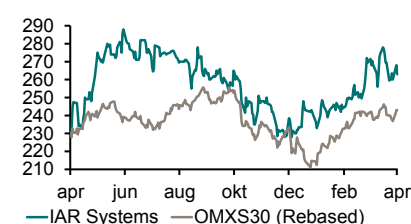


# IAR SYSTEMS

## Starting the year with tailwinds

We have made minor model adjustments ahead of the Q1 results (due on 24 April at 15:00 CET). Our Q1e sales of SEK102m implies growth of 15% YOY (6% organic and 9% including FX effects). We expect adjusted EBIT of SEK31m, giving an EBIT margin of 30.4% (-2.7%-points YOY) as we expect rising opex to hamper short-term margins. With Embedded Trust and C-Trust launched in late February, we forecast only SEK1m of Secure Thingz sales for Q1. Following positive customer feedback, we see upside potential to our 2019–2021 forecasts but have not changed them at this stage. We reiterate our SEK280–350 fair value.

IARB versus OMXS30 (12m)



Source: Factset

### SUMMARY

Share price (SEK)	263
Tickers	IARB SS, IARB.ST

### CAPITAL STRUCTURE

No. of shares (m)	14.0
No. of shares fully dil. (m)	14.0
Market cap. (SEKm)	3,674
NIBD adj end-2019e (SEKm)	-92
Enterprise value adj (SEKm)	3,582
Net debt/EBITDA adj (x)	-0.52
Free float (%)	100

Source: Company, DNB Markets (estimates)

Note: Unless otherwise stated, the share prices in this note are the last closing price.

### NEXT EVENT

Q1 2019	24/04/2019
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### ESTIMATE CHANGES (SEK)

Year-end Dec	2019e	2020e	2021e
Sales (old)	462.0	562.6	656.3
Sales (new)	461.7	562.4	655.2
Change (%)	-0.1	0.0	-0.2
EPS (old)	7.70	10.52	12.85
EPS (new)	7.68	10.51	12.80
Change (%)	-0.3	-0.1	-0.4

Source: DNB Markets,

This report has been commissioned and paid for by the company, and is deemed to constitute an acceptable minor non-monetary benefit as defined in MiFID II

Year-end Dec	2015	2016	2017	2018	2019e	2020e	2021e
Revenue (SEKm)	312	328	345	385	462	562	655
EBITDA adj (SEKm)	98	113	127	140	178	243	298
EBIT adj (SEKm)	83	101	107	119	145	199	242
PTP (SEKm)	83	100	106	117	143	196	238
EPS rep (SEK)	5.02	6.18	6.33	6.67	7.68	10.51	12.80
EPS adj (SEK)	5.02	6.18	6.33	6.67	7.68	10.51	12.80
DPS (SEK)	5.00	7.00	5.00	4.99	5.00	5.50	5.50
Revenue growth (%)	21.9	5.4	5.1	11.7	19.9	21.8	16.5
EBITDA growth adj (%)	54.6	15.2	12.4	10.1	26.9	36.4	22.8
EPS growth adj (%)	50.2	23.0	2.6	5.3	15.2	36.8	21.8
EBITDA margin adj (%)	31.5	34.5	36.9	36.4	38.5	43.1	45.5
EV/Sales adj (x)	5.80	7.63	6.58	8.32	7.76	6.31	5.32
EV/EBITDA adj (x)	18.4	22.1	17.8	22.9	20.1	14.6	11.7
EV/EBIT adj (x)	21.7	24.9	21.1	27.0	24.7	17.8	14.4
P/E adj (x)	29.9	33.4	29.8	36.4	34.2	25.0	20.5
P/Book (x)	6.51	9.31	8.22	6.02	6.25	5.59	4.84
ROE (%)	21.9	27.3	28.1	21.6	18.9	23.6	25.2
ROCE (%)	28.5	34.9	33.6	26.1	23.8	28.3	30.7
Dividend yield (%)	3.3	3.4	2.6	2.1	1.9	2.1	2.1

Source: Company (historical figures), DNB Markets (estimates)

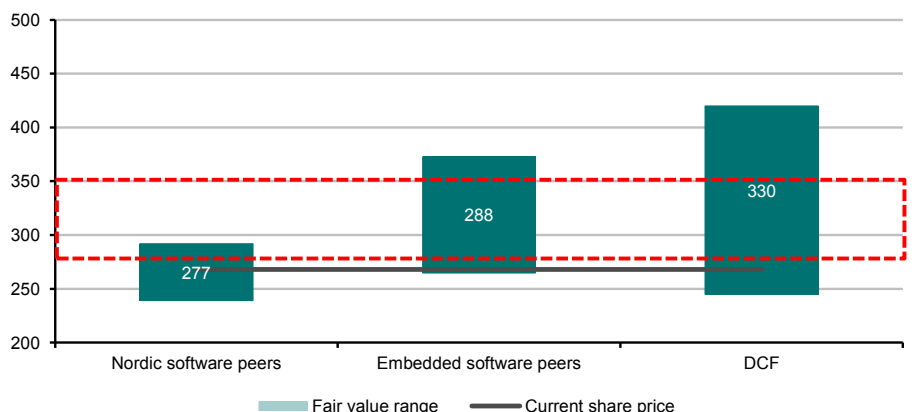
### ANALYSTS

Joachim Gunell

Please see the last two pages for important information. This research report was not produced in the US. Analysts employed by non-US affiliates are not registered/qualified research analysts with FINRA in the United States.

# Overview

## Valuation (SEK)



Source: DNB Markets

### Downside risks to our fair value

- Failure to resurrect the growth story. If investors lose trust in its ability to reinstate growth, it could trigger a devaluation of the shares, as in 2017.
- Disappointing disclosures regarding key strategic partnerships in terms of when they will materialise and fee structure. For instance, the Renesas Synergy agreement has yet to show itself in IAR Systems' sales. Thus, it would be negative if the Secure Thingz collaboration falls short of management expectations.
- IAR Systems is highly sensitive to a strengthening of the SEK (particularly against the USD, EUR, and JPY).

Source: DNB Markets

### DNB Markets estimates

- We believe IAR 3.0 will mark the shift when the market starts to view it as the go-to tools partner for global players as they position their embedded systems ahead of the IoT. We would highlight the market opportunity within secure embedded systems.
- A broad consensus has yet to emerge on IAR Systems' investment case; however, we particularly like the group's market opportunity, operating profile, financial outlook, and valuation.
- We estimate that IAR Systems should generate a 2018–2021 EBIT CAGR of 27%, with the true potential beyond our forecast period.

Source: DNB Markets

## Valuation methodology

- Blending our total peer group of Nordic software and embedded software peers with DCF suggests a fair value of SEK280–350 in our 12-month perspective (methodology unchanged).
- Our estimates correspond to a 2019e P/E of 34x, an EV/EBIT of 25x, and an EV/sales of 8x.

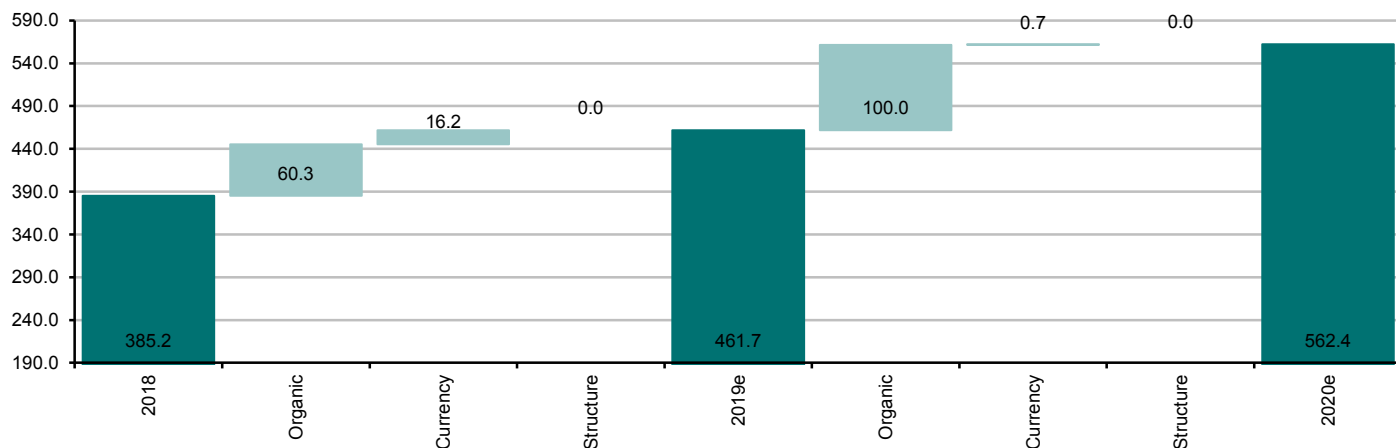
Source: DNB Markets

### Upside risks to our fair value

- The company over-delivering on its financial targets (particularly for 10–15% in organic growth).
- If IAR Systems' new security offering gains faster penetration than we assume by leveraging on its head-start, we believe there is a potential for shareholder value creation beyond our fair value.
- Value-enhancing acquisitions to be integrated in its product offering or new strategic partnerships.

Source: DNB Markets

## Sales bridge 2018–2020e (SEKm)



Source: DNB Markets (forecasts), company (historical data)

3 April 2019

## Estimate revisions

Figure 1: Estimate changes

(SEKm, except per share data)	Old			New			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
<b>Sales</b>									
Legacy IAR Systems	416.5	446.6	475.4	415.1	444.0	472.9	0%	-1%	-1%
Royalty-based revenue	8.3	19.7	38.1	8.3	16.5	34.9	0%	-16%	-8%
Secure Thingz	37.2	96.3	142.8	38.3	101.9	147.3	3%	6%	3%
<b>Group Total</b>	<b>462.0</b>	<b>562.6</b>	<b>656.3</b>	<b>461.7</b>	<b>562.4</b>	<b>655.2</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>EBIT adjusted</b>									
Legacy IAR Systems + Secure Thingz	137.5	180.2	206.3	137.2	183.0	208.4	0%	2%	1%
Royalty-based revenue	8.0	19.0	37.0	8.0	16.0	34.0	0%	-16%	-8%
<b>Group Total</b>	<b>145.5</b>	<b>199.2</b>	<b>243.3</b>	<b>145.2</b>	<b>199.0</b>	<b>242.4</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>EBIT adjusted margin</b>									
Legacy IAR Systems + Secure Thingz	30.3%	33.2%	33.4%	30.3%	33.5%	33.6%	-6bp	34bp	22bp
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0bp	0bp	0bp
<b>Group Total</b>	<b>31.5%</b>	<b>35.4%</b>	<b>37.1%</b>	<b>31.4%</b>	<b>35.4%</b>	<b>37.0%</b>	<b>-6bp</b>	<b>-2bp</b>	<b>-8bp</b>
<b>Organic growth</b>									
Legacy IAR Systems	6.7%	6.3%	5.2%	6.7%	6.5%	5.4%	2bp	20bp	13bp
Royalty-based revenue	0.6%	2.3%	3.1%	0.6%	1.7%	3.2%	2bp	-57bp	9bp
Secure Thingz	7.7%	12.0%	7.9%	8.3%	13.4%	7.9%	56bp	142bp	6bp
<b>Group Total</b>	<b>15.0%</b>	<b>20.6%</b>	<b>16.2%</b>	<b>15.6%</b>	<b>21.7%</b>	<b>16.5%</b>	<b>61bp</b>	<b>104bp</b>	<b>27bp</b>
<b>Group</b>									
<b>Sales</b>	<b>462.0</b>	<b>562.6</b>	<b>656.3</b>	<b>461.7</b>	<b>562.4</b>	<b>655.2</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Sales growth	19.4%	21.1%	16.2%	19.9%	21.8%	16.5%	47bp	73bp	27bp
Organic	15.0%	20.6%	16.2%	15.6%	21.7%	16.5%	61bp	104bp	27bp
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0bp	0bp	0bp
Currency	4.3%	0.5%	0.0%	4.2%	0.2%	0.0%	-14bp	-32bp	0bp
<b>Gross profit</b>	<b>451.3</b>	<b>549.4</b>	<b>641.0</b>	<b>450.9</b>	<b>549.2</b>	<b>639.8</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Margin	97.7%	97.7%	97.7%	97.7%	97.7%	97.7%	0bp	0bp	0bp
<b>EBIT adjusted</b>	<b>145.5</b>	<b>199.2</b>	<b>243.3</b>	<b>145.2</b>	<b>199.0</b>	<b>242.4</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Margin	31.5%	35.4%	37.1%	31.4%	35.4%	37.0%	-6bp	-2bp	-8bp
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0			
EBIT	145.5	199.2	243.3	145.2	199.0	242.4	0%	0%	0%
Margin	31.5%	35.4%	37.1%	31.4%	35.4%	37.0%	-6bp	-2bp	-8bp
Net financial items	-2.1	-3.2	-3.9	-2.1	-3.2	-3.9			
Pretax profit	143.5	195.9	239.4	143.1	195.7	238.5	0%	0%	0%
Tax	-35.9	-49.0	-59.8	-35.8	-48.9	-59.6	0%	0%	0%
Tax rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	0bp	0bp	0bp
Net profit	107.6	146.9	179.5	107.3	146.8	178.8	0%	0%	0%
EPS adjusted	7.70	10.52	12.85	7.68	10.51	12.80	0%	0%	0%
EPS	7.70	10.52	12.85	7.68	10.51	12.80	0%	0%	0%
DPS	5.00	5.50	5.50	5.00	5.50	5.50	0%	0%	0%

Source: DNB Markets

3 April 2019

Figure 2: Quarterly estimates by division

(SEKm, except per share data)	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	Q1'19e	Q2'19e	Q3'19e	Q4'19e
<b>Sales</b>												
Legacy IAR Systems	83.5	85.4	82.9	86.4	87.6	93.8	95.5	97.8	100.3	104.0	104.4	107.0
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.5	1.4	1.9	2.5	2.5
Secure Thingz	0.0	0.0	0.0	0.0	0.0	0.5	1.0	3.5	0.8	3.3	9.0	24.7
<b>Group Total</b>	<b>86.4</b>	<b>86.8</b>	<b>84.2</b>	<b>87.6</b>	<b>88.9</b>	<b>95.6</b>	<b>97.9</b>	<b>102.8</b>	<b>102.5</b>	<b>109.1</b>	<b>115.8</b>	<b>134.3</b>
<b>EBIT adjusted</b>												
Legacy IAR Systems + Secure Thingz	23.3	24.4	27.3	25.6	28.2	27.6	29.9	29.6	29.8	32.1	33.5	41.6
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.5	1.4	1.9	2.5	2.5
<b>Group Total</b>	<b>26.2</b>	<b>25.8</b>	<b>28.6</b>	<b>26.8</b>	<b>29.5</b>	<b>28.9</b>	<b>31.3</b>	<b>31.1</b>	<b>31.2</b>	<b>33.9</b>	<b>35.9</b>	<b>44.1</b>
<b>EBIT adjusted margin</b>												
Legacy IAR Systems + Secure Thingz	27.9%	28.6%	32.9%	29.6%	32.2%	29.4%	31.3%	30.3%	29.7%	30.8%	32.1%	38.9%
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Group Total</b>	<b>30.3%</b>	<b>29.7%</b>	<b>34.0%</b>	<b>30.6%</b>	<b>33.2%</b>	<b>30.2%</b>	<b>32.0%</b>	<b>30.3%</b>	<b>30.4%</b>	<b>31.1%</b>	<b>31.0%</b>	<b>32.9%</b>
<b>Organic growth</b>												
Legacy IAR Systems	2.6%	0.6%	8.3%	8.4%	4.9%	7.9%	6.5%	9.6%	5.9%	6.9%	6.8%	7.1%
Royalty-based revenue	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.5%	1.0%	1.0%
Secure Thingz	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.8%	2.8%	8.0%	20.2%
<b>Group Total</b>	<b>2.7%</b>	<b>0.6%</b>	<b>8.4%</b>	<b>8.5%</b>	<b>5.0%</b>	<b>8.1%</b>	<b>6.7%</b>	<b>10.0%</b>	<b>6.7%</b>	<b>10.2%</b>	<b>15.8%</b>	<b>28.3%</b>
<b>Group</b>												
<b>Sales</b>	<b>86.4</b>	<b>86.8</b>	<b>84.2</b>	<b>87.6</b>	<b>88.9</b>	<b>95.6</b>	<b>97.9</b>	<b>102.8</b>	<b>102.5</b>	<b>109.1</b>	<b>115.8</b>	<b>134.3</b>
Sales growth	7.3%	6.1%	3.8%	3.1%	2.9%	10.1%	16.3%	17.4%	15.3%	14.2%	18.3%	30.6%
Organic	2.7%	0.6%	8.4%	8.5%	5.0%	8.1%	6.7%	10.0%	6.7%	10.2%	15.8%	28.3%
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Currency	4.6%	5.5%	-4.6%	-5.4%	-2.1%	2.1%	9.6%	7.3%	8.6%	4.0%	2.5%	2.3%
<b>Gross profit</b>	<b>84.0</b>	<b>85.2</b>	<b>82.3</b>	<b>85.0</b>	<b>86.1</b>	<b>93.7</b>	<b>95.8</b>	<b>100.6</b>	<b>99.2</b>	<b>107.0</b>	<b>113.3</b>	<b>131.4</b>
Margin	97.2%	98.2%	97.7%	97.0%	96.9%	98.0%	97.9%	97.9%	96.9%	98.0%	97.9%	97.9%
<b>EBIT adjusted</b>	<b>26.2</b>	<b>25.8</b>	<b>28.6</b>	<b>26.8</b>	<b>29.5</b>	<b>28.9</b>	<b>31.3</b>	<b>31.1</b>	<b>31.2</b>	<b>33.9</b>	<b>35.9</b>	<b>44.1</b>
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	30.2%	32.0%	30.3%	30.4%	31.1%	31.0%	32.9%
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	26.2	25.8	28.6	26.8	29.5	28.9	31.3	31.1	31.2	33.9	35.9	44.1
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	30.2%	32.0%	30.3%	30.4%	31.1%	31.0%	32.9%
Net financial items	-0.8	-0.1	-0.4	-0.4	-0.4	-1.7	-0.3	0.6	-0.6	-0.8	-0.4	-0.2
Pretax profit	25.4	25.7	28.2	26.4	29.1	22.0	31.0	31.7	30.6	33.1	35.5	43.9
Tax	-6.6	-4.5	-7.9	-6.7	-6.3	-5.8	-4.2	-9.9	-7.6	-8.3	-8.9	-11.0
Tax rate	26.0%	17.5%	28.0%	25.4%	21.6%	26.4%	13.5%	31.2%	25.0%	25.0%	25.0%	25.0%
Net profit	18.8	21.2	20.3	19.7	22.8	16.2	26.8	21.8	22.9	24.8	26.6	32.9
EPS adjusted	1.49	1.68	1.61	1.56	1.81	1.57	1.97	1.56	1.64	1.78	1.91	2.36
EPS	1.49	1.67	1.61	1.56	1.81	1.20	1.97	1.60	1.64	1.78	1.91	2.36
DPS	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00

Source: DNB Markets (forecasts), company (historical data)

Figure 3: Peer group (%)

	Sales growth			GM*	EBIT margin			EBIT growth			EPS growth			2018–2021e CAGR		
	2019e	2020e	2021e	2018	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	Sales	EBIT	EPS
<b>IAR Systems (DNBe)</b>	<b>19.9</b>	<b>21.8</b>	<b>16.5</b>	<b>97.7</b>	<b>30.8</b>	<b>31.4</b>	<b>35.4</b>	<b>22.2</b>	<b>37.1</b>	<b>21.8</b>	<b>18.2</b>	<b>36.8</b>	<b>21.8</b>	<b>19.4</b>	<b>26.8</b>	<b>25.4</b>
IAR Systems versus total peer group	4.0	8.1	3.8	27.5	6.2	5.8	8.3	0.8	4.6	1.6	-2.6	-6.1	1.4	5.1	2.0	-0.5
<b>Nordic software peers</b>																
HMS Networks	18.2	15.2	14.9	61.1	18.5	19.3	21.4	23.4	27.7	21.7	32.2	23.3	22.3	16.1	24.2	25.9
SimCorp	11.1	7.5	11.0	58.1	27.0	27.6	27.7	13.7	7.8	17.7	20.0	8.2	19.5	9.8	13.0	15.8
F-Secure	15.7	8.7	8.3	79.4	3.4	3.0	7.2	1.5	160.6	41.7	-3.0	283.6	43.8	10.9	55.4	74.9
INVISIO Communications	17.1	27.1	21.7	58.9	18.0	22.0	25.2	43.4	45.5	29.7	47.7	46.6	29.4	21.9	39.3	41.0
Fortnox	31.6	23.5	19.2	n.a.	27.7	30.3	33.1	44.1	34.7	25.9	45.6	34.6	26.1	24.6	34.7	35.2
Vitec Software	6.7	2.5	2.3	n.a.	13.2	14.9	15.5	20.9	6.2	4.1	12.3	7.8	5.7	3.8	10.1	8.6
<b>Average of the above</b>	<b>16.7</b>	<b>14.1</b>	<b>12.9</b>	<b>64.4</b>	<b>17.9</b>	<b>19.5</b>	<b>21.7</b>	<b>24.5</b>	<b>47.1</b>	<b>23.5</b>	<b>25.8</b>	<b>67.4</b>	<b>24.5</b>	<b>14.5</b>	<b>29.5</b>	<b>33.5</b>
DNBe versus peer group	3.1	7.7	3.6	33.3	12.9	11.9	13.7	-2.3	-10.0	-1.7	-7.6	-30.6	-2.6	4.9	-2.6	-8.2
<b>Embedded software peers</b>																
Cadence Design Systems	7.2	6.4	6.5	87.8	30.2	30.3	28.1	7.3	-1.4	2.3	8.4	9.0	5.2	6.7	2.7	7.5
ANSYS	10.2	10.1	9.0	86.3	47.4	43.9	44.8	2.2	12.3	10.2	-2.5	11.9	10.8	9.8	8.1	6.5
Xilinx	12.2	10.3		70.0	31.6	31.8	33.0	12.8	14.6		11.1	13.3				
Altium	29.6	23.7	21.1	44.4	30.3	34.2	36.7	45.9	32.8	28.3	50.0	19.0	24.4	24.8	35.4	30.4
Red Hat	14.6	15.8		85.3	23.5	24.6	24.8	19.7	17.0		7.1	15.0	17.4			13.0
<b>Average of the above</b>	<b>14.8</b>	<b>13.3</b>	<b>12.2</b>	<b>74.8</b>	<b>32.6</b>	<b>32.9</b>	<b>33.5</b>	<b>17.6</b>	<b>15.1</b>	<b>13.6</b>	<b>14.8</b>	<b>13.6</b>	<b>14.4</b>	<b>13.7</b>	<b>15.4</b>	<b>14.4</b>
DNBe vs. peer group	5.1	8.5	4.3	22.9	-1.8	-1.5	1.9	4.6	22.0	8.2	3.4	23.2	7.4	5.6	11.4	11.0
<b>Average of total peer group</b>	<b>15.8</b>	<b>13.7</b>	<b>12.7</b>	<b>70.1</b>	<b>24.6</b>	<b>25.6</b>	<b>27.0</b>	<b>21.4</b>	<b>32.5</b>	<b>20.2</b>	<b>20.8</b>	<b>42.9</b>	<b>20.4</b>	<b>14.3</b>	<b>24.8</b>	<b>25.9</b>
<b>Median of total peer group</b>	<b>14.6</b>	<b>10.3</b>	<b>11.0</b>	<b>70.0</b>	<b>27.0</b>	<b>27.6</b>	<b>27.7</b>	<b>19.7</b>	<b>17.0</b>	<b>21.7</b>	<b>12.3</b>	<b>15.0</b>	<b>20.9</b>	<b>10.9</b>	<b>24.2</b>	<b>20.8</b>

Source: Factset (3 April 2019)

Note (GM = gross margin)

Figure 4: Peer group (x/%)

	M Cap	P/E (x)			EV/EBITDA (x)			EV/EBIT (x)			FCF yield	RoE	Div. yield	Performance (%)		
	(SEKbn)	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2019e	2019e	-1M	-3M	-12M
<b>IAR Systems (DNBe)</b>	<b>3.6</b>	<b>33.1</b>	<b>24.2</b>	<b>19.9</b>	<b>18.8</b>	<b>13.8</b>	<b>12.5</b>	<b>23.1</b>	<b>16.8</b>	<b>15.2</b>	<b>2.1%</b>	<b>18.3%</b>	<b>2.0%</b>	<b>-2.4</b>	<b>11.2</b>	<b>14.3</b>
Premium (+) / discount (-)		-30%	-27%	-29%	-30%	-36%	-28%	-31%	-32%	-25%						
<b>Nordic software peers</b>																
HMS Networks	8.0	35.4	28.7	23.5	22.8	18.1	14.8	26.4	20.3	16.3	2.9%	22.7%	1.2%	10.3	36.2	43.3
SimCorp	35.7	37.2	34.3	28.7	27.2	25.0	21.7	28.6	26.4	22.4	2.2%	44.4%	1.3%	6.0	37.3	50.5
F-Secure	4.3	124.7	32.5	22.6	26.7	13.9	10.6	62.4	23.6	16.0	5.0%	4.7%	0.5%	12.1	8.3	-28.9
INVISIO Communications	3.0	42.9	29.2	22.6	29.1	19.2	14.7	31.6	21.5	16.3	4.1%	21.6%	1.4%	-0.4	22.1	11.5
Fortnox	6.0	51.7	38.4	30.5	32.9	24.6	19.2	38.3	27.8	21.4	2.0%	40.3%	0.5%	14.8	51.9	102.0
Vitec Software	2.7	25.2	23.4	22.1	10.0	9.4	8.9	19.6	17.9	16.6	5.5%	15.2%	1.4%	8.0	21.1	12.4
<b>Average of the above</b>		<b>52.8</b>	<b>31.1</b>	<b>25.0</b>	<b>24.8</b>	<b>18.4</b>	<b>15.0</b>	<b>34.5</b>	<b>22.9</b>	<b>18.2</b>	<b>3.6%</b>	<b>24.8%</b>	<b>1.1%</b>	<b>8.5</b>	<b>29.5</b>	<b>31.8</b>
Premium (+) / discount (-)		-37%	-22%	-21%	-24%	-25%	-17%	-33%	-27%	-16%						
<b>Embedded software peers</b>																
Cadence Design Systems	169.5	32.1	29.4	28.0	24.1	22.6	18.4	25.6	25.3	23.1	2.9%	34.6%	0.0%	11.8	50.4	81.4
ANSYS	146.4	32.3	28.9	26.1	21.6	18.9	16.7	22.6	19.4	17.0	2.9%	16.7%	0.0%	3.4	31.7	22.4
Altium	303.2	37.3	33.6	29.7	29.8	26.3	22.8	32.4	28.2	24.4	2.9%	31.8%	1.1%	2.0	48.7	87.0
Xilinx	28.2	55.6	46.7	37.6	44.4	34.0	26.5	49.3	36.8	28.4	2.1%	29.9%	1.2%	-0.7	51.5	64.5
Red Hat	300.2	46.4	40.3	34.4	28.6	23.5		30.9	25.4		3.4%	31.0%	0.0%	0.3	5.1	26.5
<b>Average of the above</b>		<b>40.7</b>	<b>35.8</b>	<b>31.1</b>	<b>29.7</b>	<b>25.1</b>	<b>21.1</b>	<b>32.2</b>	<b>27.0</b>	<b>23.2</b>	<b>2.8%</b>	<b>28.8%</b>	<b>0.5%</b>	<b>3.4</b>	<b>37.5</b>	<b>56.4</b>
Premium (+) / discount (-)		-19%	-32%	-36%	-37%	-45%	-41%	-28%	-38%	-35%						
<b>Average of total peer group</b>		<b>47.3</b>	<b>33.2</b>	<b>27.8</b>	<b>27.0</b>	<b>21.4</b>	<b>17.4</b>	<b>33.4</b>	<b>24.8</b>	<b>20.2</b>	<b>3.3%</b>	<b>26.6%</b>	<b>0.8%</b>	<b>6.1</b>	<b>33.1</b>	<b>43.0</b>
<b>Median of total peer group</b>		<b>37.3</b>	<b>32.5</b>	<b>28.0</b>	<b>27.2</b>	<b>22.6</b>	<b>17.5</b>	<b>30.9</b>	<b>25.3</b>	<b>19.2</b>	<b>2.9%</b>	<b>29.9%</b>	<b>1.1%</b>	<b>6.0</b>	<b>36.2</b>	<b>43.3</b>

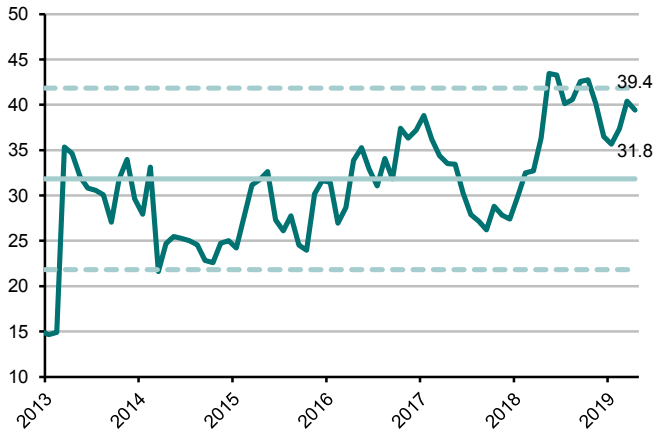
Source: Factset

Note: Share prices correct as of 17.30.00 CET on 3 April 2019

3 April 2019

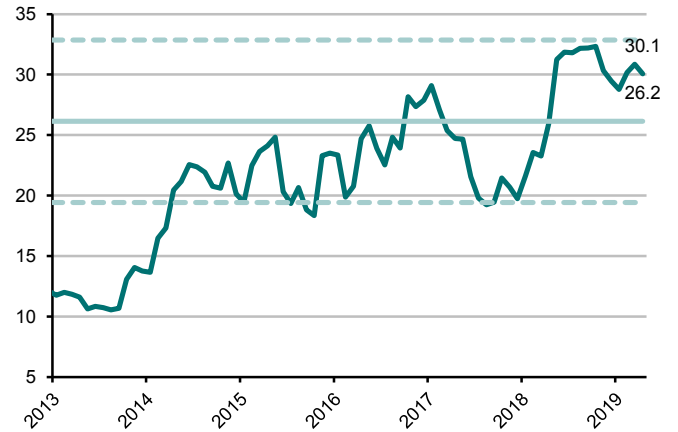
# Valuation

**Figure 5: IAR Systems EV/EBIT LTM**



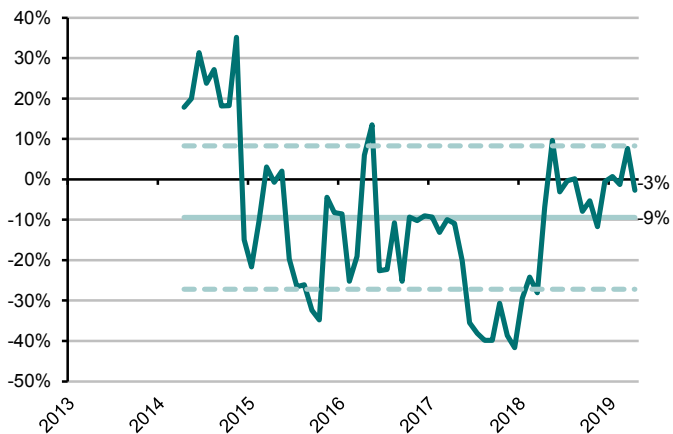
Source: Factset (underlying data), DNB Markets (further calculations)

**Figure 6: IAR Systems P/E LTM**



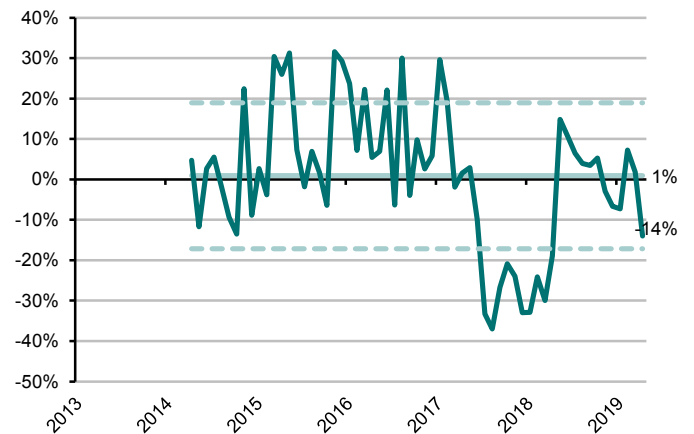
Source: Factset (underlying data), DNB Markets (further calculations)

**Figure 7: Premium/discount EV/EBIT LTM IAR Systems to Nordic software peers**



Source: Factset (underlying data), DNB Markets (further calculations)

**Figure 8: Premium/discount EV/EBIT LTM IAR Systems to embedded software peers**



Source: Factset (underlying data), DNB Markets (further calculations)

3 April 2019

## Summary of positives

### World-leading provider of software development tools and services

Sweden-based IAR Systems is a world-leading provider of software tools and services for embedded systems (a chip containing embedded software) that enable the development of digital products for 46,000+ customers in end-markets, underpinned by growing demand for digital technology. We believe IAR Systems has a resilient business model selling flexible right-to-use licences to access its wholly owned software tool-chain (the IAR Embedded Workbench), which enables close customer relationships, high customer retention, and consistent revenue streams complemented by a royalty-based agreement with world-leading processor vendor Renesas Electronics. The March 2018 acquisition of Secure Thingz (the leading provider of advanced security solutions that help customers to take control of digital products from day one) has made IAR Systems the frontrunner ahead of the paradigm shift associated with security solutions for embedded systems in the Internet of Things (IoT).

### Embedded resilience in a sticky business

We consider IAR Systems' key competitive advantage to be its proprietary technology platform, the IAR Embedded Workbench, which holds a ~50% global market share, as: 1) it is a unique line-up of a complete tool-chain for product developers; 2) being independent, IAR Systems supports a wide range of design architecture, meaning customers can choose the programming environment and tools according to their own needs, regardless of processor or project, which avoids locking customers in to one technical platform; 3) superior quality as its commercial customers cannot compromise on tools' code performance, reliability, user-friendliness, or time-to-market using inferior technologies such as open-source alternatives; 4) it is now a leading participant in embedded systems security, and should be able to leverage its head-start and unique technology to maximise the market potential; and 5) a scaled-up management team with the ability to execute the growth potential in the business, in our view.

### IAR 3.0

IAR Systems has gone through various phases since 2010, having: 1) streamlined the business towards proprietary software, creating a more specialised company; and 2) shifted its project-based business model to scalable licence sales, which has substantially improved margins. In our view, it is now heading into its third phase: the growth story. We believe that IAR 3.0 (our interpretation of IAR Systems' next phase) marks the shift from being a supplier of a compiler to becoming the go-to software tool partner for global names such as Amazon and Renesas Electronics as they position their embedded systems ahead of the Internet of Things (IoT).

### Growing addressable market with the spread of digital technology

The spread of digital technology is driving the market for embedded systems. Thus, the market has numerous underlying drivers that all indicate a continuation of the solid industry growth of the past decade. Global Market Insights estimates a 7% market CAGR until 2023e, and we believe the factors that should affect growth for IAR Systems are likely to be: 1) continued increase in the number (and complexity) of embedded systems driven by IoT; 2) demand for reliable and advanced software tools that offer faster time-to-market and a complete development platform; 3) the automotive opportunity as cars become mobile computing platforms; 4) market consolidation and participants becoming too dominant; and 5) untapped potential in security solutions for embedded systems.

### Security for embedded systems could mark a paradigm shift for IAR Systems

Following the acquisition of Secure Thingz, IAR Systems is now the frontrunner in offering secure embedded systems. We believe IAR Systems identified Secure Thingz as a takeover candidate before the market had valued its demand growth opportunity. The security market for embedded systems is in its inception phase but we expect it to grow rapidly through 2022e as the share of secure new embedded products is set to grow from 4% today to almost 20% by 2022e, according to ABI Research. There are no real competitors in this market yet, and if IAR Systems were to capture considerable market share, we believe it could be a paradigm shift for the company. However, to be prudent, we have included minimal sales from its security offering in our estimates, preferring to see sales materialise.

Its software tools and services enable the development of digital products...

...in end-markets underpinned by growing demand for digital technology

IAR Systems owns the market for software development tools with c50% global market share

Key competitive strengths:

- 1) unique and complete tool-chain
- 2) independence
- 3) high-quality products
- 4) frontrunner in security solutions
- 5) management's ability to achieve its long-term potential

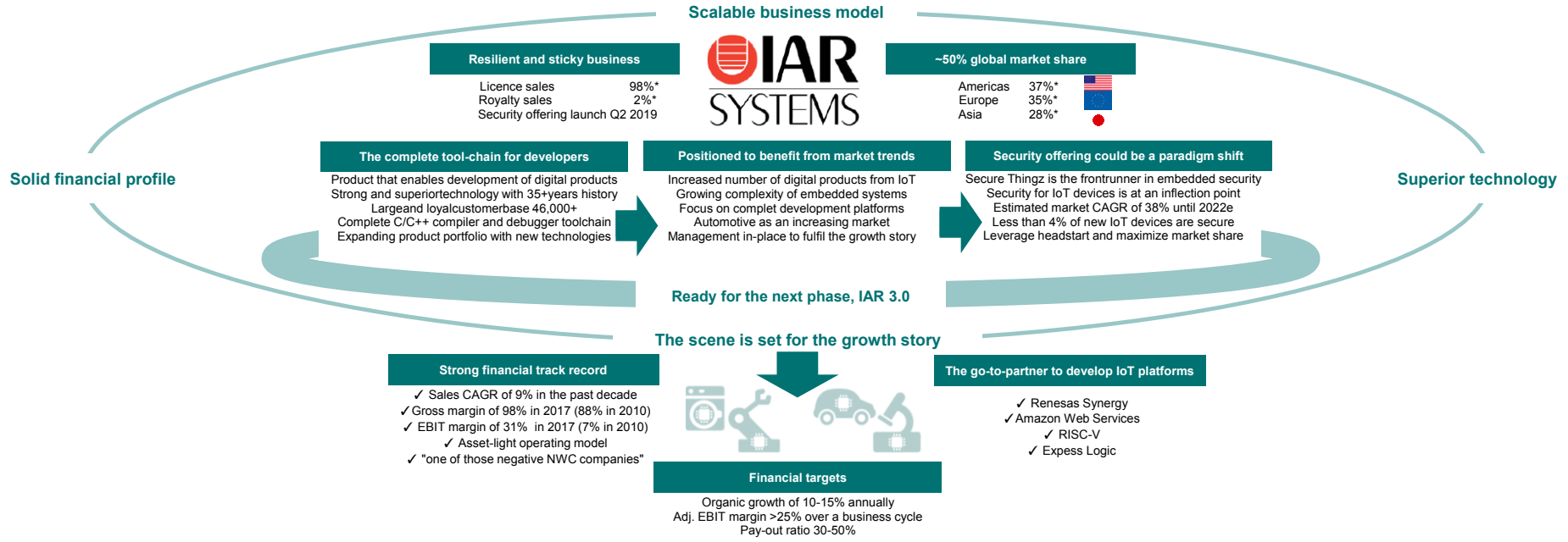
Setting the scene for the growth story

Numerous market drivers indicate a continuation of the solid industry growth

Untapped potential in security offering



Figure 9: IAR Systems' in one picture



Source: Company (underlying data), DNB Markets (compilation)

3 April 2019

**We forecast 2018–2021 sales and EBIT CAGR of 19% and 27%, respectively**

We forecast a 2018–2021 sales CAGR of 19% and EBIT CAGR of 27% based on a strong market outlook underpinned by: 1) an increase in the number (and complexity) of embedded systems; 2) growing demand for reliable and advanced software tools that offer faster time-to-market and complete development platforms; 3) the automotive opportunity, as cars become mobile computing platforms; and 4) royalties from Renesas Electronics. Moreover, we see additional prospects and untapped potential in security solutions for embedded systems.

This should be driven by an 7% organic sales CAGR for its legacy licensing business (99% of 2018 sales) as the aforementioned market drivers should translate into more processors and lines of code, driving demand for software development tools and possibly programmers (user keys) for IAR Systems, as well as a full user-friendly total solution enabling customers to re-use large amounts of code. In addition, increased penetration from existing and new technologies in the IAR Embedded Workbench should drive add-on sales.

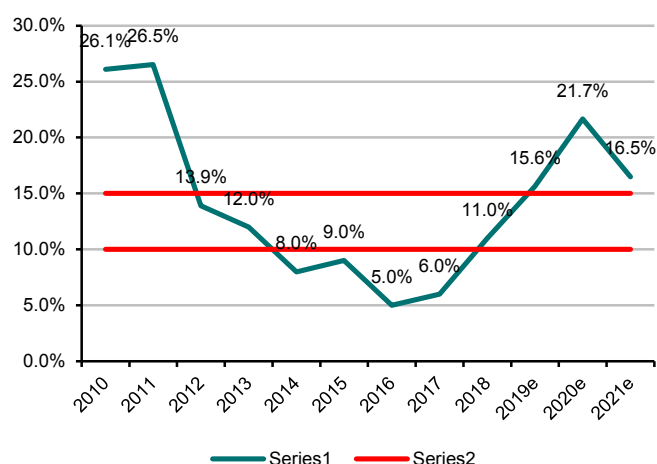
We estimate that revenues stemming from the royalty-based agreement with Renesas Electronics (1%) should contribute 3% organic sales CAGR for IAR Systems until 2021. However, as the dynamics of this agreement have not been disclosed, we take a conservative approach for estimating the revenue impact.

We forecast a 2018–2021 EBIT CAGR of 27%, implying a margin gain from 30% in 2018 to 37% in 2021e, driven by: 1) solid organic volume growth; and 2) ample operational leverage (hurt in 2018 by the integration of Secure Thingz) in 2019–2021e as we believe IAR Systems should continue to benefit from economies of scale due to its large fixed cost base.

Market drivers should create more processors and lines of code, driving demand for software development tools, and a user-friendly total solution enabling customers to re-use code

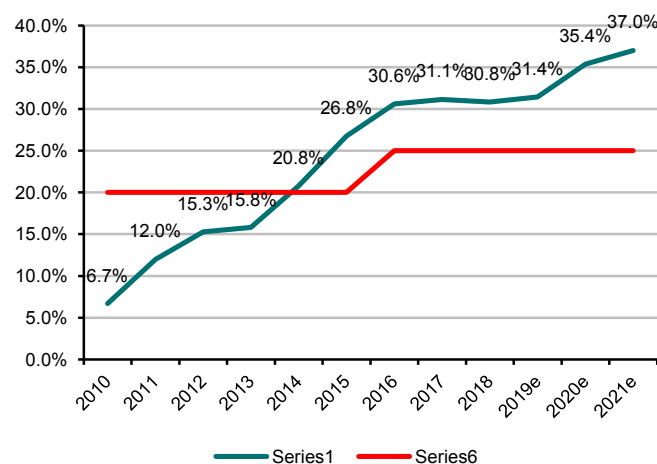
We expect Secure Thingz to contribute to group sales with 10% organic growth CAGR in 2018–2021

**Figure 10: Organic sales growth (2010–2020e)**



Source: DNB Markets (forecasts), company (historical data)

**Figure 11: Adj. EBIT margin**



Source: DNB Markets (forecasts), company (historical data)

**Financial targets**

IAR Systems has three financial targets: 1) average organic growth of 10–15% annually; 2) an adj. EBIT margin in excess of 25% over a business cycle; and 3) a dividend payout of 30–50% of annual net income. Our estimates are above IAR Systems’ throughout our forecast period.

**Figure 12: IAR Systems’ financial targets – reported and DNB Markets’ estimates**

	Reported fiscal years					IAR target	DNB Markets’ estimates		
	2014	2015	2016	2017	2018		2019e	2020e	2021e
Organic growth	8.0%	9.0%	5.0%	6.0%	11.0%	10-15%	15.6%	21.7%	16.5%
EBIT margin	20.8%	26.8%	30.6%	31.1%	30.8%	>25%	31.4%	35.4%	37.0%
Pay-out ratio	149.3%	99.7%	113.3%	79.0%	74.9%	30-50%	65%	52%	43%

Source: DNB Markets (forecasts), company (historical data and targets)

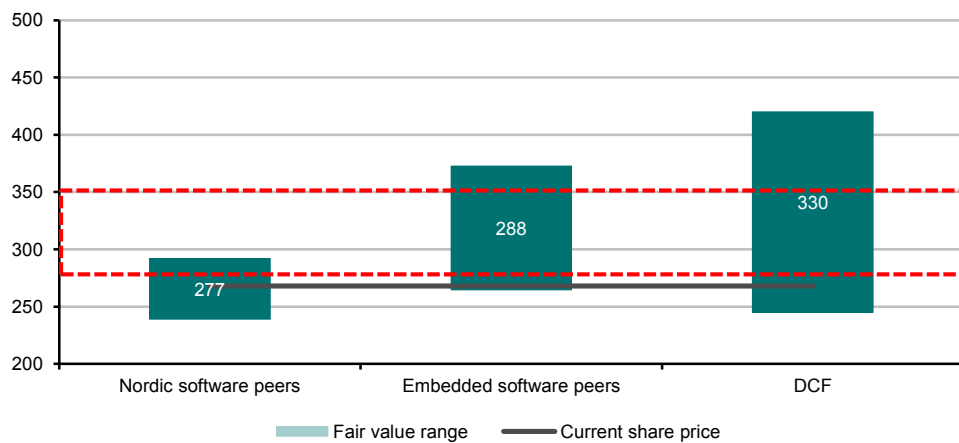
**We calculate a fair value of SEK280–350/share**

Based on our group of Nordic software peers, embedded software peers, and our DCF model, we calculate a fair value of SEK280–350/share. We believe the market has been valuing IAR

Fair value of SEK280–350/share suggests potential upside of 5–30%

Systems relative to Nordic Software peers, whereas in our view embedded software peers better reflect its operating environment, business model, and growth prospects. On the current share price, our estimates suggest a 34x 2019e P/E, 25x EV/EBIT, and 8x EV/sales, while our fair value suggests share price potential upside of 5–30%.

Figure 13: Valuation summary (SEK/share)



Source: DNB Markets

3 April 2019

## Summary of negatives

The key risks that could affect our fair value are: 1) IAR Systems' inability to resurrect the growth story, e.g. if it failed to capture the underlying market growth, or if there was prolonged market consolidation (causing market uncertainty) or delays in key strategic initiatives; 2) market entry from large and well-resourced participants that, until now, have overlooked the potential in software tools for embedded systems; and 3) FX headwinds, as the company is fairly sensitive to fluctuations in the SEK as it does not hedge its currency flows (with >98% of sales from markets outside Sweden but 58% of its cost base in SEK).

- **Failure to resurrect the growth story.** Having reported average local currency growth of 20% in 2010–2013, 9% in 2014–2015, and 6% in 2016–2017, we believe the key risk to the valuation is a failure to resurrect the organic growth story. While we have identified numerous market drivers that should fuel organic growth in our forecast period, an inability to capture these trends, delays in when the factors materialise, or disappointing disclosures regarding the new strategic alliances in royalty fees, licensing structures, etc. could raise questions about the operations and thus the valuation.
- **FX headwinds.** With >98% of sales from markets outside Sweden, while the vast majority of the fixed cost base is denominated in SEK (we estimate ~58%), IAR Systems is fairly sensitive to fluctuations to the SEK. If the SEK were to strengthen by 10% against its most important currencies (USD, EUR, JPY) as well as the GBP and KRW in 2018, we estimate a ~10% FX headwind on sales and a ~30% headwind on 2019 EBIT.
- **Intensified competitive landscape.** While the company holds leading positions across most processor types, it still faces a highly competitive environment, particularly from the independent supplier Green Hills Software and Arm's development tool Kiel. If the competitiveness were to intensify or market growth rates were to abate, there could be pressure on the pricing of software licences (from those not giving it away free) in efforts to recapture growth or gain market share. While we believe the commercial viability of open source names is a limited risk for IAR Systems' offering today, any success for these alternatives could result in reduced licensing revenues for IAR Systems.
- **Continued market consolidation.** The ongoing consolidation trend among processor vendors could last longer than IAR Systems expects. If this continues to create market uncertainty and disrupt IAR Systems' partner network, it could hamper its growth prospects. Moreover, if the acquisitions of embedded software companies continue, it could cap IAR Systems' ability to integrate new technologies to its product offering. If it fails to acquire new technologies or create strategic alliances to integrate into IAR Systems' offering, this could impede its ability to address new market trends that should contribute to growth.
- **Large company entering the market.** While we believe the barriers to entry are considerable, we also believe the attractiveness of this market has been somewhat overlooked by industry giants as they have often acquired development tools companies and given away the products 'free' to reduce costs. As many competitors in the semiconductor industry (particularly processor vendors) but especially global giants such as Google and Amazon are well resourced, it could pose a threat if they were to consider increasing their presence in software development tools.
- **Limited supply of qualified personnel.** In an industry characterised by rapid technological development, it is vital for IAR Systems to continually improve its product offering through innovation. A need for its technology and products to be market-leading means it has to retain qualified employees, particularly in the technological aspects of product development. Failure to respond quickly to technological developments through qualified personnel could hurt its operations.
- **Worsening economic conditions.** A deteriorating global economy would probably cause a downturn in the cyclical semiconductor industry and customers' end-markets, which could affect the number of new microprocessors, and consequently demand for software development tools that programme the chips.

Until now large well-resourced competitors have overlooked the potential in software tools for embedded systems

IAR Systems is sensitive to fluctuations in the SEK

Growth prospects could be hampered by further consolidation

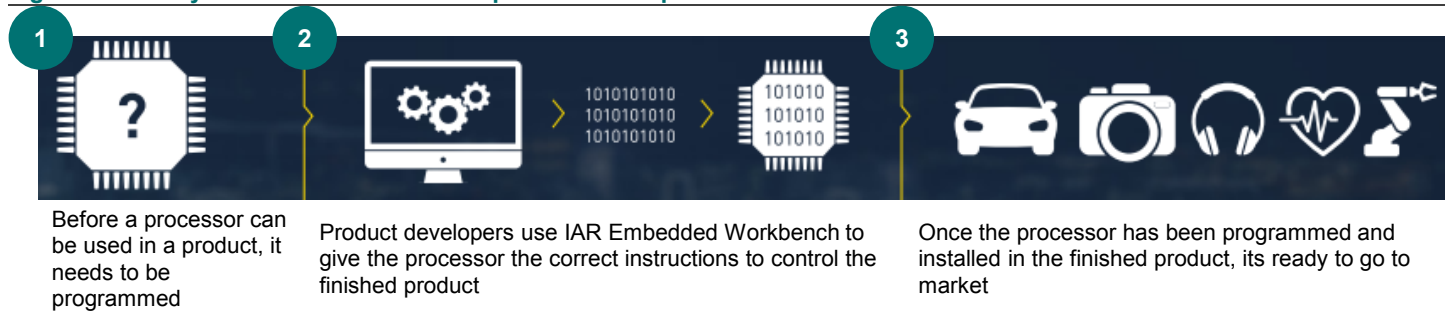
Retaining talented employees is key

## Business overview

Dating back to 1983, IAR Systems is an independent provider of software for the programming of microprocessors in embedded systems (the control function in digital products). Its leading software – the IAR Embedded Workbench – facilitates, quality-assures, and improves the time-to-market of programming instructions in processors so they can fulfil their function in the embedded system for developers of smart products. The customer base of 150,000+ programmers (users) is found mainly in end-markets underpinned by growing demand for digital technology and embedded systems, such as industrial automation, medical technology, telecommunication, consumer electronics, and the automotive industry.

World-leading provider of software for programming processors in embedded systems, which enable the development of digital products

Figure 14: IAR Systems' role in customers' product development



Source: Company

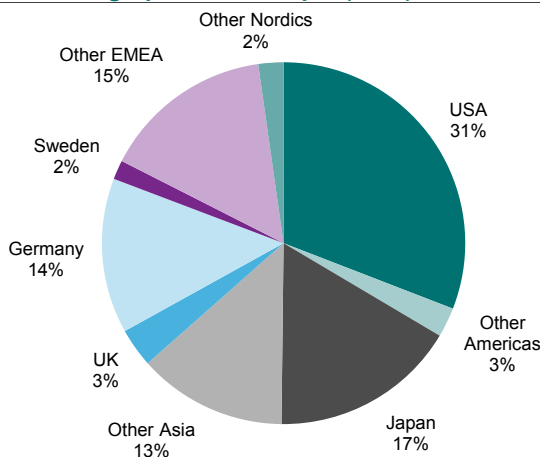
Headquartered in Uppsala (Sweden), the company holds a leading global market share of ~50% with 95%+ of sales stemming from markets outside the Nordics and a market presence in 50+ countries and headcount of 200. With a history of adapting to meet customer demand, IAR Systems' business model is primarily licence-based, where customers pay for a flexible right-to-use licence to access the IAR Embedded Workbench®, giving it attractive and steady revenue streams (~30% recurring revenues). Also, to position itself more towards the Internet of Things (IoT), the company complemented its licence-based model in 2016 with an exclusive royalty-based agreement with world-leading process vendor Renesas Electronics.

50% global market share with 98% licence-based revenues, which are flexible for customers and leverage the number of programmers using its licence...

- **Licence-based revenue (99% of 2018 sales)** based entirely on the number of licence users (perpetual software keys) of the IAR Embedded Workbench sold when a developer programmes a product. The licence cost is ~SEK30,000 (upfront) while the customer can add a support and update agreement for an annual cost of 20% of the licence price.
- **Royalty-based revenue (1%)** based on the number of microprocessors produced in Renesas Synergy series. Unlike the licence-based model, IAR Systems receives revenue throughout the entire production period.

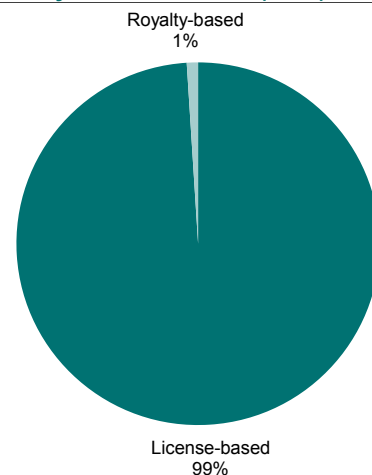
...complemented by royalty-based revenue that leverages the number of chips used in customers' production, which falls straight through to EBIT

Figure 15: Geographical sales split (2018)



Source: Company

Figure 16: Sales by business model (2018)



Source: Company

3 April 2019

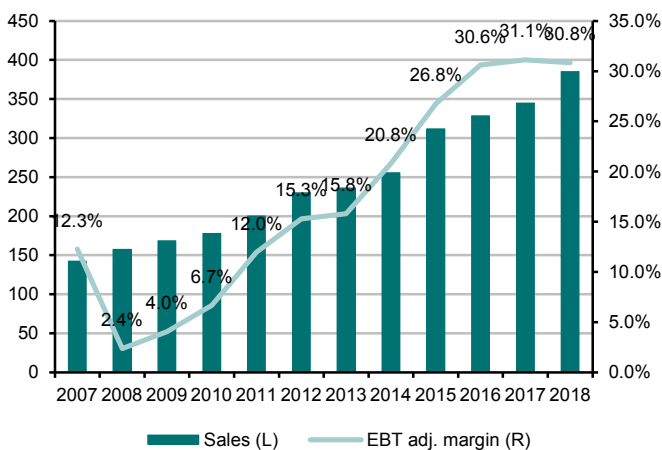
IAR Systems was acquired by IT conglomerate Nocom in 2005. However, by 2010 Nocom (known as Intoi by then) wanted to focus more on proprietary software and create a more specialised company, so it kept only IAR Systems and took on that name.

With 2018 net sales of SEK385m, IAR Systems is 3x larger than the company acquired in 2005. While generating a sales CAGR of 9% over the past 10 years, it was able to significantly boost its underlying profitability from an adj. EBIT margin of 12.3% in 2007 to 30.0% in 2018, which we attribute to: 1) the scalability of its high gross-margin standardised software; 2) more focus on proprietary products; and 3) increased cost efficiency (given the large fixed cost base where personnel costs compose 44% of sales).

From an IT conglomerate to a streamlined proprietary software provider...

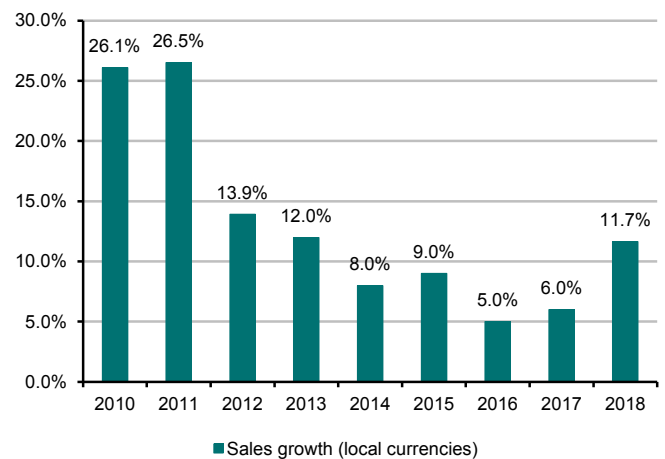
...with profitable growth, sales CAGR of 9% and adj. EBIT CAGR of 40% in the past 10 years

Figure 17: IAR Systems – sales (SEKm) and adj. EBIT margin



Source: Company

Figure 18: IAR Systems – sales growth local currencies



Source: Company

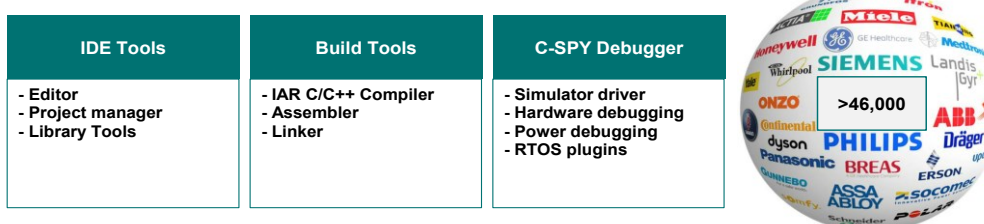
IAR Systems' key competitive advantage in our view is its flagship product, the IAR Embedded Workbench, which is a complete tool-chain for customers. Being independent, the software supports 12,000+ processors for embedded systems from the major process vendors with 8-, 16-, and 32-bit architecture, meaning customers can choose the programming environment and tools according to their own needs regardless of processor or project, which avoids locking customers in to one technical platform. Moreover, it can re-use 70–80% of previously developed code instead of rewriting it (saving time and resources).

Key competitive advantage: cutting-edge wholly owned technology that maximises customer benefits offering a complete solution...

Over the past few years, IAR Systems has expanded its product portfolio and now offers several adjacent products integrated in the IAR Embedded Workbench to optimise the code programming, for instance C-STAT and C-RUN (static and dynamic analysis that quality-assures and strengthens the reliability of the programming), Embedded Trust (security development environment for IoT solutions) through its acquisition of Secure Thingz, as well as support for Amazon FreeRTOS (IoT Microcontroller Operating System). In addition to driving add-on sales, this has – combined with a comprehensive support organisation – translated into impressive customer retention (95% recurring customers) and strengthened IAR Systems' competitiveness. The customer base is very broad as none of the 46,000+ customer organisations account for more than 3% of group sales.

...which, combined with complementary integrated products and comprehensive support means a loyal customer base (95% recurring customers)

Figure 19: IAR Embedded Workbench ® sold to >46,000 customer organisations



Source: Company (information), DNB Markets (graph structuring)

3 April 2019

Forecast changes – P&L

(SEKm)	New			Old			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
Revenues	462	562	655	462	563	656	0	0	-1
Cost of sales	-11	-13	-15	-11	-13	-15	0	0	0
Gross profit	451	549	640	451	549	641	0	0	-1
Operating expenses	-273	-307	-342	-273	-307	-342	0	0	0
EBITDA	178	243	298	178	243	299	0	0	-1
EBITDA adj	178	243	298	178	243	299	0	0	-1
EBITDA margin (%)	38.5	43.1	45.5	38.6	43.2	45.6	-0.1	0.0	-0.1
Depreciation	-4	-5	-6	-4	-5	-6	0	0	0
Amortisation	-29	-39	-49	-29	-39	-49	0	0	0
EBIT	145	199	242	146	199	243	0	0	-1
EBIT adj	145	199	242	146	199	243	0	0	-1
Net financial items	-2	-3	-4	-2	-3	-4	0	0	0
PBT	143	196	238	143	196	239	0	0	-1
Taxes	-36	-49	-60	-36	-49	-60	0	0	0
Minorities	0	0	0	0	0	0	0	0	0
Net profit	107	147	179	108	147	180	0	0	-1
Adjustments to net profit	0	0	0	0	0	0	0	0	0
Net profit adj	107	147	179	108	147	180	0	0	-1
<i>Per share data (SEK)</i>									
EPS	7.68	10.51	12.80	7.70	10.52	12.85	-0.02	-0.01	-0.05
EPS adj	7.68	10.51	12.80	7.70	10.52	12.85	-0.02	-0.01	-0.05
DPS ordinary	5.00	5.50	5.50	5.00	5.50	5.50	0.00	0.00	0.00
DPS	5.00	5.50	5.50	5.00	5.50	5.50	0.00	0.00	0.00
<i>Other key metrics (%)</i>									
Revenue growth	19.9	21.8	16.5	20.0	21.8	16.7	-0.1	0.1	-0.2
EBIT adj growth	22.2	37.1	21.8	22.5	36.8	22.2	-0.3	0.2	-0.4
EPS adj growth	15.2	36.8	21.8	13.9	36.6	22.2	1.3	0.2	-0.4
Avg. number of shares (m)	14	14	14	14	14	14	0	0	0
Capex	-64	-72	-74	-64	-72	-74	0	0	0
OpFCF	114	170	224	115	171	225	-1	0	-1
Working capital	81	122	206	81	123	207	0	-1	-1
NIBD adj	-92	-127	-191	-93	-127	-193	2	1	2

Source: DNB Markets

Forecast changes – By segment and assumptions

(SEKm)	New			Old			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
<b>Assumptions</b>									
Revenue org. % YOY	15.65	21.65	16.50	15.03	20.61	16.23	0.61	1.04	0.27
Structure impact % YOY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency impact % YOY	4.21	0.15	0.00	4.35	0.47	0.00	-0.14	-0.32	0.00

Source: DNB Markets

3 April 2019

Quarterly numbers

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
<b>Revenues</b>	<b>84</b>	<b>88</b>	<b>89</b>	<b>96</b>	<b>98</b>	<b>103</b>	<b>102</b>	<b>109</b>	<b>116</b>	<b>134</b>	<b>136</b>
Cost of sales	-2	-3	-3	-2	-2	-2	-3	-2	-2	-3	-4
<b>Gross profit</b>	<b>82</b>	<b>85</b>	<b>86</b>	<b>94</b>	<b>96</b>	<b>101</b>	<b>99</b>	<b>107</b>	<b>113</b>	<b>131</b>	<b>132</b>
Operating expenses	-49	-53	-51	-64	-58	-63	-61	-65	-69	-78	-71
<b>EBITDA</b>	<b>34</b>	<b>32</b>	<b>35</b>	<b>30</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>42</b>	<b>45</b>	<b>53</b>	<b>61</b>
Depreciation	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Amortisation	-5	-5	-5	-6	-6	-6	-6	-7	-8	-8	-9
<b>EBIT</b>	<b>29</b>	<b>27</b>	<b>30</b>	<b>24</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>34</b>	<b>36</b>	<b>44</b>	<b>51</b>
Net financial items	0	0	0	-2	0	1	-1	-1	0	0	-1
<b>PBT</b>	<b>28</b>	<b>26</b>	<b>29</b>	<b>22</b>	<b>31</b>	<b>32</b>	<b>31</b>	<b>33</b>	<b>36</b>	<b>44</b>	<b>50</b>
Taxes	-8	-7	-6	-6	-4	-10	-8	-8	-9	-11	-12
Minorities	0	0	0	0	0	0	0	0	0	0	0
<b>Net profit</b>	<b>20</b>	<b>20</b>	<b>23</b>	<b>16</b>	<b>27</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>27</b>	<b>33</b>	<b>37</b>
Adjustments to net profit	0	0	0	-4	0	0	0	0	0	0	0
Net profit adj	20	20	23	12	27	22	23	25	27	33	37
Dividend paid	0	0	0	-68	0	0	0	-70	0	0	0
Avg. number of shares (m)	13	13	13	14	14	14	14	14	14	14	14
<i>Per share data (SEK)</i>											
EPS	1.61	1.56	1.81	1.20	1.97	1.60	1.64	1.78	1.91	2.36	2.67
<b>EPS adj</b>	<b>1.61</b>	<b>1.56</b>	<b>1.81</b>	<b>1.57</b>	<b>1.97</b>	<b>1.56</b>	<b>1.64</b>	<b>1.78</b>	<b>1.91</b>	<b>2.36</b>	<b>2.67</b>
DPS ordinary	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
DPS	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
<i>Growth and margins (%)</i>											
Revenues, QOQ growth	-3.0	4.0	1.5	7.5	2.4	5.0	-0.3	6.5	6.1	15.9	1.2
Revenues, YOY growth	3.8	3.1	2.9	10.1	16.3	17.4	15.3	14.2	18.3	30.6	32.6
EPS adj, YOY growth	-6.9	-2.0	21.3	-6.3	22.5	0.1	-9.0	13.0	-3.2	51.0	62.8
Gross margin	97.7	97.0	96.9	98.0	97.9	97.9	96.9	98.0	97.9	97.9	96.9
EBITDA adj margin	40.1	36.4	39.0	31.4	38.6	36.6	37.0	38.5	38.4	39.8	44.6
Depreciation/revenues	-0.7	-0.7	-0.6	-0.6	-0.7	-0.8	-0.7	-0.7	-0.8	-0.9	-0.7
EBIT adj margin	34.0	30.6	33.2	30.2	32.0	30.3	30.4	31.1	31.0	32.9	37.4
Net profit margin	24.1	22.5	25.6	16.9	27.4	21.2	22.4	22.7	23.0	24.5	27.5

Source: Company (historical figures), DNB Markets (estimates)

Adjustments to quarterly numbers

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
<b>EBITDA</b>	<b>34</b>	<b>32</b>	<b>35</b>	<b>30</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>42</b>	<b>45</b>	<b>53</b>	<b>61</b>
EBITDA adj	34	32	35	30	38	38	38	42	45	53	61
<b>EBIT</b>	<b>29</b>	<b>27</b>	<b>30</b>	<b>24</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>34</b>	<b>36</b>	<b>44</b>	<b>51</b>
Other EBIT adjustments	0	0	0	-5	0	0	0	0	0	0	0
EBIT adj	29	27	30	29	31	31	31	34	36	44	51
<b>Net profit</b>	<b>20</b>	<b>20</b>	<b>23</b>	<b>16</b>	<b>27</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>27</b>	<b>33</b>	<b>37</b>
Other EBIT adjustments	0	0	0	-5	0	0	0	0	0	0	0
Tax adjustments	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0	0	0	0	0
Net profit adj	20	20	23	12	27	22	23	25	27	33	37

Source: Company (historical figures), DNB Markets (estimates)



3 April 2019

Quarterly numbers by segment and assumptions

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
<b>Assumptions</b>											
Revenue org. % YOY	8.38	8.47	4.98	8.06	6.65	10.05	6.70	10.16	15.84	28.30	31.91
Structure impact % YOY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency impact % YOY	-4.56	-5.41	-2.08	2.07	9.62	7.31	8.56	4.00	2.46	2.32	0.73

Source: Company (historical figures), DNB Markets (estimates)

Annual P&L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>Revenues</b>	<b>230</b>	<b>236</b>	<b>256</b>	<b>312</b>	<b>328</b>	<b>345</b>	<b>385</b>	<b>462</b>	<b>562</b>	<b>655</b>
Cost of sales	-23	-15	-13	-10	-12	-9	-9	-11	-13	-15
<b>Gross profit</b>	<b>207</b>	<b>222</b>	<b>243</b>	<b>301</b>	<b>316</b>	<b>337</b>	<b>376</b>	<b>451</b>	<b>549</b>	<b>640</b>
Operating expenses	-165	-171	-179	-203	-203	-209	-236	-273	-307	-342
<b>EBITDA</b>	<b>42</b>	<b>51</b>	<b>64</b>	<b>98</b>	<b>113</b>	<b>127</b>	<b>140</b>	<b>178</b>	<b>243</b>	<b>298</b>
Depreciation	-2	-2	-2	-3	-3	-2	-3	-4	-5	-6
Amortisation	-4	-7	-8	-12	-14	-17	-22	-29	-39	-49
<b>EBIT</b>	<b>35</b>	<b>41</b>	<b>53</b>	<b>83</b>	<b>97</b>	<b>107</b>	<b>116</b>	<b>145</b>	<b>199</b>	<b>242</b>
Net financial items	0	0	0	0	0	-2	-2	-2	-3	-4
<b>PBT</b>	<b>35</b>	<b>37</b>	<b>54</b>	<b>83</b>	<b>100</b>	<b>106</b>	<b>117</b>	<b>143</b>	<b>196</b>	<b>238</b>
Taxes	-22	-12	-11	-20	-22	-26	-26	-36	-49	-60
Effective tax rate (%)	63	31	21	24	22	24	22	25	25	25
Minorities	0	0	0	0	0	0	0	0	0	0
<b>Net profit</b>	<b>13</b>	<b>26</b>	<b>42</b>	<b>63</b>	<b>78</b>	<b>80</b>	<b>91</b>	<b>107</b>	<b>147</b>	<b>179</b>
Adjustments to net profit	0	3	0	0	-3	0	-2	0	0	0
Net profit adj	13	29	42	63	75	80	88	107	147	179
Dividend paid	-11	-23	0	-63	-88	-63	-68	-70	-77	-77
Avg. number of shares	11	12	13	13	13	13	14	14	14	14
<i>Per share data (SEK)</i>										
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.68	10.51	12.80
<b>EPS adj</b>	<b>1.14</b>	<b>2.10</b>	<b>3.34</b>	<b>5.02</b>	<b>6.18</b>	<b>6.33</b>	<b>6.67</b>	<b>7.68</b>	<b>10.51</b>	<b>12.80</b>
DPS ordinary	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
DPS	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
<i>Growth and margins (%)</i>										
Revenue growth	14.8	2.7	8.3	21.9	5.4	5.1	11.7	19.9	21.8	16.5
EPS adj growth	-53.2	83.4	59.2	50.2	23.0	2.6	5.3	15.2	36.8	21.8
Gross margin	89.9	93.9	95.0	96.7	96.3	97.5	97.7	97.7	97.7	97.7
EBITDA margin	18.2	21.4	24.9	31.5	34.5	36.9	36.4	38.5	43.1	45.5
EBITDA adj margin	18.2	21.4	24.9	31.5	34.5	36.9	36.4	38.5	43.1	45.5
Depreciation/revenues	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.8	-0.9	-1.0
EBIT margin	15.3	17.5	20.8	26.8	29.4	31.1	30.0	31.4	35.4	37.0
EBIT adj margin	15.3	15.8	20.8	26.8	30.6	31.1	30.8	31.4	35.4	37.0
PBT margin	15.3	15.8	21.0	26.7	30.5	30.6	30.4	31.0	34.8	36.4
<b>Net profit margin</b>	<b>5.6</b>	<b>11.0</b>	<b>16.5</b>	<b>20.3</b>	<b>23.8</b>	<b>23.2</b>	<b>23.6</b>	<b>23.2</b>	<b>26.1</b>	<b>27.3</b>

Source: Company (historical figures), DNB Markets (estimates)

3 April 2019

## Adjustments to annual P&amp;L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>EBITDA</b>	<b>42</b>	<b>51</b>	<b>64</b>	<b>98</b>	<b>113</b>	<b>127</b>	<b>140</b>	<b>178</b>	<b>243</b>	<b>298</b>
EBITDA adj	42	51	64	98	113	127	140	178	243	298
<b>EBIT</b>	<b>35</b>	<b>41</b>	<b>53</b>	<b>83</b>	<b>97</b>	<b>107</b>	<b>116</b>	<b>145</b>	<b>199</b>	<b>242</b>
Other EBIT adjustments	0	4	0	0	-4	0	-3	0	0	0
EBIT adj	35	37	53	83	101	107	119	145	199	242
<b>Net profit</b>	<b>13</b>	<b>26</b>	<b>42</b>	<b>63</b>	<b>78</b>	<b>80</b>	<b>91</b>	<b>107</b>	<b>147</b>	<b>179</b>
Other EBIT adjustments	0	4	0	0	-4	0	-3	0	0	0
Tax adjustments	0	0	0	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0	0	0	0
Net profit adj	13	29	42	63	75	80	88	107	147	179
<i>Per share data (SEK)</i>										
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.68	10.51	12.80
Recommended adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPS adj	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.68	10.51	12.80

Source: Company (historical figures), DNB Markets (estimates)

## Cash flow

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
Net profit	13	26	42	63	78	80	91	107	147	179
Depreciation and amortisation	7	9	10	15	17	20	25	33	44	56
<b>Cash flow from operations (CFO)</b>	<b>38</b>	<b>41</b>	<b>70</b>	<b>99</b>	<b>114</b>	<b>124</b>	<b>93</b>	<b>122</b>	<b>184</b>	<b>215</b>
Capital expenditure	-22	-21	-32	-19	-19	-19	-47	-64	-72	-74
Acquisitions/Investments	0	0	0	0	0	0	-171	0	0	0
Divestments	0	0	0	1	0	0	0	0	0	0
<b>Cash flow from investing (CFI)</b>	<b>-18</b>	<b>-19</b>	<b>-32</b>	<b>-18</b>	<b>-19</b>	<b>-38</b>	<b>-218</b>	<b>-64</b>	<b>-72</b>	<b>-74</b>
<b>Free cash flow (FCF)</b>	<b>20</b>	<b>22</b>	<b>39</b>	<b>80</b>	<b>95</b>	<b>86</b>	<b>-125</b>	<b>58</b>	<b>112</b>	<b>141</b>
Net change in debt	0	0	0	0	0	0	0	0	0	0
Dividends paid	-11	-23	0	-63	-88	-63	-68	-70	-77	-77
Share issue (repurchase)	0	22	-53	0	0	0	172	0	0	0
Other	12	12	0	0	0	0	4	0	0	0
<b>Cash flow from financing (CFF)</b>	<b>1</b>	<b>12</b>	<b>-53</b>	<b>-64</b>	<b>-88</b>	<b>-63</b>	<b>108</b>	<b>-70</b>	<b>-77</b>	<b>-77</b>
<b>Total cash flow (CFO+CFI+CFF)</b>	<b>21</b>	<b>33</b>	<b>-15</b>	<b>17</b>	<b>7</b>	<b>23</b>	<b>-17</b>	<b>-12</b>	<b>35</b>	<b>64</b>
<i>FCFF calculation</i>										
Free cash flow	20	22	39	80	95	86	-125	58	112	141
Less: tax shields/other	0	0	0	0	0	0	0	0	0	0
Less: acquisitions	0	0	0	0	0	0	171	0	0	0
Less: divestments	0	0	0	-1	0	0	0	0	0	0
<b>Growth (%)</b>										
CFO	10.1	6.3	72.7	40.4	15.7	8.5	-25.3	31.9	50.5	17.1
CFI	30.1	-5.5	-66.0	42.3	-3.3	-98.9	-478.5	70.6	-12.9	-2.8
FCF	127.0	6.9	78.7	108.3	18.5	-9.4	-244.7	146.7	91.7	26.4
CFF	-92.2	1866.7	-550.8	-19.5	-39.0	28.5	270.4	-164.8	-10.0	0.0
FCFF	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

Source: Company (historical figures), DNB Markets (estimates)

3 April 2019

Balance sheet

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<b>Assets</b>	<b>324</b>	<b>370</b>	<b>375</b>	<b>399</b>	<b>396</b>	<b>410</b>	<b>722</b>	<b>759</b>	<b>831</b>	<b>935</b>
Inventories	4	3	4	5	6	5	7	8	9	11
Trade receivables	29	34	39	44	48	51	63	79	86	105
Other receivables	14	15	11	20	19	12	38	38	38	38
Current financial assets	3	1	0	0	0	0	0	0	0	0
Cash and cash equivalents	49	82	71	89	99	120	106	95	129	194
<b>Current assets</b>	<b>98</b>	<b>135</b>	<b>124</b>	<b>158</b>	<b>172</b>	<b>187</b>	<b>214</b>	<b>220</b>	<b>263</b>	<b>349</b>
Property, plant and equipment	6	6	8	7	6	6	9	17	25	33
Other intangible assets	152	164	186	192	197	194	484	507	527	538
Deferred tax assets	62	59	51	37	16	3	13	13	13	13
Non-current financial assets	5	5	6	5	5	20	2	2	2	2
<b>Non-current assets</b>	<b>226</b>	<b>235</b>	<b>251</b>	<b>241</b>	<b>224</b>	<b>223</b>	<b>508</b>	<b>539</b>	<b>568</b>	<b>586</b>
<b>Total assets</b>	<b>324</b>	<b>370</b>	<b>375</b>	<b>399</b>	<b>396</b>	<b>410</b>	<b>722</b>	<b>759</b>	<b>831</b>	<b>935</b>
<b>Equity and liabilities</b>	<b>324</b>	<b>370</b>	<b>375</b>	<b>399</b>	<b>396</b>	<b>410</b>	<b>722</b>	<b>759</b>	<b>831</b>	<b>935</b>
<b>Total equity</b>	<b>254</b>	<b>295</b>	<b>289</b>	<b>291</b>	<b>280</b>	<b>290</b>	<b>550</b>	<b>587</b>	<b>657</b>	<b>759</b>
Trade payables	6	6	5	5	5	6	7	7	8	11
Other payables and accruals	53	54	65	84	92	31	131	52	52	52
Short-term debt	1	1	1	1	1	1	2	2	2	2
<b>Total current liabilities</b>	<b>61</b>	<b>61</b>	<b>71</b>	<b>90</b>	<b>99</b>	<b>102</b>	<b>140</b>	<b>140</b>	<b>141</b>	<b>143</b>
Long-term debt	1	1	2	1	2	2	1	1	1	1
Deferred tax liabilities	9	13	15	17	15	14	30	30	30	30
Other non-current liabilities	0	0	0	1	1	2	2	2	2	2
<b>Total non-current liabilities</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>
<b>Total liabilities</b>	<b>70</b>	<b>75</b>	<b>87</b>	<b>108</b>	<b>116</b>	<b>120</b>	<b>172</b>	<b>172</b>	<b>173</b>	<b>175</b>
<b>Total equity and liabilities</b>	<b>324</b>	<b>370</b>	<b>375</b>	<b>399</b>	<b>396</b>	<b>410</b>	<b>722</b>	<b>759</b>	<b>831</b>	<b>935</b>
<i>Key metrics</i>										
Net interest bearing debt	-47	-79	-68	-88	-97	-117	-103	-92	-127	-191

Source: Company (historical figures), DNB Markets (estimates)

3 April 2019

Valuation ratios

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Enterprise value</i>										
Share price (SEK)		39.77	74.75	150.00	206.00	189.00	243.00	263.00	263.00	263.00
Number of shares (m)	11.36	12.34	12.63	12.63	12.63	12.63	13.62	13.97	13.97	13.97
Market capitalisation		491	944	1,895	2,602	2,387	3,310	3,674	3,674	3,674
Net interest bearing debt	-47	-79	-68	-88	-97	-117	-103	-92	-127	-191
Adjustments to NIBD	0	0	0	0	0	0	0	0	0	0
Net interest bearing debt adj	-47	-79	-68	-88	-97	-117	-103	-92	-127	-191
EV		411	876	1,807	2,505	2,270	3,206	3,582	3,547	3,483
EV adj		411	876	1,807	2,505	2,270	3,206	3,582	3,547	3,483
<i>Valuation</i>										
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.68	10.51	12.80
<b>EPS adj</b>	<b>1.14</b>	<b>2.10</b>	<b>3.34</b>	<b>5.02</b>	<b>6.18</b>	<b>6.33</b>	<b>6.67</b>	<b>7.68</b>	<b>10.51</b>	<b>12.80</b>
DPS ordinary	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
DPS	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
P/E		18.9	22.4	29.9	33.4	29.8	36.4	34.2	25.0	20.5
P/E adj		18.9	22.4	29.9	33.4	29.8	36.4	34.2	25.0	20.5
P/B		1.66	3.27	6.51	9.31	8.22	6.02	6.25	5.59	4.84
Average ROE	5.3%	9.4%	14.5%	21.9%	27.3%	28.1%	21.6%	18.9%	23.6%	25.2%
Earnings yield adj		5.3%	4.5%	3.3%	3.0%	3.4%	2.7%	2.9%	4.0%	4.9%
Dividend yield		4.6%	0.0%	3.3%	3.4%	2.6%	2.1%	1.9%	2.1%	2.1%
Free cash flow yield		4.4%	4.1%	4.2%	3.7%	3.6%	-3.8%	1.6%	3.0%	3.8%
EV/SALES		1.74	3.42	5.80	7.63	6.58	8.32	7.76	6.31	5.32
EV/SALES adj		1.74	3.42	5.80	7.63	6.58	8.32	7.76	6.31	5.32
EV/EBITDA		8.1	13.8	18.4	22.1	17.8	22.9	20.1	14.6	11.7
EV/EBITDA adj		8.1	13.8	18.4	22.1	17.8	22.9	20.1	14.6	11.7
EV/EBIT		10.0	16.5	21.7	26.0	21.1	27.7	24.7	17.8	14.4
EV/EBIT adj		11.0	16.5	21.7	24.9	21.1	27.0	24.7	17.8	14.4
EV/capital employed		1.4	3.0	6.2	8.9	6.4	5.8	5.4	4.8	4.1
EV/NOPLAT		13.5	22.2	29.3	35.1	28.6	37.5	33.3	24.1	19.4
EV/OpFCF (taxed)		20.8	50.1	31.6	36.6	28.3	51.4	47.0	29.9	21.7

Source: Company (historical figures), DNB Markets (estimates)

3 April 2019

**Key accounting ratios**

	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Profitability (%)</i>										
ROA	4.1	7.5	11.3	16.4	19.6	19.9	16.0	14.5	18.5	20.3
ROCE	14.0	13.4	18.1	28.5	34.9	33.6	26.1	23.8	28.3	30.7
ROCE after tax	10.4	9.9	13.4	21.1	25.8	24.8	19.3	17.6	20.9	22.7
<i>Return on invested capital (%)</i>										
Net PPE/revenues	2.7	2.6	3.1	2.1	1.9	1.8	2.3	3.7	4.5	5.0
Working capital/revenues	16.4	31.2	20.9	22.0	22.4	24.6	19.3	17.5	21.7	31.4
<i>Cash flow ratios (%)</i>										
FCF/revenues	8.8	9.1	15.1	25.8	29.0	25.0	-32.4	12.6	19.9	21.6
FCF/market capitalisation		4.4	4.1	4.2	3.7	3.6	-3.8	1.6	3.0	3.8
CFO/revenues	16.6	17.2	27.5	31.7	34.8	35.9	24.0	26.5	32.7	32.9
CFO/market capitalisation		8.3	7.4	5.2	4.4	5.2	2.8	3.3	5.0	5.9
CFO/capex	171.0	192.9	217.6	508.8	614.0	652.1	197.9	191.3	254.9	290.6
CFO/current liabilities	63.3	66.8	99.4	110.2	115.8	121.1	66.2	87.5	130.7	150.5
Cash conversion ratio	155.4	83.4	91.5	126.8	122.2	107.9	-137.6	54.3	76.1	79.0
Capex/revenues	9.7	8.9	12.6	6.2	5.7	5.5	12.1	13.8	12.8	11.3
Capex/depreciation	973.9	959.1	1404.3	776.0	744.0	791.7	1800.0	1791.5	1492.6	1184.3
OpFCF margin	8.4	12.5	12.2	25.3	28.8	31.4	24.2	24.7	30.3	34.2
Total payout ratio	85.4	88.0	0.0	99.7	113.3	79.0	74.9	65.1	52.3	43.0
<i>Leverage and solvency (x)</i>										
Net debt/EBITDA	-1.12	-1.57	-1.08	-0.89	-0.85	-0.92	-0.74	-0.52	-0.52	-0.64
Total debt/total capital (BV)	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
LTD / (LTD + equity (MV))		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Cash conversion cycle</i>										
Inventory turnover days	61.1	83.1	104.7	180.7	167.5	223.3	267.7	287.8	249.3	265.1
Receivables turnover days	67.7	75.3	70.9	74.5	74.7	66.2	96.1	92.6	80.7	80.0
Credit period	95.6	143.5	147.1	170.1	158.6	244.8	296.1	238.6	227.4	251.9
Cash conversion cycle	33.3	14.8	28.5	85.1	83.7	44.8	67.7	141.8	102.6	93.3

Source: Company (historical figures), DNB Markets (estimates)

3 April 2019

## Important Information

Company: IAR Systems  
 Coverage by Analyst: Joachim Gunell  
 Date: 03-4-2019

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3 April 2019

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