

# Willsemi (603501 CH)

## The feared bad 1Q22 is gone; All eyes on the recovery

Willsemi announced 1Q22 results. 1Q22 revenue/NP to shareholders declined 10.8%/13.9% YoY to RMB5,583mn/RMB896mn, which accounted for 20%/18% of our full year forecasts. The Company expected NP to shareholders will have 50%+ QoQ growth in 2Q22, driven by products structure adjustments and market recovery. Although we remain positive on Willsemi's long-term outlook, we expect short-term performance is challenging under current market environment. Maintain BUY with reduced TP of RMB200.0.

- 1Q22 results missed estimates.** Although our previous forecasts were more conservative than consensus, 1Q22 results still missed expectations. Despite another satisfactory quarter of non-mobile CIS growth, 1Q22's revenue dropped 10.8% YoY. Mgmt. attributed the decline to 1) further weakness in smartphone shipment and 2) lowered semi distribution sales due to logistic disruptions. GPM dropped 1.2% to 35.3% in 1Q22 (vs. 36.5% in 4Q21), impacted by clients' pricing strategy under share gain pressure.
- High level of inventories raised investors' concerns.** The Company's inventories level was equal to ~4.6x monthly sales in 4Q21 and further increased to 5.7x in 1Q22. The mgmt. have made clear that most of the inventories are standard products and will not have higher asset impairment risk. However, such level of inventory balance has surely caused market concerns, especially under current market sentiment. In addition, the resurgence of COVID cases and partial lockdown measures may require the Company to excessively build up inventories to secure productions, adding difficulty to offload inventories in near-term.
- Tough market environment challenges Company performance.** Although we remain positive on Willsemi's long-term outlook, we expect short-term performance to be challenging. By segment, we expect the growth in non-mobile CIS to remain largely intact. 1Q22 non-mobile CIS is estimated to grow 70% YoY, while full year growth is forecasted at 36.1%. However, we have cut our expectations for mobile CIS sales, given lowered smartphone shipment projection. Sales from mobile CIS is expected to decline 3.5% YoY in 2022 vs. previous forecast of 10% growth.
- Maintain BUY with TP of RMB200.0.** We lowered our TP to RMB200 based on 35x FY22E P/E multiple (vs. prior 42x), given depressed market sentiment and weakened consumer confidence. Potential downside risks include: 1) worse-than-expected global economy that curbs consumer spending, 2) higher level of inventory and 3) possible disruption in logistic and production.

### Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (RMB mn)	19,824	24,104	28,269	33,428	38,566
YoY growth (%)	45.4%	21.6%	17.3%	18.2%	15.4%
Gross profit margin %	29.9%	34.5%	34.9%	35.4%	35.5%
Net profit (RMB mn)	2,706	4,476	5,040	6,198	7,225
Net profit margin %	13.7%	18.6%	17.8%	18.5%	18.7%
EPS (RMB)	3.21	5.16	5.70	6.96	8.08
YoY growth (%)	322.4%	60.7%	10.4%	22.2%	16.1%
Consensus EPS (RMB)	NA	NA	6.44	8.23	0.00
P/E (x)	42.0	26.1	23.6	19.3	16.7
ROE (%)	23.5%	27.5%	22.5%	21.1%	19.7%

Source: Company data, Bloomberg, CMBIGM estimates

**BUY (Maintain)**

Target Price **RMB 200.00**  
 (Previous TP **RMB 270.00**)  
 Up/Downside **+48%**  
 Current Price **RMB 134.66**

### China Technology Sector

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### Stock Data

Mkt Cap (RMBmn)	118,085
Avg 3 mths t/o (RMBmn)	1,651
52w High/Low (RMB)	345/134.02
Total Issued Shares (mn)	876.9

Source: Bloomberg

### Shareholding Structure

Yu Renrong	30.28%
SX Weihao Equity Invest. FD	9.22%
HKSCC	7.67%

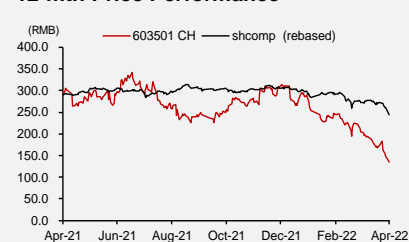
Source: Company data

### Share Performance

	Absolute	Relative
1-mth	-32.6%	-26.1%
3-mth	-50.4%	-41.8%
6-mth	-44.7%	-31.8%

Source: Bloomberg

### 12-mth Price Performance



Auditor: BDO

### Related Reports

- In-line FY21 results: Solid non-mobile CIS growth overshadowed by weak smartphone – 20 Apr 2022 ([Link](#))
- China CIS sector – Can non-mobile CIS strength offset handset weakness? We remain cautiously optimistic – 1 Apr 2022 ([Link](#))
- FY21 revenue in line; Growth story stays intact – 10 Mar 2022 ([Link](#))

## Earnings preview

Figure 1: Quarterly results

RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	QoQ	YoY
Revenue	3,817	4,226	5,926	5,855	6,212	6,236	5,866	5,789	5,538	-4.3%	-10.8%
Gross Profit	1,230	1,371	1,653	1,675	2,014	2,105	2,082	2,113	1,955	-7.4%	-2.9%
Operating Profit	489	559	797	1,110	1,175	1,358	1,378	1,088	933	-14.3%	-20.7%
Net profit	445	545	736	980	1,041	1,203	1,275	958	896	-6.4%	-13.9%
EPS (RMB)	0.53	0.67	0.64	1.37	1.20	1.39	1.47	1.10	1.03	-6.7%	-14.2%
Gross Margin	32.2%	32.4%	27.9%	28.6%	32.4%	33.7%	35.5%	36.5%	35.3%	-1.2 ppt	2.9 ppt
Operating Margin	12.8%	13.2%	13.5%	19.0%	18.9%	21.8%	23.5%	18.8%	16.8%	-2 ppt	-2.1 ppt
Net Margin	11.7%	12.9%	12.4%	16.7%	16.8%	19.3%	21.7%	16.5%	16.2%	-0.4 ppt	-0.6 ppt

Source: Company data, CMBIGM estimates

Figure 2: Earnings revision

US\$ mn	New			Old			Diff (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	28,269	33,428	38,566	30,272	36,242	41,494	-7%	-8%	-7%
Gross Profit	9,865	11,821	13,677	10,513	12,657	14,545	-6%	-7%	-6%
Operating Profit	5,543	6,816	7,947	6,425	7,908	9,253	-14%	-14%	-14%
Net profit	5,040	6,198	7,225	5,697	7,011	8,204	-12%	-12%	-12%
EPS (US\$ cents)	5.698	6.960	8.080	6.440	7.874	9.174	-12%	-12%	-12%
Gross Margin	34.9%	35.4%	35.5%	34.7%	34.9%	35.1%	0.2 ppt	0.4 ppt	0.4 ppt
Operating Margin	19.6%	20.4%	20.6%	21.2%	21.8%	22.3%	-1.6 ppt	-1.4 ppt	-1.7 ppt
Net Margin	17.8%	18.5%	18.7%	18.8%	19.3%	19.8%	-1 ppt	-0.8 ppt	-1 ppt

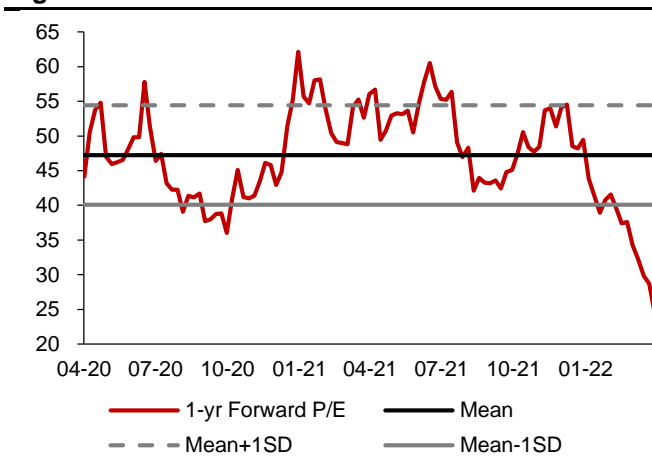
Source: Company data, CMBIGM estimates

Figure 3: CMBIGM estimates vs consensus

US\$ mn	CMBIGM			Consensus			Diff (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	28,269	33,428	38,566	31,129	38,768	46,271	-9%	-14%	-17%
Gross Profit	9,865	11,821	13,677	10,634	13,366	16,543	-7%	-12%	-17%
Operating Profit	5,543	6,816	7,947	6,363	8,082	9,857	-13%	-16%	-19%
Net profit	5,040	6,198	7,225	5,625	7,267	8,989	-10%	-15%	-20%
EPS (US\$ cents)	5.698	6.960	8.080	6.438	8.229	9.983	-12%	-15%	-19%
Gross Margin	34.9%	35.4%	35.5%	34.2%	34.5%	35.8%	0.7 ppt	0.9 ppt	-0.3 ppt
Operating Margin	19.6%	20.4%	20.6%	20.4%	20.8%	21.3%	-0.8 ppt	-0.5 ppt	-0.7 ppt
Net Margin	17.8%	18.5%	18.7%	18.1%	18.7%	19.4%	-0.2 ppt	-0.2 ppt	-0.7 ppt

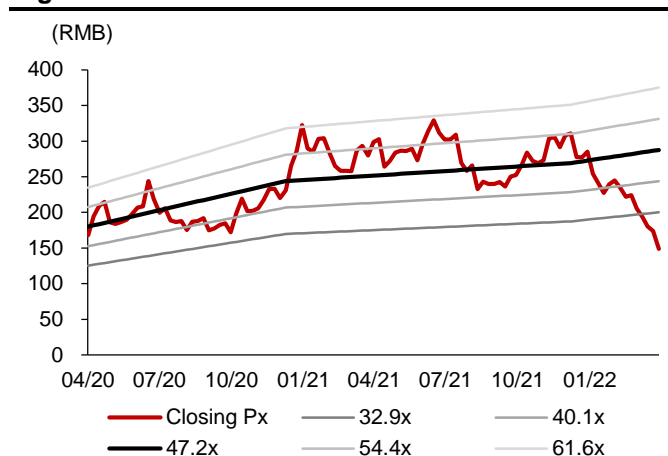
Source: Company data, CMBIGM estimates

Figure 4: 12M forward P/E chart



Source: Company data, CMBIGM estimates

Figure 5: 12M forward P/E band



Source: Company data, CMBIGM estimates

**Figure 6: Smartphone Component Shortage Outlook for 2022**

Component	Shortage level			Price trend 2022 (YoY)
	2021	2H21	1H22	
AP/SoC -Flagship 5G	●	●	●	Up 5+% in 2022 due to advanced nodes FLAT in Q1, entry 5G down in 2H
AP/SoC -Mainstream 5G	●●			
AP/SoC - 4G	●	●●	●●	Slightly up in 1H, flat in 2H
RFIC/FEM	●	●●		RF content will increase driving cost up
Memory - DRAM/MCP	●	●		Per bit price down
Memory - Flash				Q2 NAND price up, 2H slight decrease
CIS - 64MP&Above				Down YoY
CIS - 12-48 MP	●			Down YoY
CIS - 2/5/8MP	●●	●		Down YoY
DDIC/TDDI	●●●●	●●	●	Up 5+% in Q1, flat in 2H
PMIC	●●●	●●●	●●	Up 15+% in Q1, flat in 2H
Packaging Substrate	●	●●		Down 0-5%

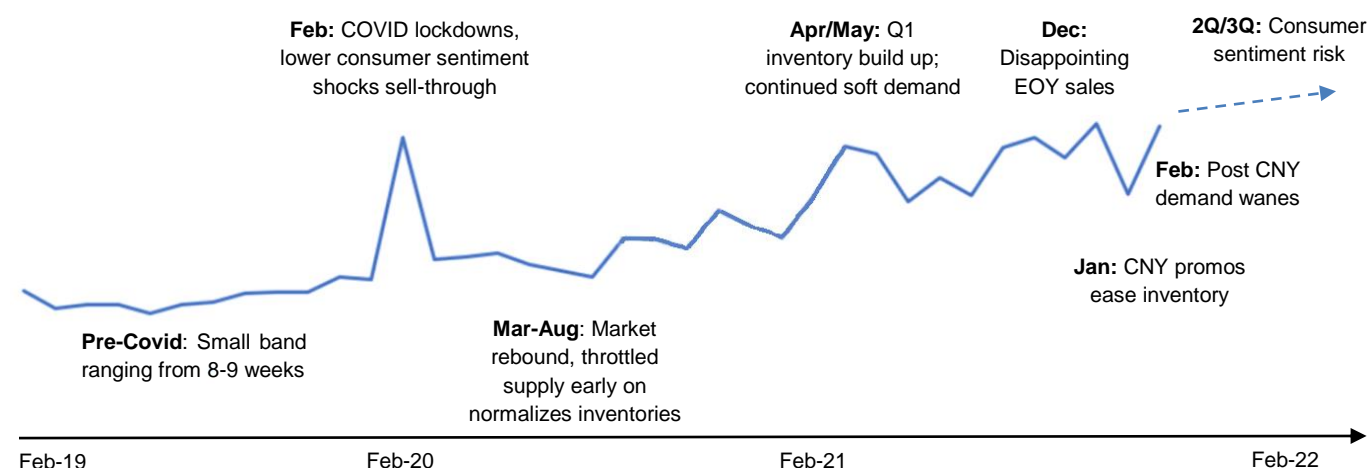
Source: Counterpoint, CMBIGM estimates

Note:

a) YoY comparison is based on the average price of the years;

b) Pricing considers product mix during the year.

- Demand>Supply by 10%
- Demand>Supply by 10% -20%
- Demand>Supply by 20% -30%
- Demand>Supply by 30% -40%

**Figure 7: Smartphone inventory level**

Source: Counterpoint, CMBIGM estimates

## Financial Summary

### Income statement

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Revenue</b>	<b>19,824</b>	<b>24,104</b>	<b>28,269</b>	<b>33,428</b>	<b>38,566</b>
COGS	-13,894	-15,790	-18,404	-21,607	-24,889
<b>Gross Profit</b>	<b>5,930</b>	<b>8,314</b>	<b>9,865</b>	<b>11,821</b>	<b>13,677</b>
SG&A	-1,147	-1,201	-1,408	-1,665	-1,921
R&D exp.	-1,727	-2,110	-2,573	-3,042	-3,510
Financing exp.	-275	-356	-367	-310	-302
Other opex	176	352	26	13	2
<b>Operating profit</b>	<b>2,956</b>	<b>5,000</b>	<b>5,543</b>	<b>6,816</b>	<b>7,947</b>
Non-operating income	44	5	6	7	8
Non-operating exp.	-9	-3	-3	-4	-4
<b>Pre-tax profit</b>	<b>2,991</b>	<b>5,002</b>	<b>5,546</b>	<b>6,820</b>	<b>7,950</b>
Income tax expenses	-308	-456	-506	-622	-725
<b>Net profit</b>	<b>2,683</b>	<b>4,546</b>	<b>5,040</b>	<b>6,198</b>	<b>7,225</b>
Non-controlling interests	-23	70	0	0	0
<b>Net profit to shareholders</b>	<b>2,706</b>	<b>4,476</b>	<b>5,040</b>	<b>6,198</b>	<b>7,225</b>

### Cash flow summary

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Pretax profit</b>	<b>2,683</b>	<b>4,546</b>	<b>5,040</b>	<b>6,198</b>	<b>7,225</b>
D&A	765	879	879	994	1,155
Change in working capital	-221	-3,328	252	-2,078	500
Others	117	96	501	557	642
<b>Net cash from operating</b>	<b>3,345</b>	<b>2,192</b>	<b>6,672</b>	<b>5,671</b>	<b>9,521</b>
Capex	-1,133	-1,122	-1,514	-1,811	-2,083
Purchase/sale of investments	-373	-1,969	-268	-286	-305
Purchase/sale of subs	-1,163	96	51	51	51
Other	38	96	329	283	337
<b>Net cash from investing</b>	<b>-2,631</b>	<b>-2,899</b>	<b>-1,401</b>	<b>-1,763</b>	<b>-2,000</b>
Change in shares	683	1,203	1,779	1,298	888
Change in debt	1,567	3,066	-1,095	243	-66
Dividend/interests paid	-413	-569	-859	-897	-1,019
Other	-3	-767	-194	20	-105
<b>Net cash from financing</b>	<b>1,835</b>	<b>2,932</b>	<b>-369</b>	<b>665</b>	<b>-302</b>
<b>Net change in cash</b>	<b>2,548</b>	<b>2,226</b>	<b>4,902</b>	<b>4,572</b>	<b>7,219</b>
Cash, beginning	3,116	5,423	7,630	12,514	17,068
Exchange difference	-241	-18	-18	-18	-18
<b>Cash, end</b>	<b>5,423</b>	<b>7,630</b>	<b>12,514</b>	<b>17,068</b>	<b>24,269</b>

### Balance sheet

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Current assets</b>	<b>13,913</b>	<b>20,296</b>	<b>25,310</b>	<b>33,535</b>	<b>40,513</b>
Cash & equivalents	5,456	7,671	12,555	17,109	24,310
Trade & other receivables	2,583	3,029	3,404	4,618	4,894
Inventories	5,274	8,781	8,466	10,671	10,053
Other current assets	600	814	885	1,138	1,257
<b>Non-current assets</b>	<b>8,735</b>	<b>11,784</b>	<b>12,572</b>	<b>13,450</b>	<b>14,429</b>
PPE	1,871	1,863	2,090	2,397	2,768
Intangibles	1,509	1,604	1,508	1,442	1,390
Goodwill	2,800	2,998	2,947	2,896	2,845
Other non-current assets	2,556	5,320	6,027	6,714	7,427
<b>Total assets</b>	<b>22,648</b>	<b>32,080</b>	<b>37,883</b>	<b>46,986</b>	<b>54,943</b>
<b>Current liabilities</b>	<b>6,845</b>	<b>8,700</b>	<b>8,682</b>	<b>9,849</b>	<b>9,782</b>
ST debt & LT debt to mature	3,041	3,745	3,266	2,842	2,433
Trade & other payables	2,544	3,956	3,817	5,307	5,203
Other current liabilities	1,260	999	1,600	1,700	2,146
<b>Non-current liabilities</b>	<b>4,278</b>	<b>7,076</b>	<b>6,813</b>	<b>7,831</b>	<b>8,564</b>
LT debt	3,182	3,448	3,082	3,749	4,092
Bonds payables	0	2,250	2,000	2,000	2,000
Other non-current liabilities	1,096	1,378	1,731	2,082	2,473
<b>Total liabilities</b>	<b>11,123</b>	<b>15,776</b>	<b>15,495</b>	<b>17,681</b>	<b>18,346</b>
<b>Total equity</b>	<b>11,525</b>	<b>16,304</b>	<b>22,388</b>	<b>29,305</b>	<b>36,596</b>
Share capital	868	876	885	890	894
Reserves	7,248	8,434	10,204	11,497	12,381
Treasury stock	-255.4	-741.7	-741.7	-741.7	-741.7
Retained earnings	3,895	8,049	12,579	18,196	24,712
Other equities	-516.2	-418.8	-643.9	-642.5	-754.8
Minority interests	286	106	106	106	106
<b>Total liabilities and equity</b>	<b>22,648</b>	<b>32,080</b>	<b>37,883</b>	<b>46,986</b>	<b>54,943</b>

### Key ratios

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Revenue by segment</b>					
CMOS	14,697	16,264	18,350	21,633	25,106
TDDI	744	1,963	3,115	3,995	4,555
Others	4,383	5,877	6,804	7,799	8,905
<b>Total</b>	<b>19,824</b>	<b>24,104</b>	<b>28,269</b>	<b>33,428</b>	<b>38,566</b>
CMOS %	74.1%	67.5%	64.9%	64.7%	65.1%
<b>Growth (%)</b>					
Revenue	45.4%	21.6%	17.3%	18.2%	15.4%
Adj. EBITDA	173.1%	58.0%	9.2%	21.6%	9.1%
Net profit	481.2%	65.4%	12.6%	23.0%	16.6%
<b>Profit &amp; loss ratio (%)</b>					
Gross margin	29.9%	34.5%	34.9%	35.4%	35.5%
EBITDA margin	18.8%	24.4%	22.7%	23.4%	22.1%
Net profit margin	13.7%	18.6%	17.8%	18.5%	18.7%
<b>Balance sheet ratio</b>					
Net debt/total equity (%)	6.7%	10.9%	net	net	net
Debt/EBITDA	1.7	1.6	1.3	1.1	1.0
Interest coverage	12.5	14.3	15.9	20.3	22.0
Cash conversion cycle (days)	123.1	152.5	157.5	149.5	140.5
<b>Profitability (%)</b>					
ROE	23.5%	27.5%	22.5%	21.1%	19.7%
ROA	11.9%	14.0%	13.3%	13.2%	13.2%
<b>Per share data (RMB)</b>					
EPS	3.21	5.16	5.70	6.96	8.08
BVPS	13.33	18.67	25.19	32.79	40.81

Source: Company data, CMBIGM estimates

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**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  
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**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

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