

China AI surveillance

Ambarella suggested strong AI demand

Ambarella (AMBA) FY4Q21 results shed some lights on the China AI surveillance camera sector. AMBA expects AI SoC to account for >25% of revenue in CY21 (vs. 10% in CY20) with Dahua being a strong customer. Meanwhile, Hikvision preliminary FY4Q20 delivered impressive revenue growth of +20% YoY. We like surveillance camera leader Hikvision (BUY) over Dahua (HOLD) given strong R&D to benefit from AI adoption in non-public security market.

- **Ambarella sees strong AI outlook in 2021.** AMBA derived 60% of revenue from security camera SoC with Hikvision and Dahua contributed around low-teens % of revenue. AMBA started mass production of Computer Vision AI SoC (CV) in late CY2019 and revenue contribution >10% in CY2020. In CY2021, company guided CV to be >25% of total revenue. By end of Apr 2021, AMBA will have shipped more than 2mn CV SoCs on a cumulative basis (1.7mn related to security camera). We estimate that security camera AI penetration is less than 5% in 2020 (assuming AMBA 20% market share, global surveillance camera annual shipment >300m units). There is still large room for growth when AI use cases expand to non-public security.
- **AMBA CV only penetrated into Dahua but not Hikvision.** Dahua began mass production of multiple CV products using AMBA chipsets in FY4Q21. However, AMBA has not received any design wins from Hikvision on the CV side yet. We believe it suggested 1) Hikvision was able to pile up more Hisilicon AI chips and 2) Hikvision is trying on non-US chipsets such as SigmaStar (subsidiary of Mediatek) and Novatek, in our view.
- **R&D gap resulted in growth and margin difference between Hikvision and Dahua.** Hikvision and Dahua announced preliminary FY20 results on 26 Feb. Hikvision FY4Q20 revenue delivered impressive sequential improvement of +20% YoY to RMB21.4bn vs. Dahua +6% YoY to RMB10.3bn. As Dahua R&D size is halved of Hikvision (FY19 Dahua R&D RMB2.8bn vs. Hikvision RMB5.5bn), Dahua is likely to face slower growth (weaker AI) and lower margins (longer time to transit to use non-US chipsets).
- **Prefer Hikvision (BUY) over Dahua (HOLD).** We largely maintained Hikvision FY20-22E estimates but lowered Dahua FY20-22E net profit by -7% to -12% to reflect slower growth, lower gross margin and higher R&D. We slightly lowered Hikvision target price to RMB73.78 (prior RMB74.28) on unchanged 36x FY22 P/E. We cut Dahua target price to RMB25.35 (prior RMB26.72) on unchanged 17x FY22 P/E. We expect valuation gap between Hikvision and Dahua will continue to widen.

Valuation Table

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/down-side (%)	P/E FY21E	P/E FY22E	ROE FY21E	ROE FY22E
Hikvision	002415 CH	BUY	86,258	59.68	73.78	24%	34.7	29.1	29.9	34.3
Dahua	002236 CH	HOLD	10,737	23.17	25.35	9%	18.6	15.5	17.5	17.9
China Transinfo	002373 CH	NR	4,207	17.20	N/A	20.28	20.3	16.2	11.4	12.7
Thunisoft	300271 CH	NR	2,395	18.98	N/A	19.96	20.0	14.9	10.4	12.4
iFlytek	002230 CH	NR	17,032	49.49	N/A	72.25	72.2	53.2	11.5	13.7
Cambricon Tech	688256 CH	NR	9,637	155.70	N/A	N/A	N/A	N/A	-7.4	-5.0

Source: Company data, CMBIS estimates

OUTPERFORM
(Maintain)

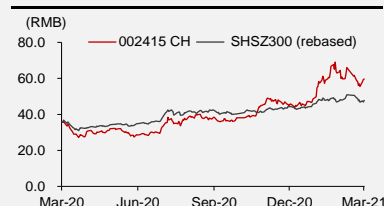
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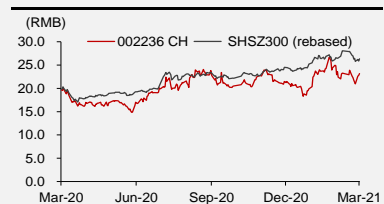
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Hikvision 12-mth Price Performance



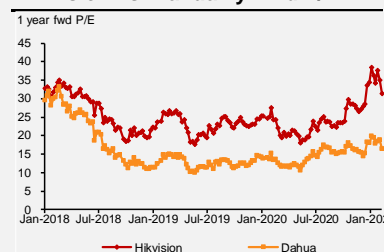
Source: Bloomberg, CMBIS

Dahua 12-mth Price Performance



Source: Bloomberg, CMBIS

Hikvision vs. Dahua 1yr fwd P/E



Source: Bloomberg, CMBIS

Related Reports

China software & IT services - New Infrastructure for digital transformation; Initiate at Outperform - 29 Jan 2021

Ambarella FY4Q21 results suggested strong AI demand

Highlights from management comments on security camera and computer vision demand

■ FY4Q21

- Revenue was at US\$62.1mn (+9% YoY, +11% QoQ), 4% above high-end guidance as number of **computer vision (CV) production doubling QoQ**.
- Security camera sequential growth was 20%** and began to grow again on YoY basis after the trough in FY3Q21.
- Dahua commenced mass production of multiple CV products in FY4Q21.**
- Hikvision and Dahua accounted for low-teens % of FY4Q21 revenue.

■ FY21

- Revenue was at US\$223m (-3% YoY), **CV contribution >10% of revenue**.
- Security camera revenue = 60% of FY21 revenue.

■ FY22E outlook

- FY1Q22 security camera up in the low to mid-teens sequentially.
- By end of FY1Q22, Ambarella will have shipped more than 2mn CV SoCs** on a cumulative basis (1.7mn CV SoCs shipped into the security camera market).
- CV to be >25% of total revenue.**
- Dahua will continue to be a strong customer as inventory clean-up completed and CV revenue is ramping up.
- Hikvision will be a smaller customer moving forward and Ambarella has not gotten design wins from Hikvision on the CV side.

Figure 1: AMBA FY4Q21 results review

CY	Jan-20	Oct-20	Jan-21			Jan-20	Jan-21	
FY	4Q20	3Q21	4Q21	YoY	QoQ	FY20	FY21	YoY
US\$m	actual	actual	actual			actual	actual	
Revenue	57.2	56.1	62.1	9%	11%	228.7	223.0	-3%
Gross profit	33.3	34.8	37.8	13%	9%	132.7	135.6	2%
...Gross margin	58.2%	62.0%	60.8%	2.6%	-1.2%	58.0%	60.8%	2.8%
Non-GAAP net profit	4.9	3.3	5.1	6%	56%	23.7	11.9	-50%
...Net margin	8.5%	5.9%	8.3%	-0.2%	2.4%	10.3%	5.3%	-5.0%

Source: Company data

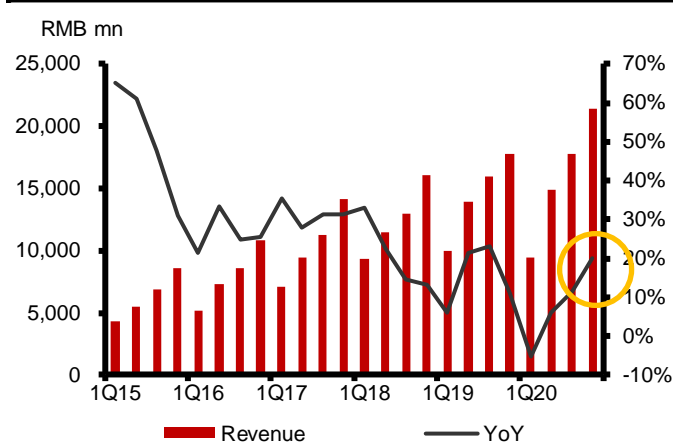
Hikvision and Dahua R&D gap

We maintain our view that the gap between Hikvision and Dahua is widening. The difference in R&D capabilities will become more obvious when 1) growth is driven by enterprise AI more than traditional public security and 2) supply chain undergoing de-Americanization that product redesign is necessary.

We believe the revenue growth and margin gap between Hikvision and Dahua recorded in FY4Q20 reaffirmed our view.

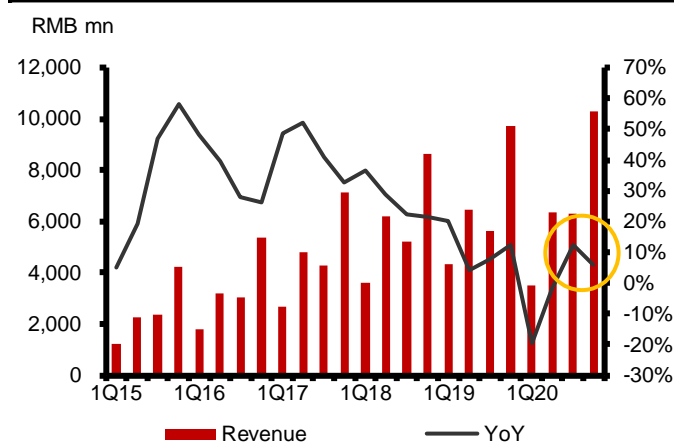
- Hikvision FY4Q20 recorded revenue of RMB21,406m **(+20% YoY)** compared to Dahua FY4Q20 revenue growth of RMB10,301m **(+6% YoY)**.
- Hikvision FY4Q20 net margin was **23.2%**, compared to Dahua of **15.3%**.

Figure 2: Hikvision 4Q20 revenue back to +20% YoY



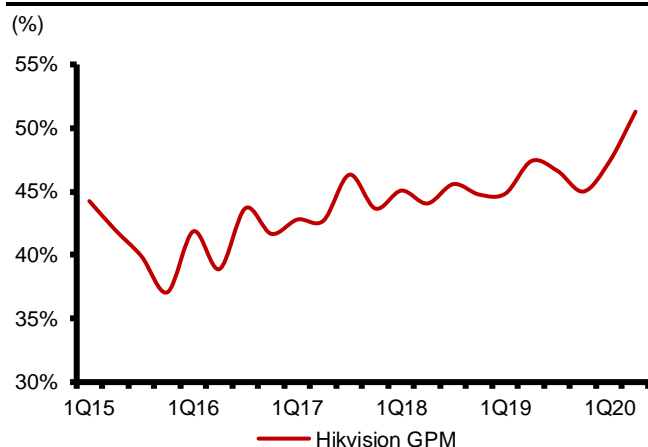
Source: Company data, CMBIS estimates

Figure 3: Dahua revenue growth



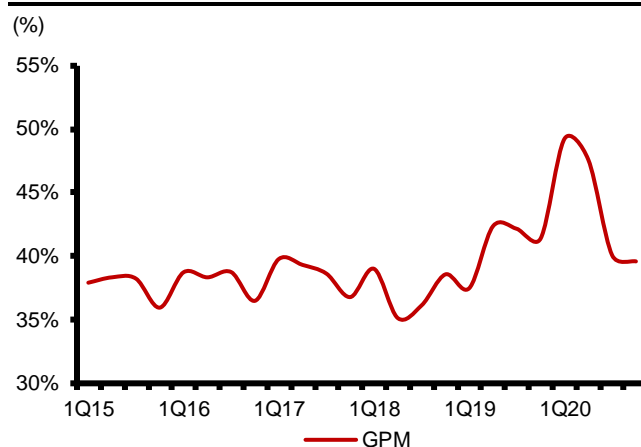
Source: Company data, CMBIS estimates

Figure 4: Hikvision GPM continues to improve

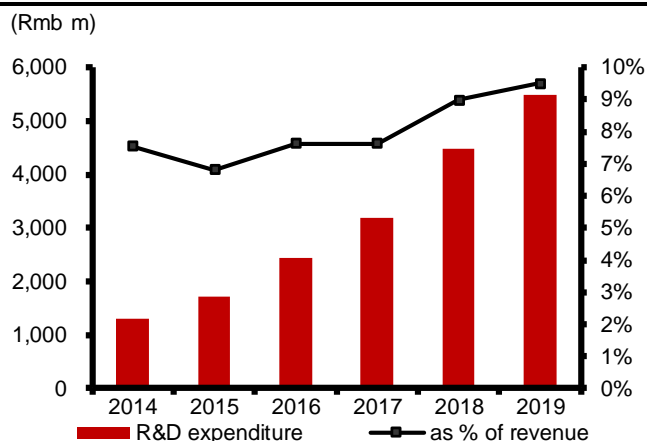


Source: Company data, CMBIS estimates

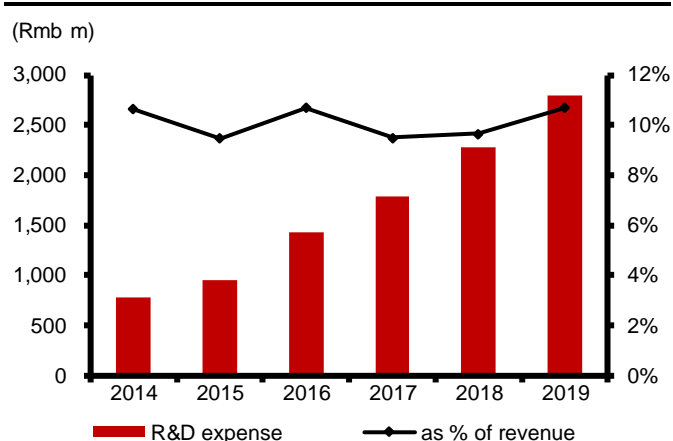
Figure 5: Dahua gross margin



Source: Company data, CMBIS estimates

Figure 6: Hikvision R&D expense and ratio

Source: Company data, CMBIS estimates

Figure 7: Dahua R&D expense and ratio

Source: Company data, CMBIS estimates

Figure 8: Hikvision preliminary FY4Q21 results

	Dec-19 4Q19	Sep-20 3Q20	Dec-20 4Q20			Dec-20 4Q20	versus	Dec-20 4Q20	versus
RMB mn	actual	actual	actual	YoY	QoQ	CMBI	CMBI	consensus	consensus
Revenue	17,819	17,750	21,406	20%	21%	20,387	5%	20,573	4%
PBT	4,267	4,107	5,532	30%	35%	4,756	16%	5,532	0%
Net income	4,387	3,815	4,963	13%	30%	4,249	17%	4,606	8%
Net margin	24.6%	21.5%	23.2%	-1.4 pct pts	1.7 pct pts	20.8%	2.3 pct pts	22.4%	0.8 pct pts
EPS RMB	0.47	0.41	0.54	16%	33%	0.45	19%	0.50	9%

Source: Company data, Bloomberg consensus

Figure 9: Dahua preliminary FY4Q21 results

	Dec-19 4Q19	Sep-20 3Q20	Dec-20 4Q20			Dec-20 4Q20	versus	Dec-20 4Q20	versus
RMB mn	actual	actual	actual	YoY	QoQ	CMBI	CMBI	consensus	consensus
Revenue	9,721	6,328	10,301	6%	63%	11,649	-12%	10,695	-4%
PBT	1,545	1,469	1,335	-14%	-9%	1,915	-30%	1,421	-6%
Net income	1,311	1,456	1,576	20%	8%	1,708	-8%	1,371	15%
Net margin	13.5%	23.0%	15.3%	1.8 pct pts	-7.7 pct pts	14.7%	0.6 pct pts	12.8%	2.5 pct pts
EPS RMB	0.44	0.49	0.43	-2%	-12%	0.57	-25%	0.37	16%

Source: Company data, Bloomberg consensus

Earnings revision

Hikvision

We raised FY20E revenue/net profit by 2%/ 5% to reflect the better-than-expected preliminary results. We largely maintained our FY21-22E estimates.

Figure 10: Hikvision earnings revision

RMB mn	2020E			2021E			2022E		
	New	Old	Diff	New	Old	Diff	New	Old	Diff
Sales	63,430	62,409	2%	74,352	74,841	-1%	86,091	87,508	-2%
Gross profit	30,174	29,245	3%	35,147	35,182	-0%	40,811	41,292	-1%
OP Profit	13,464	12,718	6%	15,842	15,686	1%	19,395	19,424	-0%
PBT	15,661	14,865	5%	18,037	17,890	1%	21,491	21,520	-0%
Net profit	13,782	13,071	5%	16,073	15,942	1%	19,151	19,177	0%
EPS	1.47	1.40	5%	1.72	1.71	1%	2.05	2.05	-0%
Margins									
GM	47.6%	46.9%	71 bps	47.3%	47.0%	26 bps	47.4%	47.2%	22 bps
OPM	21.2%	20.4%	85 bps	21.3%	21.0%	35 bps	22.5%	22.2%	33 bps
PBT margin	24.7%	23.8%	87 bps	24.3%	23.9%	35 bps	25.0%	24.6%	37 bps
Net margin	21.7%	20.9%	78 bps	21.6%	21.3%	32 bps	22.2%	21.9%	33 bps

Source: Company data, CMBIS estimates

Figure 11: Hikvision CMBIS estimates vs. consensus

RMB mn	2020E			2021E			2022E		
	CMBIS	Street	Diff	CMBIS	Street	Diff	CMBIS	Street	Diff
Sales	63,430	62,912	1%	74,352	75,498	-2%	86,091	87,430	-2%
Gross profit	30,174	29,519	2%	35,147	35,120	0%	40,811	40,959	-0%
OP Profit	13,464	15,202	-11%	15,842	18,358	-14%	19,395	22,164	-12%
PBT	15,661	15,139	3%	18,037	18,538	-3%	21,491	22,171	-3%
Net profit	13,782	13,466	2%	16,073	16,604	-3%	19,151	19,742	-3%
EPS	1.47	1.45	2%	1.72	1.77	-3%	2.05	2.12	-3%
Margins									
GM	47.6%	46.9%	65 bps	47.3%	46.5%	75 bps	47.4%	46.8%	56 bps
OPM	21.2%	24.2%	-294 bps	21.3%	24.3%	-301 bps	22.5%	25.4%	-282 bps
PBT margin	24.7%	24.1%	63 bps	24.3%	24.6%	-29 bps	25.0%	25.4%	-40 bps
Net margin	21.7%	21.4%	32 bps	21.6%	22.0%	-38 bps	22.2%	22.6%	-34 bps

Source: Company data, CMBIS estimates, Bloomberg

Dahua

We cut FY20E revenue/ net profit by -5%/ -12% to reflect weaker-than-expected 4Q20 top-line, lower gross margin, one-off forex loss and bad debt impairment. We further cut FY21 and FY22E net profit by -8%/ -7% to reflect lower gross margin (using higher ASP Ambarella's chipsets) and higher R&D (more expense amid product redesign).

Figure 12: Dahua earnings revision

RMB mn	2020E			2021E			2022E		
	New	Old	Diff	New	Old	Diff	New	Old	Diff
Sales	26,463	27,902	-5%	30,481	33,058	-8%	34,514	38,662	-11%
Gross profit	11,347	11,803	-4%	12,786	13,763	-7%	14,619	16,144	-9%
OP Profit	3,114	4,170	-25%	3,716	4,886	-24%	4,548	5,839	-22%
PBT	4,304	4,475	-4%	4,089	4,928	-17%	4,918	5,871	-16%
Net profit	3,980	4,034	-1%	3,731	4,463	-16%	4,468	5,326	-16%
EPS	1.3	1.4	-3%	1.2	1.5	-18%	1.5	1.8	-18%
Margins									
GM	42.9%	42.3%	57 bps	41.9%	41.6%	32 bps	42.4%	41.8%	60 bps
OPM	11.8%	14.9%	-318 bps	12.2%	14.8%	-259 bps	13.2%	15.1%	-192 bps
PBT margin	16.3%	16.0%	23 bps	13.4%	14.9%	-149 bps	14.2%	15.2%	-93 bps
Net margin	15.0%	14.5%	58 bps	12.2%	13.5%	-126 bps	12.9%	13.8%	-83 bps

Source: Company data, CMBIS estimates

Figure 13: Dahua CMBI estimates vs. consensus

RMB mn	4Q20E			1Q21E			2Q21E		
	CMBIS	Street	Diff	CMBIS	Street	Diff	CMBIS	Street	Diff
Sales	10,297	10,695	-4%	4,923	4,497	9%	8,154	7,799	5%
Gross profit	4,074	4,227	-4%	2,091	1,891	11%	3,456	3,306	5%
OP Profit	1,390	1,816	-23%	467	402	16%	1,206	1,158	4%
PBT	1,295	1,421	-9%	619	296	109%	1,255	1,209	4%
Net profit	1,155	1,371	-16%	575	398	45%	1,085	1,050	3%
EPS	0.4	0.4	3%	0.2	0.2	-15%	0.4	0.3	4%
Margins									
GM	40%	40%	4 bps	42%	42%	42 bps	42%	42%	0 bps
OPM	13%	17%	-348 bps	9%	9%	54 bps	15%	15%	-6 bps
PBT margin	13%	13%	-71 bps	13%	7%	599 bps	15%	16%	-11 bps
Net margin	11%	13%	-160 bps	12%	9%	283 bps	13%	13%	-15 bps

Source: Company data, CMBIS estimates, Bloomberg

Valuation

Hikvision (002145 CH, BUY, TP RMB73.78)

We slightly lowered our target price to RMB73.78 (prior RMB74.28), based on unchanged 36x FY22 P/E, 50% above its 3-year mean. We believe Hikvision deserves re-rating as supply chain risk is mitigated after two years of product re-design, and new growth drivers (AI) in enterprise segment is emerging. Also, Hikvision announced plan to spin-off its smart home business (Ezviz Network) on STAR board. We believe the spin-off could provide new financing channel to support IoT/ AI R&D.

Dahua (002236 CH, HOLD, TP RMB25.35)

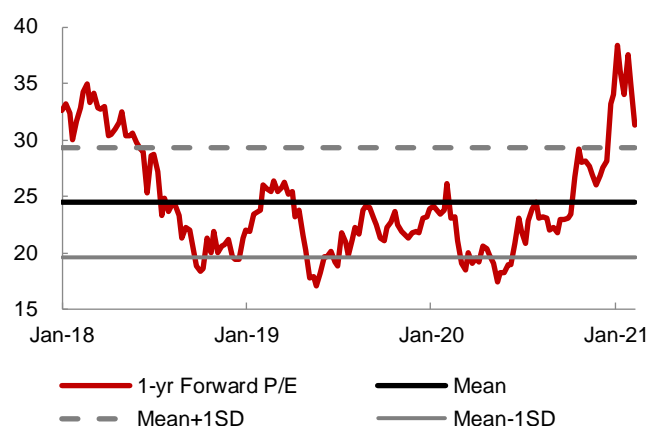
We cut our target price to RMB25.35 (prior RMB26.72), based on unchanged 17x FY22 P/E, in-line with its 3 year mean. We are less positive on Dahua during supply chain transition given weaker R&D in Hikvision. We expect Hikvision valuation gap will continue to widen.

Figure 14: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	P/E FY21E	P/E FY22E	ROE FY21E	ROE FY22E	Sales CAGR FY19-22E	EPS CAGR FY19-22E
Hikvision	002415 CH	BUY	86,258	59.68	73.78	34.7	29.1	29.9	34.3	14%	16%
Dahua	002236 CH	HOLD	10,737	23.17	25.35	18.6	15.5	17.5	17.9	10%	12%
China Transinfo	002373 CH	NR	4,207	17.20	N/A	20.3	16.2	11.4	12.7	21%	15%
Thunisoft	300271 CH	NR	2,395	18.98	N/A	20.0	14.9	10.4	12.4	29%	20%
iFlytek	002230 CH	NR	17,032	49.49	N/A	72.2	53.2	11.5	13.7	28%	32%
Cambricon Tech	688256 CH	NR	9,637	155.70	N/A	N/A	N/A	-7.4	-5.0	39%	-41%
Mean						33.2	25.8	12.2	14.3	23%	9%
Median						20.3	16.2	11.5	13.2	13.2	24%

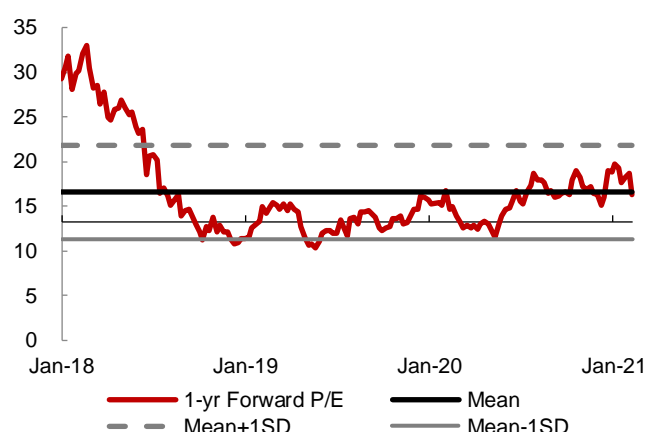
Source: Bloomberg, CMBIS

Figure 15: Hikvision 12M forward P/E chart



Source: Company data, CMBIS, Bloomberg

Figure 16: Dahua 12M forward P/E chart



Source: Company data, CMBIS, Bloomberg

Financial Summary – Hikvision (002415 CH)

Income statement

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	49,837	57,658	63,430	74,352	86,091
Cost of sales	(27,483)	(31,140)	(33,256)	(39,205)	(45,279)
Gross profit	22,354	26,518	30,174	35,147	40,811
Selling exp	(5,893)	(7,257)	(7,525)	(8,996)	(9,811)
Admin exp	(1,376)	(1,822)	(1,956)	(2,303)	(2,530)
R&D exp	(4,483)	(5,484)	(6,775)	(7,497)	(8,502)
Other operating exp.	(418)	(417)	(455)	(509)	(573)
Operating profit	10,184	11,538	13,464	15,842	19,395
Finance costs	424	640	239	252	117
Other non-oper exp.	1,830	1,578	1,958	1,943	1,979
Pre-tax profit	12,438	13,755	15,661	18,037	21,491
Income tax expense	(1,057)	(1,290)	(1,677)	(1,714)	(2,042)
Minority interests	(29)	(51)	(202)	(251)	(298)
Net profit to S/H	11,353	12,415	13,782	16,073	19,151

Cash flow summary

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Net profit	11,353	12,415	13,399	16,073	19,151
Depreciation/amortization	480	699	973	1,065	1,178
Change in working capital	3,616	(7,153)	(9,850)	(3,033)	(2,797)
Others	(6,334)	1,807	(198)	251	298
Net cash from operating	9,114	7,768	4,324	14,356	17,830
Capex	(2,056)	(1,927)	(2,049)	(2,070)	(1,995)
Other	3,507	4	(198)	0	0
Net cash from investing	1,451	(1,923)	(2,247)	(2,070)	(1,995)
Net borrowings	1,748	187	2,499	1,327	1,105
Dividend paid	(4,614)	(5,609)	(13,083)	(14,121)	(16,938)
Other	2,150	(14)	6,411	(251)	(298)
Net cash from financing	(716)	(5,436)	(4,173)	(13,044)	(16,132)
Net change in cash	9,849	408	(2,096)	(759)	(297)
Cash at beginning of the year	16,468	26,552	27,072	24,558	23,799
Exchange difference	235	111	(419)	0	0
Cash at the end of the year	26,552	27,072	24,558	23,799	23,502

Balance sheet

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Current assets	53,627	64,026	66,944	71,794	80,194
Cash & equivalents	26,552	27,072	24,558	23,799	23,502
Account receivables	20,236	23,146	28,154	31,814	37,224
Inventory	5,725	11,268	11,731	12,133	15,483
Other current assets	1,113	2,540	2,501	4,048	3,985
Non-current assets	9,858	11,332	13,297	14,302	15,119
PPE	5,499	6,423	7,366	8,371	9,188
Intangible assets	1,082	1,407	1,546	1,546	1,546
Other non-current assets	3,277	3,502	4,384	4,384	4,384
Total assets	63,485	75,358	80,241	86,096	95,313
Current liabilities	24,709	23,521	20,414	23,750	30,197
ST borrowings	6,644	2,726	4,041	4,802	5,349
Account payables	10,765	13,940	8,039	9,350	13,683
Accrued expense	6,935	5,941	7,039	8,088	9,155
Other current liabilities	365	914	1,295	1,510	2,010
Non-current liabilities	811	6,364	6,512	7,079	7,636
LT borrowings	440	4,604	4,855	5,422	5,979
Other non-current liabilities	371	1,760	1,657	1,657	1,657
Total liabilities	25,520	29,885	26,926	30,829	37,833
Share capital	9,227	9,345	9,345	9,345	9,345
Capital surplus	1,956	4,127	5,058	5,058	5,058
Retained earnings	26,821	33,634	40,493	42,445	44,658
Other reserves	(415)	(2,202)	(2,135)	(2,135)	(2,135)
Minority interest	374	569	554	554	554
Total equity	37,965	45,473	53,315	55,267	57,480
Total liabilities and equity	63,485	75,358	80,241	86,096	95,313

Key ratios

YE 31 Dec	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue mix					
Front-end equipment	48%	47%	49%	48%	47%
Back-end equipment	14%	13%	11%	11%	11%
Central control equipment	15%	15%	14%	14%	14%
New Stuff	6%	8%	0%	0%	0%
Construction	5%	2%	1%	1%	1%
Others	13%	15%	15%	14%	14%
Growth (%)					
Revenue	19%	16%	10%	17%	16%
Operating profit	8%	13%	17%	18%	22%
EPS	21%	8%	11%	17%	19%
Profit & loss ratio (%)					
Gross margin	44.9%	46.0%	47.6%	47.3%	47.4%
Operating margin	20.4%	20.0%	21.2%	21.3%	22.5%
Net profit margin	22.8%	21.5%	21.7%	21.6%	22.2%
Balance sheet ratio					
Current ratio (x)	2.17	2.72	3.28	3.02	2.66
Receivable turnover days	145	137	148	147	146
Inventory turnover days	39	54	66	59	59
Payable turnover days	143	163	88	87	110
Net debt to equity	net cash	net cash	net cash	net cash	net cash
Profitability (%)					
ROE	33.4%	30.1%	28.2%	29.9%	34.3%
ROIC	48.5%	45.1%	36.0%	34.7%	38.9%
Per share data (RMB)					
EPS (RMB)	1.23	1.33	1.47	1.72	2.05
DPS (RMB)	0.50	0.60	1.40	1.51	1.81
BVPS (RMB)	4.07	4.81	5.65	5.85	6.09

Source: Company data, CMBIS estimates

Financial Summary – Dahua (002236 CH)

Income statement

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	23,666	26,149	26,463	30,481	34,514
Cost of sales	(14,871)	(15,396)	(15,117)	(17,695)	(19,895)
Gross profit	8,795	10,753	11,347	12,786	14,619
Selling exp	(3,365)	(3,953)	(4,243)	(4,648)	(5,165)
Admin exp	(633)	(741)	(749)	(823)	(914)
R&D exp	(2,284)	(2,794)	(3,044)	(3,384)	(3,737)
Other operating exp.	(192)	(183)	(197)	(216)	(254)
Operating profit	2,320	3,083	3,114	3,716	4,548
Finance costs	(29)	33	(309)	(42)	(36)
Other non-oper exp.	482	383	1,499	415	405
Pre-tax profit	2,773	3,499	4,304	4,089	4,918
Income tax expense	(179)	(338)	(334)	(371)	(467)
Minority interests	(65)	27	10	14	17
Net profit to S/H	2,529	3,188	3,980	3,731	4,468

Cash flow summary

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Net profit	2,529	3,188	3,980	3,731	4,468
Depreciation/amortization	239	297	337	337	337
Change in working capital	(371)	(28)	(2,365)	(2,640)	(2,032)
Others	(1,442)	(1,857)	554	(14)	(17)
Net cash from operating	955	1,601	2,507	1,414	2,756
Capex	(552)	(531)	(573)	(457)	(518)
Other	(195)	(309)	138	0	0
Net cash from investing	(747)	(840)	(434)	(457)	(518)
Net borrowings	44	(1,462)	1,325	263	142
Dividend paid	(580)	(300)	(399)	(499)	(468)
Other	820	(120)	64	14	17
Net cash from financing	284	(1,882)	990	(222)	(308)
Net change in cash	493	(1,121)	3,062	735	1,930
Cash at beginning of the year	3,613	4,160	3,084	6,061	6,796
Exchange difference	54	45	(86)	0	0
Cash at the end of the year	4,160	3,084	6,061	6,796	8,726

Balance sheet

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Current assets	21,279	22,975	28,831	32,173	37,297
Cash & equivalents	4,160	3,084	6,061	6,796	8,726
Account receivables	12,577	13,241	13,944	16,495	18,242
Inventory	3,036	3,840	4,519	4,604	6,001
Other current assets	1,506	2,810	4,307	4,279	4,328
Non-current assets	5,072	6,589	6,861	6,981	7,162
PPE	1,634	1,958	2,527	2,721	2,977
Intangible assets	519	492	465	390	316
Other non-current assets	2,919	4,139	3,870	3,870	3,870
Total assets	26,351	29,565	35,692	39,155	44,460
Current liabilities	12,567	12,531	13,912	13,879	15,042
ST borrowings	1,877	427	1,027	1,027	1,027
Account payables	7,461	8,098	8,147	8,021	8,753
Accrued expense	3,119	3,935	3,008	3,101	3,532
Other current liabilities	109	71	1,729	1,729	1,729
Non-current liabilities	881	1,057	1,712	1,975	2,117
LT borrowings	179	154	879	1,141	1,283
Other non-current liabilities	702	904	833	833	833
Total liabilities	13,447	13,588	15,624	15,854	17,159
Share capital	2,998	3,004	2,997	2,997	2,997
Capital surplus	1,501	1,883	1,851	1,851	1,851
Retained earnings	8,917	11,802	15,386	18,618	22,619
Other reserve	(797)	(1,045)	(552)	(552)	(552)
Minority interest	285	333	386	386	386
Total equity	12,619	15,643	19,682	22,914	26,915
Total liabilities and	26,066	29,231	35,306	38,769	44,074

Key ratios

YE 31 Dec	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue mix					
Domestic	64%	63%	64%	65%	66%
Overseas	36%	37%	36%	35%	34%
Growth (%)					
Domestic	25%	9%	2%	17%	15%
Overseas	26%	13%	-1%	12%	10%
Revenue	26%	10%	1%	15%	13%
Gross profit	22%	22%	6%	13%	14%
Operating profit	-1%	33%	1%	19%	22%
EPS	3%	26%	25%	-6%	20%
Profit & loss ratio (%)					
Gross margin	37%	41%	43%	42%	42%
Operating margin	9.8%	11.8%	11.8%	12.2%	13.2%
Net profit margin	10.7%	12.2%	15.0%	12.2%	12.9%
Balance sheet ratio					
Current ratio (x)	1.69	1.83	2.07	2.32	2.48
Receivable turnover days	174	180	187	182	184
Inventory turnover days	45	48	58	55	56
Payable turnover days	105	109	112	97	89
Net debt to equity	net cash	net cash	net cash	net cash	net cash
Profitability (%)					
ROE	21.9%	22.6%	22.5%	17.5%	17.9%
ROIC	23.7%	26.3%	22.8%	22.0%	23.1%
Per share data (RMB)					
EPS (RMB)	0.84	1.06	1.33	1.25	1.49
DPS (RMB)	0.19	0.10	0.13	0.17	0.16
BVPS (RMB)	4.21	5.21	6.57	7.65	8.98

Source: Company data, CMBIS estimates

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