

Sunny Optical (2382 HK)

1H23 preview: Better ASP to offset shipment weakness; Focus on demand recovery in 2H23E

Sunny will unveil 1H23E results in mid-Aug. We estimate 1H23E revenue/net profit to decline 11%/10% YoY, -8%/+3% vs consensus estimate, given 1H23 inventory destocking and weak Android demand. Looking into 2H23E, we expect channel restocking to kick off and camera spec migration will resume in flagship models (e.g. periscope/OIS) in 3Q23E. We remain positive on Sunny's HCM/HLS shipment YoY recovery, steady VLS shipment growth and strong XR growth momentum in 2H23E. We lower FY23E revenue/NP by 5%/10% to reflect weaker HLS/HCM shipment in 1H23, offset by spec upgrade and gradual demand recovery in 2H23E. While we are positive on Sunny's technology leadership and non-smartphone outlook, we think the stock is fairly valued at 26.1x FY23E P/E. Maintain HOLD with new SOTP-based TP of HK\$78.3 (implied 24.5x FY23E P/E).

■ **1H23 preview: expect revenue/NP to decline 11%/10% YoY.** We estimate 1H23 revenue/net profit to decline 11%/10% YoY, mainly due to weak 1H23 shipment and inventory destocking. By segment, we expect HCM/HLS revenue to drop 11%/flatish YoY on weaker shipment and ASP recovery, while VLS revenue will climb 31% YoY driven by easing semi shortage and rising ADAS adoption. We estimate lower GPM of 18.6% on slow spec upgrade and lower utilization. In addition, Sunny reported solid set of June HCM/HSL shipment of +29%/+26% YoY and +8%/-4% MoM, largely in-line with market expectations as sequential shipment recovery is well on track.

■ **2H23E outlook: HCM/HLS to resume YoY growth; VLS steady growth; XR driven by Pancake and new models.** Looking forward, we expect smartphone inventory to return to healthy level in 3Q23E and shipment to normalise in 4Q23E. As for Sunny, we forecast: 1) HCM/HLS shipment of 16%/30% YoY in 2H23E driven by Android HoH recovery and Apple lens share gain; 2) VLS shipment with steady growth of 10% YoY off high base and improving ASP thanks to easing price competition by auto OEM, NEV subsidy succession and easing chip shortage; 3) XR revenue growth of ~30% YoY in FY23E driven by Meta Quest 3 and pancake products.

■ **Recovery well on track into 2H23E; Maintain HOLD on fair valuation.** Despite a weak 1H23, we expect HCM/HLS recovery in 2H23E driven by Apple share gain and product launches, and steady VLS shipment growth given inventory restocking. We remain positive on Sunny's technology leadership and non-smartphone upside in the long term. Trading at 26.1x FY23E P/E, we believe the stock is fairly valued and maintain HOLD.

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	37,497	33,197	33,896	38,282	40,672
YoY growth (%)	(1.3)	(11.5)	2.1	12.9	6.2
Net profit (RMB mn)	5,061.1	2,474.1	2,990.3	3,439.1	3,832.8
YoY growth (%)	2.2	(51.1)	20.9	15.0	11.4
EPS (Reported) (RMB)	4.57	2.20	2.65	3.05	3.40
Consensus EPS (RMB)	4.58	2.48	2.79	3.61	4.46
P/E (x)	38.3	46.8	26.1	22.7	20.4
P/B (x)	9.2	5.1	3.2	2.9	2.7
Yield (%)	0.5	0.9	1.7	1.9	2.1
ROE (%)	26.8	11.5	13.0	13.8	14.2
Net gearing (%)	(16.1)	(22.6)	(1.3)	(24.6)	(12.0)

Source: Company data, Bloomberg, CMBIGM estimates

HOLD (Maintain)

Target Price **HK\$78.3**
 (Previous TP HK\$86.75)
Up/Downside **4.1%**
Current Price **HK\$75.20**

China Technology

Alex NG
 (852) 3900 0881
 alexng@cmbi.com.hk

Lily YANG, Ph.D
 (852) 3916 3716
 lilyyang@cmbi.com.hk

Hanqing LI
 lihanqing@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	82,494.4
Avg 3 mths t/o (HK\$ mn)	368.3
52w High/Low (HK\$)	123.20/67.55
Total Issued Shares (mn)	1097.0

Source: FactSet

Shareholding Structure

Sun Xu Ltd	35.5%
JP Morgan Chase & Co	4.9%

Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-3.0%	0.8%
3-mth	-22.3%	-14.7%
6-mth	-21.7%	-10.0%

Source: FactSet

12-mth Price Performance



Source: FactSet

Related Reports:

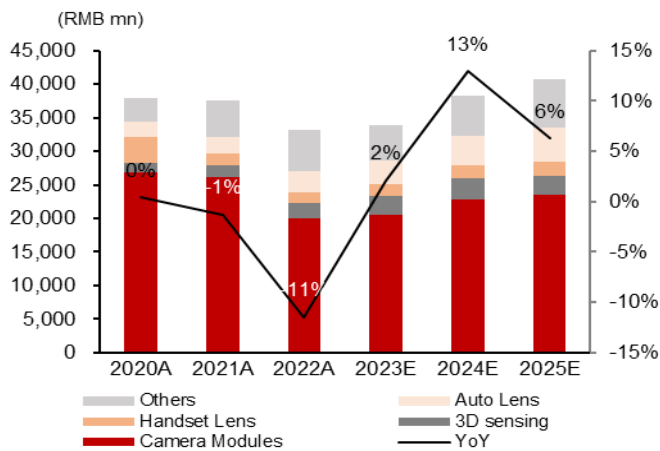
1) NDR takeaways: a bumpy 1H23 ahead; Auto/VR/AR biz to drive long-term growth 28 Mar 2023 ([link](#))

2) Strong auto/XR pipeline to weather smartphone headwinds – 22 Mar 2023 ([link](#))

3) 2H22 first take: weakness in-line; awaiting recovery – 21 Mar 2023 ([link](#))

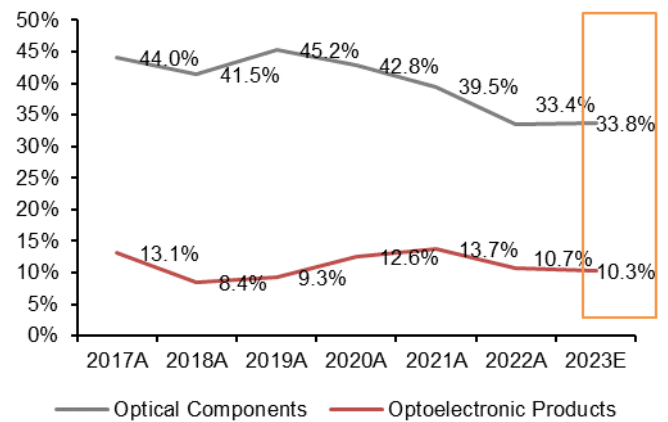
Focus Charts

Figure 1: Sunny Optical revenue trend



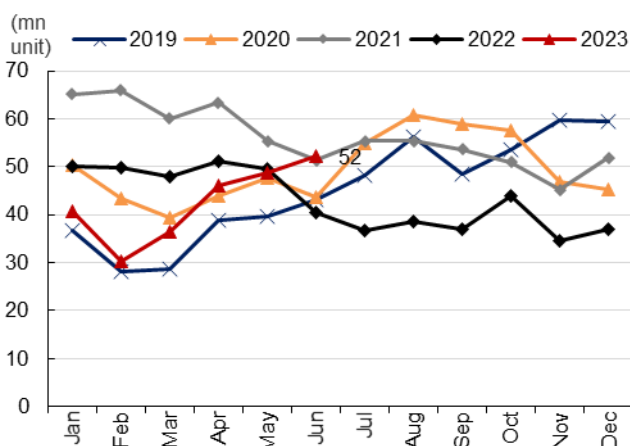
Source: Company data, CMBIGM estimates

Figure 2: Sunny Optical GPM trend



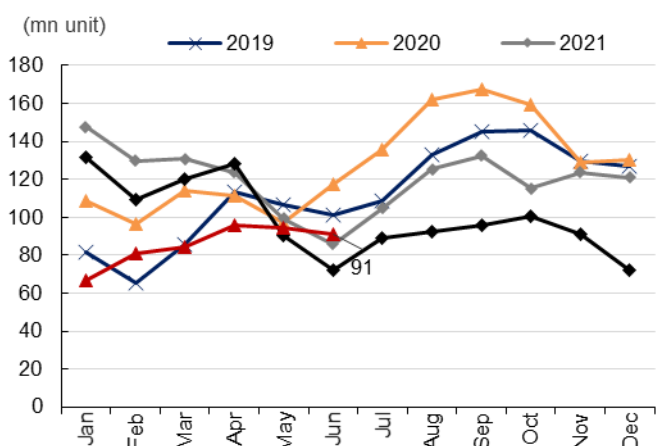
Source: Company data, CMBIGM estimates

Figure 3: Sunny HCM shipment trend



Source: Company data, CMBIGM estimates

Figure 4: Sunny HLS shipment trend



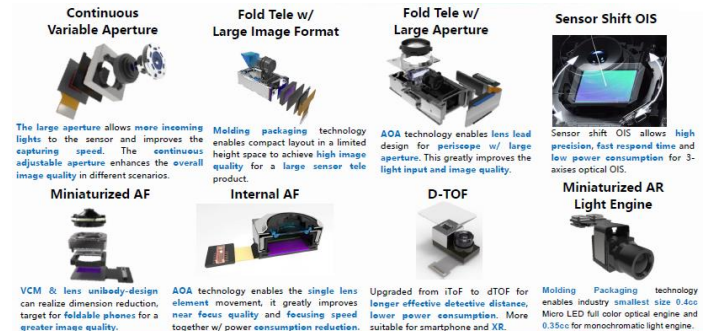
Source: Company data, CMBIGM estimates

Figure 5: Sunny's roadmap in automotive modules



Source: Company, CMBIGM

Figure 6: Upgrade trend for next-gen cameras



Source: Company, CMBIGM

1H23 Results Preview

Figure 7: 1H23 results preview

RMB mn	2H20	1H21	2H21	1H22	2H22	CMBI		Consensus	
						1H23E	YoY	1H23E	Diff (%)
Revenue	19,138	19,833	17,663	16,972	16,225	15,045	-11%	16,313	-8%
Gross profit	5,022	4,946	3,790	3,522	3,083	2,792	-21%	3,155	-11%
Operating profit	3,630	3,345	2,506	1,798	1,216	1,524	-15%	1,217	25%
Net profit	3,133	2,688	2,305	1,358	1,050	1,219	-10%	1,188	3%
EPS (RMB)	2.86	2.46	2.11	1.24	0.96	1.11	-10%	1.11	0%
Gross margin	26.2%	24.9%	21.5%	20.8%	19.0%	18.6%	-2.2 ppt	19.3%	-0.8 ppt
Operating margin	19.0%	16.9%	14.2%	10.6%	7.5%	10.1%	-0.5 ppt	7.5%	2.7 ppt
Net margin	16.4%	13.6%	13.1%	8.0%	6.5%	8.1%	0.1 ppt	7.3%	0.8 ppt

Source: Company data, CMBIS estimates

Figure 8: 1H23 revenue breakdown

RMB mn	2H21	1H22	2H22	1H23E	YoY
Optical comp (VLS, HLS)	4,432	4,399	5,069	3,809	-13%
Auto lens shipment (mn unit)	31	38	41	47	25%
... ASP (Rmb)	36.1	35.8	42.7	37.5	5%
Handset lens Shipment (mn unit)	7,225	6,516	5,410	5,128	-21%
... ASP (Rmb)	3.0	3.0	3.3	3.3	12%
Optoelectronic (HCM)	13,026	12,371	10,955	11,032	-11%
HCM shipment (mn unit)	312	289	228	255	-12%
... ASP (Rmb)	38.2	38.6	39.0	38.9	1%
Optical instruments	206	202	202	205	1%
Total Revenue	17,663	16,972	16,225	15,045	-11%
Gross Margin					
Optical comp (VLS, HLS)	35.9%	35.5%	31.5%	33.5%	-2 ppt
Optoelectronic (HCM)	12.4%	11.6%	9.7%	10.0%	-1.6 ppt
Optical instruments	49.3%	44.6%	46.3%	46.0%	1.4 ppt
Blended GPM	21.5%	20.8%	19.0%	18.6%	-2.2 ppt

Source: Company data, CMBIS estimates

Figure 9: P&L forecast

RMB mn	FY21	FY22	1H23E	2H23E	FY23E	FY24E	FY25E
Revenue	37,497	33,197	15,045	18,851	33,896	38,282	40,672
...YoY	-1.3%	-11.5%	-11.4%	16.2%	2.1%	12.9%	6.2%
Cost of sales	(28,761)	(26,592)	(12,253)	(15,110)	(27,363)	(30,799)	(32,508)
Gross profit	8,736	6,605	2,792	3,741	6,533	7,483	8,164
GPM (%)	23.3%	19.9%	18.6%	19.8%	19.3%	19.5%	20.1%
...YoY	0.4%	-24.4%	-20.7%	21.4%	-1.1%	14.5%	9.1%
SG&A	(1,032)	(1,281)	(471)	(571)	(1,042)	(1,091)	(1,159)
...% of rev	-2.8%	-3.9%	-3.1%	-3.0%	-3.1%	-2.9%	-2.9%
R&D	(2,642)	(2,803)	(1,204)	(1,480)	(2,683)	(3,024)	(3,213)
...% of rev	-7.0%	-8.4%	-8.0%	-7.9%	-7.9%	-7.9%	-7.9%
Other gain & loss	252	537	789	353	151	471	-
Operating profit	5,851	3,014	1,524	2,161	3,685	4,221	4,698
OPM (%)	15.6%	9.1%	10.1%	11.5%	10.9%	11.0%	11.6%
...YoY	-0.4%	-48.5%	-15.2%	77.7%	22.3%	14.5%	11.3%
Net profit	4,993	2,408	1,219	1,680	2,899	3,334	3,716
NPM (%)	13.3%	7.3%	8.1%	8.9%	8.6%	8.7%	9.1%
...YoY	2.3%	-51.8%	-10.2%	60.0%	20.4%	15.0%	11.4%

Source: Company data, CMBIGM estimates

Earnings Revision

Figure 10: CMBIGM earnings revisions

RMB mn	New			Old			Change (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	33,896	38,282	40,672	35,763	40,427	42,729	-5%	-5%	-5%
Gross profit	6,533	7,483	8,164	7,106	8,237	9,008	-8%	-9%	-9%
Operating profit	3,685	4,221	4,698	4,084	4,712	5,282	-10%	-10%	-11%
Net profit	2,899	3,334	3,716	3,212	3,721	4,178	-10%	-10%	-11%
EPS (RMB)	2.65	3.05	3.40	2.94	3.40	3.82	-10%	-10%	-11%
Gross margin	19.3%	19.5%	20.1%	19.9%	20.4%	21.1%	-0.6 ppt	-0.8 ppt	-1 ppt
Operating margin	10.9%	11.0%	11.6%	11.4%	11.7%	12.4%	-0.5 ppt	-0.6 ppt	-0.8 ppt
Net margin	8.6%	8.7%	9.1%	9.0%	9.2%	9.8%	-0.4 ppt	-0.5 ppt	-0.6 ppt

Source: Company data, CMBIGM estimates

Figure 11: CMBIGM estimates vs consensus

RMB mn	CMBIGM			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	33,896	38,282	40,672	36,346	41,184	46,529	-7%	-7%	-13%
Gross profit	6,533	7,483	8,164	7,330	8,834	10,327	-11%	-15%	-21%
Operating profit	3,685	4,221	4,698	3,210	4,224	5,204	15%	0%	-10%
Net profit	2,899	3,334	3,716	3,079	3,972	4,894	-6%	-16%	-24%
EPS (RMB)	2.65	3.05	3.40	2.79	3.61	4.46	-5%	-16%	-24%
Gross margin	19.3%	19.5%	20.1%	20.2%	21.4%	22.2%	-0.9 ppt	-1.9 ppt	-2.1 ppt
Operating margin	10.9%	11.0%	11.6%	8.8%	10.3%	11.2%	2 ppt	0.8 ppt	0.4 ppt
Net margin	8.6%	8.7%	9.1%	8.5%	9.6%	10.5%	0.1 ppt	-0.9 ppt	-1.4 ppt

Source: Bloomberg, CMBIGM estimates

Figure 12: Major assumptions

	FY21	FY22	FY23E	FY24E	FY25E
Shipment volume (mn unit)					
Optical Components					
Handset lens sets	1,440	1,193	1,216	1,338	1,445
...YoY(%)	-6%	-17%	2%	10%	8%
Vehicle lens sets	68	79	93	111	131
...YoY(%)	21%	16%	17%	20%	18%
Optoelectronic Products					
Handset camera modules	674	517	519	571	599
...YoY(%)	14%	-23%	0%	10%	5%
Other optoelectronic (3D sensing)	59	51	37	41	45
...YoY(%)	45%	-14%	-26%	10%	10%
Optical Instruments					
Microscopic instruments	258	320	341	375	412
...YoY(%)	32%	24%	7%	10%	10%
Revenue (RMB mn)					
Optical components	8,776	9,468	9,207	10,567	12,057
Optoelectronic products	28,334	23,326	24,294	27,286	28,150
Optical instruments	387	403	396	428	464
Total Revenue	37,497	33,197	33,896	38,282	40,672
...YoY(%)	-1.3%	-11.5%	2.1%	12.9%	6.2%
Gross Margin					
Optical components	23.3%	19.9%	19.3%	19.5%	20.1%
Optoelectronic products	39.5%	33.4%	33.8%	34.0%	34.0%
Optoelectronic products	13.7%	10.7%	10.3%	10.5%	10.5%
Optical instruments	45.1%	42.0%	46.0%	46.0%	46.0%

Source: Company data, CMBIGM estimates

Valuation

Maintain HOLD with new TP of HK\$78.3

We maintain HOLD with new TP of HK\$78.3. We derived our 12-month TP from SOTP valuation methodology and our TP is based on weighted-average target P/E multiple of 24.4x FY23E EPS, in order to reflect 1) Sunny's diversification in multiple businesses with different growth profiles, and 2) visibility of product upcycles across different segments.

We assign 18x P/E to its CCM business to reflect its China's No.1 position, product upcycle and advanced technology capacity. We assign 35x P/E for its vehicle lens business to reflect the high-margin and high-growth industry nature of vehicle lens (25% CAGR FY20-23E) and Sunny's No.1 global market share. We apply a 25x P/E to its handset lens segment given secular upgrade trend and continued share gains from peers.

Figure 13: Sunny Optical – SOTP valuation

Business segment	% of FY23E Profit	FY23E EPS (RMB)	Target P/E
Camera modules	38.2%	1.01	18x
Handset lenses	37.4%	0.99	25x
Vehicle lenses	21.8%	0.58	35x
Others	2.6%	0.07	25x
Total (RMB) /Implied P/E		2.65	24.5x
TP (HK\$)			78.3

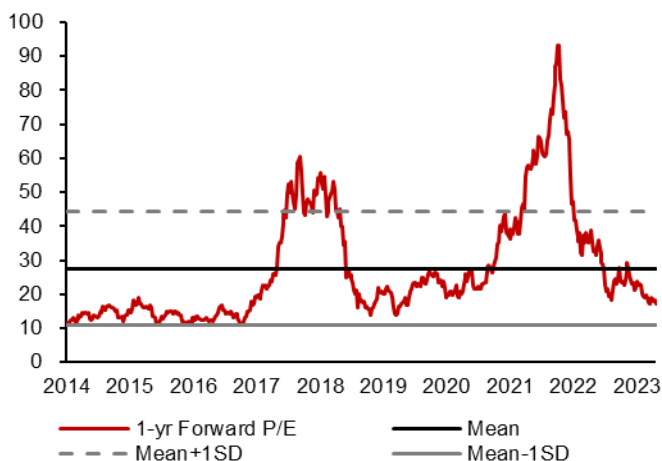
Source: Company data, CMBIGM estimates

Figure 14: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x) FY23E	P/E (x) FY24E	P/B (x) FY23E	P/B (x) FY24E	ROE (%) FY23E	ROE (%) FY24E
Sunny Optical	2382 HK	HOLD	10,537	75.2	78.3	4%	26.1	22.7	3.2	2.9	13.0	13.8
Q tech	1478 HK	BUY	478	3.2	5.2	65%	6.6	4.9	0.6	0.6	9.8	12.0
Cowell	1415 HK	NR	1,704	15.70	NA	NA	17.1	12.0	3.7	2.9	23.6	26.7
Truly	732 HK	NR	408	1.01	NA	NA	-	-	-	-	-	-
Catcher	2474 TT	NR	3,759	173.00	NA	NA	16.0	15.7	0.7	0.7	4.6	4.5
Largan	3008 TT	NR	10,123	2375.00	NA	NA	18.6	16.5	2.0	1.8	11.1	11.6
Lite-on	2301 TT	NR	9,077	120.00	NA	NA	21.4	17.8	3.4	3.1	15.7	18.6
Primax	4915 TT	NR	910	62.00	NA	NA	10.1	9.4	1.6	1.5	15.5	15.8
O-film	002456 CH	NR	2,665	5.89	NA	NA	-	-	8.1	8.1	(42.5)	(22.5)
Average							16.5	14.1	2.9	2.7	6.2	9.9

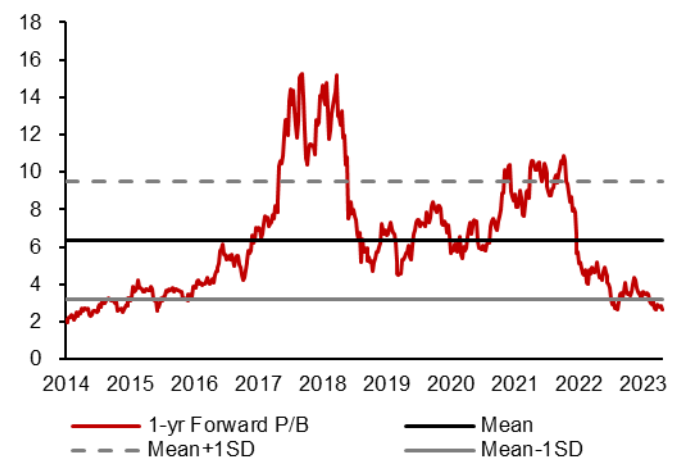
Source: Bloomberg, CMBIGM estimates

Figure 15: 12M forward P/E band



Source: Bloomberg, CMBIGM estimates

Figure 16: 12M forward P/B band



Source: Bloomberg, CMBIGM estimates

Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Revenue	38,002	37,497	33,197	33,896	38,282	40,672
Cost of goods sold	(29,304)	(28,761)	(26,592)	(27,363)	(30,799)	(32,508)
Gross profit	8,698	8,736	6,605	6,533	7,483	8,164
Selling expense	(313)	(274)	(353)	(286)	(287)	(305)
Admin expense	(719)	(758)	(929)	(756)	(804)	(854)
R&D expense	(2,499)	(2,642)	(2,803)	(2,683)	(3,024)	(3,213)
Others	698	789	504	877	854	907
Operating profit	5,877	5,851	3,014	3,685	4,221	4,698
Share of (losses)/profits of associates/JV	0	19	(6)	(6)	(6)	(6)
Net Interest income/(expense)	(224)	(230)	(293)	(322)	(354)	(390)
Pre-tax profit	5,653	5,640	2,715	3,357	3,861	4,302
Income tax	(703)	(579)	(241)	(366)	(421)	(470)
Minority interest	68	68	66	91	105	117
Net profit	4,950	5,061	2,474	2,990	3,439	3,833
Net dividends	799	974	1,048	1,261	1,451	1,617
BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Current assets	25,630	27,989	30,646	27,691	35,280	32,481
Cash & equivalents	2,842	5,605	7,033	2,323	8,395	5,393
Account receivables	8,212	7,448	7,205	7,757	9,141	8,812
Inventories	5,783	5,482	4,721	5,924	6,058	6,589
ST bank deposits	238	1,112	485	485	485	485
Financial assets at FVTPL	8,480	8,314	10,086	10,086	10,086	10,086
Other current assets	74	28	1,115	1,115	1,115	1,115
Non-current assets	9,809	10,785	12,356	13,695	14,262	14,514
PP&E	7,513	8,303	10,120	11,453	11,987	12,221
Other non-current assets	2,295	2,481	2,236	2,241	2,275	2,294
Total assets	35,438	38,774	43,001	41,386	49,543	46,995
Current liabilities	13,411	11,873	19,337	15,992	22,161	17,397
Short-term borrowings	2,071	1,539	1,990	1,990	1,990	1,990
Account payables	10,733	9,869	12,917	9,573	15,741	10,978
Other current liabilities	9,223	15,493	8,757	13,830	9,650	16,630
Non-current liabilities	5,201	6,005	1,482	1,482	1,482	1,482
Long-term borrowings	0	700	30	30	30	30
Other non-current liabilities	5,201	5,305	1,452	1,452	1,452	1,452
Total liabilities	18,612	17,879	20,819	17,474	23,643	18,879
Share capital	105	105	105	105	105	105
Other reserves	16,492	20,483	21,733	23,371	25,254	27,353
Total shareholders equity	16,826	20,895	22,182	23,911	25,900	28,116
Minority interest	229	307	344	435	541	658
Total equity and liabilities	35,438	38,774	43,001	41,386	49,543	46,995
CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Operating						
Profit before taxation	5,643	5,640	2,715	3,357	3,861	4,302
Depreciation & amortization	1,570	1,638	1,816	2,166	2,466	2,766
Change in working capital	115	200	4,053	(5,100)	4,651	(4,966)
Others	(168)	(499)	(1,207)	(50)	(101)	(98)
Net cash from operations	7,160	6,979	7,377	374	10,877	2,004
Investing						
Capital expenditure	(2,271)	(2,498)	(3,633)	(3,500)	(3,000)	(3,000)
Others	(3,705)	(403)	(201)	0	0	0
Net cash from investing	(5,976)	(2,902)	(3,834)	(3,500)	(3,000)	(3,000)
Financing						
Dividend paid	(796)	(974)	(1,048)	(1,261)	(1,451)	(1,617)
Net borrowings	1,017	0	0	0	0	0
Share repurchases	(151)	0	0	0	0	0
Others	(291)	(267)	(1,111)	(322)	(354)	(390)
Net cash from financing	(222)	(1,241)	(2,159)	(1,584)	(1,805)	(2,007)

Net change in cash

Cash at the beginning of the year	1,917	2,842	5,605	7,033	2,323	8,395
Exchange difference	(37)	(73)	44	0	0	0
Cash at the end of the year	2,842	5,605	7,033	2,323	8,395	5,393

	2020A	2021A	2022A	2023E	2024E	2025E
--	-------	-------	-------	-------	-------	-------

YE 31 Dec

Revenue	0.4%	(1.3%)	(11.5%)	2.1%	12.9%	6.2%
Gross profit	12.2%	0.4%	(24.4%)	(1.1%)	14.5%	9.1%
Operating profit	22.3%	(0.4%)	(48.5%)	22.3%	14.5%	11.3%
Net profit	23.2%	2.2%	(51.1%)	20.9%	15.0%	11.4%

	2020A	2021A	2022A	2023E	2024E	2025E
--	-------	-------	-------	-------	-------	-------

YE 31 Dec

Gross profit margin	22.9%	23.3%	19.9%	19.3%	19.5%	20.1%
Operating margin	15.5%	15.6%	9.1%	10.9%	11.0%	11.6%
Return on equity (ROE)	33.5%	26.8%	11.5%	13.0%	13.8%	14.2%

	2020A	2021A	2022A	2023E	2024E	2025E
--	-------	-------	-------	-------	-------	-------

YE 31 Dec

Net debt to equity (x)	(0.0)	(0.2)	(0.2)	(0.0)	(0.2)	(0.1)
Current ratio (x)	1.9	2.4	1.6	1.7	1.6	1.9
Receivable turnover days	85.7	76.2	80.6	80.6	80.6	80.6
Inventory turnover days	68.1	71.5	70.0	71.0	71.0	71.0
Payable turnover days	137.4	130.7	156.4	150.0	150.0	150.0

	2020A	2021A	2022A	2023E	2024E	2025E
--	-------	-------	-------	-------	-------	-------

YE 31 Dec

P/E	25.5	38.3	46.8	26.1	22.7	20.4
P/B	7.4	9.2	5.1	3.2	2.9	2.7
Div yield (%)	0.6	0.5	0.9	1.7	1.9	2.1
EV	16,826.1	20,895.3	22,182.4	23,911.3	25,899.7	28,115.8
EV/Sales	0.4	0.6	0.7	0.7	0.7	0.7

Note: The calculation of net cash includes financial assets. Source: Company data, CMBIGM estimates

Disclosures & Disclaimers

Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst in this report.

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

CMBIGM Ratings

BUY	: Stock with potential return of over 15% over next 12 months
HOLD	: Stock with potential return of +15% to -10% over next 12 months
SELL	: Stock with potential loss of over 10% over next 12 months
NOT RATED	: Stock is not rated by CMBIGM
OUTPERFORM	: Industry expected to outperform the relevant broad market benchmark over next 12 months
MARKET-PERFORM	: Industry expected to perform in-line with the relevant broad market benchmark over next 12 months
UNDERPERFORM	: Industry expected to underperform the relevant broad market benchmark over next 12 months

CMB International Global Markets Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong. Tel: (852) 3900 0888 Fax: (852) 3900 0800

CMB International Global Markets Limited ("CMBIGM") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)

Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIGM does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIGM recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIGM, solely for the purpose of supplying information to the clients of CMBIGM or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIGM nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIGM has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIGM provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIGM may issue other publications having information and/ or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIGM may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIGM may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIGM does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIGM may have a conflict of interest that could affect the objectivity of this report and CMBIS will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written consent of CMBIGM.

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I) falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Order, and may not be provided to any other person without the prior written consent of CMBIGM.

For recipients of this document in the United States

CMBIGM is not a registered broker-dealer in the United States. As a result, CMBIGM is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. The research analyst who is primary responsible for the content of this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA"). The analyst is not subject to applicable restrictions under FINRA Rules intended to ensure that the analyst is not affected by potential conflicts of interest that could bear upon the reliability of the research report. This report is intended for distribution in the United States solely to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, as amended, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this report by its acceptance hereof represents and agrees that it shall not distribute or provide this report to any other person. Any U.S. recipient of this report wishing to effect any transaction to buy or sell securities based on the information provided in this report should do so only through a U.S.-registered broker-dealer.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.