabilities</i>					
Short-term debt	0	0	0	0	0
Accounts payable	44	32	48	134	299
0 current liabilities	0	0	0	0	0
Current liabilities	44	32	48	134	299
Long-term debt	2	2	0	0	0
0 long-term liabilities	0	0	0	0	0
Convertibles	0	0	0	0	0
Total Liabilities	46	34	48	134	299
Deferred tax liab	0	0	0	0	0
Provisions	0	0	0	0	0
Shareholders' equity	252	353	287	324	665
Minority interest (BS)	0	0	0	0	0
Minority & equity	252	353	287	324	665
Total liab & SE	297	386	335	458	964

FREE CASH FLOW	2019	2020	2021E	2022E	2023E
Net sales	50	65	102	292	681
Total operating costs	-137	-121	-144	-221	-303
Depreciations total	-19	-21	-23	-34	-37
EBIT	-106	-77	-65	37	340
Taxes on EBIT	0	0	0	0	0
NOPLAT	-106	-77	-65	37	340
Depreciation	19	21	23	34	37
Gross cash flow	-87	-56	-42	71	377
Change in WC	6	-10	1	18	20
Gross CAPEX	-50	-40	-65	-60	-69
Free cash flow	-131	-105	-105	29	328

CAPITAL STRUCTURE	2019	2020	2021E	2022E	2023E
Equity ratio	85%	91%	86%	71%	69%
Debt/equity ratio	1%	0%	0%	0%	0%
Net debt	-144	-217	-111	-140	-469
Capital employed	108	136	176	184	196
Capital turnover rate	0.2	0.2	0.3	0.6	0.7

GROWTH	2019	2020	2021E	2022E	2023E
Sales growth	-2%	31%	57%	185%	133%
EPS growth (adj)	47%	-34%	-17%	-156%	820%

DCF VALUATION	
WACC (%)	9.0 %

Assumptions 2020-2026 (%)	
Average sales growth	56.8 %
EBIT margin	30.3 %

PROFITABILITY	2019	2020	2021E	2022E	2023E
ROE	-51%	-26%	-20%	12%	69%
ROCE	-50%	-25%	-20%	12%	69%
ROIC	-128%	-72%	-48%	21%	185%
EBITDA margin	-175%	-86%	-41%	24%	55%
EBIT margin	-212%	-119%	-64%	13%	50%
Net margin	-214%	-119%	-64%	13%	50%

DATA PER SHARE	2019	2020	2021E	2022E	2023E
EPS	-7.04	-4.66	-3.88	2.12	20.02
EPS adj	-7.04	-4.66	-3.88	2.12	20.02
Dividend	0.00	0.00	0.00	0.00	0.00
Net debt	-9.51	-13.05	-6.63	-8.30	-27.56
Total shares	15.12	16.63	16.80	16.90	17.00

VALUATION	2019	2020	2021E	2022E	2023E
EV	1,640.3	3,391.9	3,971.2	3,942.3	3,614.1
P/E	-16.8	-46.5	-62.6	111.7	12.1
P/E diluted	-16.8	-46.5	-62.6	111.7	12.1
P/Sales	35.8	55.4	39.9	14.1	6.1
EV/Sales	32.9	52.1	38.8	13.5	5.3
EV/EBITDA	-18.8	-60.9	-94.9	55.7	9.6
EV/EBIT	-15.5	-44.0	-61.1	107.2	10.6
P/BV	7.1	10.2	14.2	12.6	6.1

SHARE PERFORMANCE	GROWTH/YEAR	18/20E
1 month	-12.6 %	Net sales
3 month	17.1 %	Operating profit adj
12 month	174.0 %	EPS, just
Since start of the year	12.0 %	Equity

SHAREHOLDER STRUCTURE %	CAPITAL	VOTES
Swedbank Robur Fonder	7.0 %	7.0 %
Mats Krantz inklusive närstående	7.0 %	7.0 %
Första AP-fonden	6.7 %	6.7 %
Anders Jöfält	5.2 %	5.2 %
Martin Krantz	5.2 %	5.2 %
Linda Jöfält	4.7 %	4.7 %
Niclas Eriksson med närstående	4.6 %	4.6 %
Avanza Pension	3.7 %	3.7 %
Handelsbanken Fonder	3.6 %	3.6 %

SHARE INFORMATION	
Reuters code	SEYE.ST
List	First North
Share price	243.0
Total shares, million	16.8
Market Cap, MSEK	4082.6

MANAGEMENT & BOARD	
CEO	Martin Krantz
CFO	Anders Lyrheden
IR	TBA
Chairman	Anders Jöfält

ANALYSTS	Redeye AB
Viktor Westman	Mäster Samuelsgatan 42, 10tr
viktor.westman@redeye.se	111 57 Stockholm

Jesper Henrikson
jesper.henrikson@redeye.se

Redeye Rating and Background Definitions

Company Quality

Company Quality is based on a set of quality checks across three categories; PEOPLE, BUSINESS, FINANCE. These are the building blocks that enable a company to deliver sustained operational outperformance and attractive long-term earnings growth.

Each category is grouped into multiple sub-categories assessed by five checks. These are based on widely accepted and tested investment criteria and used by demonstrably successful investors and investment firms. Each sub-category may also include a complementary check that provides additional information to assist with investment decision-making.

If a check is successful, it is assigned a score of one point; the total successful checks are added to give a score for each sub-category. The overall score for a category is the average of all sub-category scores, based on a scale that ranges from 0 to 5 rounded up to the nearest whole number. The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

People

At the end of the day, people drive profits. Not numbers. Understanding the motivations of people behind a business is a significant part of understanding the long-term drive of the company. It all comes down to doing business with people you trust, or at least avoiding dealing with people of questionable character.

The People rating is based on quantitative scores in seven categories:

- Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

Business

If you don't understand the competitive environment and don't have a clear sense of how the business will engage customers, create value and consistently deliver that value at a profit, you won't succeed as an investor. Knowing the business model inside out will provide you some level of certainty and reduce the risk when you buy a stock.

The Business rating is based on quantitative scores grouped into five sub-categories:

- Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

Financials

Investing is part art, part science. Financial ratios make up most of the science. Ratios are used to evaluate the financial soundness of a business. Also, these ratios are key factors that will impact a company's financial performance and valuation. However, you only need a few to determine whether a company is financially strong or weak.

The Financial rating is based on quantitative scores that are grouped into five separate categories:

- Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

Redeye Equity Research team

Management

Björn Fahlén

bjorn.fahlen@redeye.se

Håkan Östling

hakan.ostling@redeye.se

Technology Team

Jonas Amnesten

jonas.amnesten@redeye.se

Henrik Alveskog

henrik.alveskog@redeye.se

Fredrik Nilsson

fredrik.nilsson@redeye.se

Tomas Otterbeck

tomas.otterbeck@redeye.se

Oskar Vilhelmsson

oskar.vilhelmsson@redeye.se

Viktor Westman

viktor.westman@redeye.se

Forbes Goldman

forbes.goldman@redeye.se

Mark Siöstedt

mark.siostedt@redeye.se

Danesh Zare

danesh.zare@redeye.se

Mattias Ehrenborg

mattias.ehrenborg@redeye.se

Editorial

Mark Siöstedt

mark.siostedt@redeye.se

Joel Karlsson

joel.karlsson@redeye.se

Life Science Team

Gergana Almquist

gergana.almquist@redeye.se

Oscar Bergman

oscar.bergman@redeye.se

Anders Hedlund

anders.hedlund@redeye.se

Ludvig Svensson

ludvig.svensson@redeye.se

Niklas Elmhammer

niklas.elmhammer@redeye.se

Mats Hyttinge

mats.hyttinge@redeye.se

Filip Einarsson

filip.einarsson@redeye.se

Fredrik Thor

fredrik.thor@redeye.se

Disclaimer

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Redeye AB ("Redeye" or "the Company") is a specialist financial advisory boutique that focuses on small and mid-cap growth companies in the Nordic region. We focus on the technology and life science sectors. We provide services within Corporate Broking, Corporate Finance, equity research and investor relations. Our strengths are our award-winning research department, experienced advisers, a unique investor network, and the powerful distribution channel redeye.se. Redeye was founded in 1999 and since 2007 has been subject to the supervision of the Swedish Financial Supervisory Authority.

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Redeye Rating (2021-05-09)

Rating	People	Business	Financials
5p	20	15	3
3p - 4p	96	76	37
0p - 2p	6	31	82
Company N	122	122	122

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CONFLICT OF INTERESTS

Henrikson owns shares in the company : Yes

Westman owns shares in the company : Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.