

# Willsemi (603501 CH)

## Sequential margin contraction indicates inventory digestions may persist till FY23E

Willsemi's 1H23 revenue and net profit were RMB8.9bn and RMB153mn, down 20% and 93% YoY, respectively. Margin continued to contract in 2Q23, suggesting the Company is making efforts to digest inventory. 2Q NP was negative again, failing to continue its profitability from 1Q. This has confirmed our previous prediction that "inventory digestion continues, however, not necessary a hint of market turnaround". ([link](#)) Looking forward, we think the de-stocking process is likely to persist till the end of the year, which will continue to hurt the Company's overall margin. Maintain HOLD, with adjusted TP at RMB85.

- **Margin erosion in a declining market (mobile/security CIS).** 2Q's GPM dropped to 17.3% from 24.7% in 1Q23 and 33.3% in 2Q22, mainly due to weak mobile and security market demand and inventory digestion. Mobile/security sensor sales declined 45%/23% in 2022 and further declined 14%/25% YoY in 1H23. Inventory was RMB9.8bn, down by 30% from the peak in 3Q22. However, MOI (months of inventory) was still 6M. As de-stocking will continue into 2H23, we expect the overall GPM will remain under pressure. Once the inventory is back to normal level (3-4M), GPM can be expected to gradually return to previous 30% level.
- **We are more conservative than the consensus as we expect a gradual recovery in 2024.** Counterpoint estimated smartphone shipment will decline 6% to 1.15bn in 2023, "worst in ten years", remain cautious on 1Q24 and show elevated risk of a delayed recovery into next year. Given Willsemi's large inventory and low consumer sentiment, we expect total revenue will decrease modestly by 5% in 2023. Recovery may come in 2024, when the Company's sales resume double-digit growth. 2024/25E revenue is estimated to reach RMB22.9bn/RMB26.4bn, which is 11%/14% lower than consensus.
- **Maintain HOLD with TP adjusted to RMB85,** based on rollover 29.3x (unchanged) FY25E P/E. Current price is trading at 55x 24E P/E and 32x 25E P/E, which is fair valued. We think investors should watch Willsemi's GPM trend and inventory levels in the following quarters. Potential upside includes earlier-than-expected consumer demand recovery, better sales of new products.

### Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	24,104	20,078	19,184	22,944	26,423
YoY growth (%)	21.6	(16.7)	(4.5)	19.6	15.2
Gross margin (%)	34.5	30.8	22.8	26.8	30.7
Operating profit (RMB mn)	5,022	2,456	1,392	2,658	4,204
YoY growth (%)	63.9	(51.1)	(43.3)	90.9	58.2
Net profit (RMB mn)	4,476.2	1,448.5	357.9	2,034.4	3,467.3
YoY growth (%)	65.4	(67.6)	(75.3)	468.4	70.4
EPS (Reported) (RMB)	3.83	0.84	0.69	1.71	2.91
YoY growth (%)	61.1	(82.1)	22.4	103.4	70.4
P/E (x)	24.3	110.9	135.7	54.5	32.0
ROE (%)	27.5	5.5	4.2	9.4	13.9

Source: Company data, Bloomberg, CMBIGM estimates

**HOLD (Maintain)**

Target Price	RMB85.00
(Previous TP	RMB78.00)
Up/Downside	(8.7%)
Current Price	RMB93.15
China Technology	

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### Stock Data

Mkt Cap (RMB mn)	109,791.0
Avg 3 mths t/o (RMB mn)	746.9
52w High/Low (RMB)	111.13/71.70
Total Issued Shares (mn)	1178.6

Source: FactSet

### Shareholding Structure

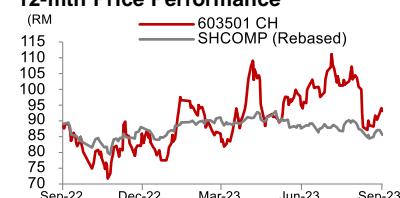
Yu Renrong	30.3%
Source: Bloomberg	

### Share Performance

	Absolute	Relative
1-mth	-10.8%	-6.7%
3-mth	-2.3%	0.0%
6-mth	11.6%	17.4%

Source: FactSet

### 12-mth Price Performance



Source: FactSet

### Related Reports

1. 16/1/2023 Willsemi (603501 CH) – Preliminary 2022 results came in below estimate; Maintain HOLD ([link](#))
2. 31/10/2022 Willsemi (603501 CH) – Sluggish 3Q22 performance; Downgrade to HOLD as near-term pressures may last longer ([link](#))
3. 12/10/2022 China CIS Sector – Maintain long-term positive outlook; near-term challenges persist ([link](#))
4. 16/8/2022 Willsemi (603501 CH) – 2Q results review: Recovery slowed down by weak mobile CIS ([link](#))
5. 1/4/2022 China CIS Sector – Can non-mobile CIS strength offset handset weakness? We remain cautiously optimistic ([link](#))

**Figure 1: CMBIGM estimates vs. consensus**

RMB mn	CMBI estimates			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	19,184	22,944	26,423	20,754	25,911	30,875	-8%	-11%	-14%
Gross Profit	4,381	6,141	8,109	4,902	7,643	9,619	-11%	-20%	-16%
Operating Profit	882	2,200	3,770	1,616	3,779	5,385	-45%	-42%	-30%
Net profit	816	2,034	3,467	1,297	3,244	4,614	-37%	-37%	-25%
EPS (RMB)	0.686	1.708	2.911	1.163	2.846	3.909	-41%	-40%	-26%
<b>Gross Margin</b>	22.8%	26.8%	30.7%	23.6%	29.5%	31.2%	-0.8 ppt	-2.7 ppt	-0.5 ppt
<b>Operating Margin</b>	4.6%	9.6%	14.3%	7.8%	14.6%	17.4%	-3.2 ppt	-5 ppt	-3.2 ppt
<b>Net Margin</b>	4.3%	8.9%	13.1%	6.3%	12.5%	14.9%	-2 ppt	-3.7 ppt	-1.8 ppt

Source: Company data, CMBIGM estimates

**Figure 2: Earnings revision**

RMB mn	New		Old		Diff (%)	
	FY23E	FY24E	FY23E	FY24E	FY23E	FY24E
Revenue	19,184	22,944	21,661	24,178	-11%	-5%
Gross Profit	4,381	6,141	6,477	7,481	-32%	-18%
Operating Profit	882	2,200	3,271	3,694	-73%	-40%
Net profit	816	2,034	2,934	3,313	-72%	-39%
EPS (RMB)	0.686	1.708	2.455	2.769	-72%	-38%
<b>Gross Margin</b>	22.8%	26.8%	29.9%	30.9%	-7.1 ppt	-4.2 ppt
<b>Operating Margin</b>	4.6%	9.6%	15.1%	15.3%	-10.5 ppt	-5.7 ppt
<b>Net Margin</b>	4.3%	8.9%	13.5%	13.7%	-9.3 ppt	-4.8 ppt

Source: Company data, CMBIGM estimates

## Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
<b>YE 31 Dec (RMB mn)</b>						
<b>Revenue</b>	<b>19,824</b>	<b>24,104</b>	<b>20,078</b>	<b>19,184</b>	<b>22,944</b>	<b>26,423</b>
Cost of goods sold	(13,894)	(15,790)	(13,903)	(14,803)	(16,803)	(18,314)
<b>Gross profit</b>	<b>5,930</b>	<b>8,314</b>	<b>6,175</b>	<b>4,381</b>	<b>6,141</b>	<b>8,109</b>
<b>Operating expenses</b>	<b>(2,865)</b>	<b>(3,292)</b>	<b>(3,719)</b>	<b>(2,989)</b>	<b>(3,483)</b>	<b>(3,905)</b>
Selling expense	(371)	(515)	(516)	(439)	(502)	(551)
SG&A expense	(795)	(709)	(789)	(657)	(762)	(852)
R&D expense	(1,727)	(2,110)	(2,496)	(1,957)	(2,294)	(2,589)
Others	27	42	82	63	76	87
<b>Operating profit</b>	<b>3,064</b>	<b>5,022</b>	<b>2,456</b>	<b>1,392</b>	<b>2,658</b>	<b>4,204</b>
Other income	44	5	5	3	5	5
Other expense	(9)	(3)	(2)	(1)	(2)	(2)
Gain/loss on financial assets at FVTPL	(285)	(178)	(1,425)	(289)	(214)	(208)
Investment gain/loss	21	614	1,047	28	31	32
Other gains/(losses)	431	(103)	(186)	130	143	161
<b>EBIT</b>	<b>3,267</b>	<b>5,358</b>	<b>1,895</b>	<b>1,263</b>	<b>2,621</b>	<b>4,193</b>
Interest income	25	25	83	27	128	173
Interest expense	(297)	(410)	(559)	(494)	(546)	(593)
<b>Net Interest income/(expense)</b>	<b>(272)</b>	<b>(385)</b>	<b>(475)</b>	<b>(467)</b>	<b>(418)</b>	<b>(420)</b>
Other income/expense	(4)	29	96	(127)	0	0
<b>Pre-tax profit</b>	<b>2,991</b>	<b>5,002</b>	<b>1,516</b>	<b>669</b>	<b>2,203</b>	<b>3,772</b>
Income tax	(308)	(456)	(80)	(343)	(198)	(340)
<b>After tax profit</b>	<b>2,683</b>	<b>4,546</b>	<b>1,436</b>	<b>326</b>	<b>2,004</b>	<b>3,433</b>
Minority interest	(23)	70	(12)	(32)	(30)	(34)
<b>Net profit</b>	<b>2,706</b>	<b>4,476</b>	<b>1,448</b>	<b>358</b>	<b>2,034</b>	<b>3,467</b>
Net dividends	274	455	82	100	205	349
BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
<b>YE 31 Dec (RMB mn)</b>						
<b>Current assets</b>	<b>13,913</b>	<b>20,296</b>	<b>19,526</b>	<b>17,871</b>	<b>19,891</b>	<b>22,599</b>
Cash & equivalents	5,423	7,630	3,995	7,112	9,947	13,134
Restricted cash	33	41	31	20	20	20
Account receivables	2,583	3,029	2,613	3,422	3,208	3,006
Inventories	5,274	8,781	12,356	6,697	6,024	5,800
Prepayment	151	220	236	218	261	300
Financial assets at FVTPL	13	15	14	34	34	34
Other current assets	436	579	280	367	397	306
<b>Non-current assets</b>	<b>8,735</b>	<b>11,784</b>	<b>15,577</b>	<b>17,744</b>	<b>19,090</b>	<b>20,331</b>
PP&E	1,995	2,045	2,540	2,977	3,405	3,823
Right-of-use assets	0	236	209	151	96	40
Deferred income tax	278	270	335	277	337	353
Investment in JVs & assos	185	1,015	2,499	2,932	2,964	2,987
Intangibles	1,509	1,604	2,018	2,133	2,256	2,349
Goodwill	2,800	2,998	3,169	3,870	3,870	3,870
Financial assets at FVTPL	1,178	2,576	2,964	3,258	3,605	3,988
Other non-current assets	791	1,041	1,842	2,144	2,558	2,922
<b>Total assets</b>	<b>22,648</b>	<b>32,080</b>	<b>35,103</b>	<b>35,615</b>	<b>38,981</b>	<b>42,931</b>
<b>Current liabilities</b>	<b>6,845</b>	<b>8,700</b>	<b>10,373</b>	<b>8,703</b>	<b>9,084</b>	<b>8,916</b>
Short-term borrowings	2,511	2,387	3,632	1,573	2,002	2,117
Account payables	2,544	3,956	2,281	2,991	2,809	2,509
Tax payable	705	589	145	107	139	141
Other current liabilities	753	1,364	3,926	3,742	3,744	3,744
Contract liabilities	110	149	125	131	157	181
Accrued expenses	221	255	263	158	233	224
<b>Non-current liabilities</b>	<b>4,278</b>	<b>7,076</b>	<b>6,717</b>	<b>7,349</b>	<b>8,252</b>	<b>9,121</b>
Long-term borrowings	3,182	3,448	2,750	3,245	4,044	4,687
Bond payables	0	2,250	2,347	2,347	2,347	2,347
Obligations under finance leases	0	179	145	133	153	165
Deferred income	279	304	423	487	501	570
Other non-current liabilities	817	895	1,052	1,138	1,207	1,352
<b>Total liabilities</b>	<b>11,123</b>	<b>15,776</b>	<b>17,090</b>	<b>16,052</b>	<b>17,336</b>	<b>18,037</b>
Share capital	868	876	1,185	1,189	1,191	1,191
Capital surplus	(255)	(742)	(769)	(769)	(769)	(769)

Retained earnings	3,895	8,049	8,572	9,288	11,241	14,503
Other reserves	6,731	8,015	9,030	9,697	9,943	9,964
<b>Total shareholders equity</b>	<b>11,239</b>	<b>16,198</b>	<b>18,018</b>	<b>19,406</b>	<b>21,605</b>	<b>24,889</b>
Minority interest	286	106	82	70	40	5
<b>Total equity and liabilities</b>	<b>22,648</b>	<b>32,080</b>	<b>35,190</b>	<b>35,528</b>	<b>38,981</b>	<b>42,931</b>

CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
<b>Operating</b>						
Profit before taxation	2,683	4,546	958	804	2,004	3,433
Depreciation & amortization	765	927	1,045	1,204	1,386	1,655
Tax paid	159	4	51	122	(46)	53
Change in working capital	(691)	(3,569)	(5,352)	5,499	462	(112)
Others	429	284	1,303	492	558	750
<b>Net cash from operations</b>	<b>3,345</b>	<b>2,192</b>	<b>(1,993)</b>	<b>8,121</b>	<b>4,364</b>	<b>5,779</b>
<b>Investing</b>						
Capital expenditure	(1,133)	(1,122)	(2,259)	(1,743)	(1,932)	(2,130)
Acquisition of subsidiaries/ investments	(1,504)	(1,780)	(1,762)	(1,332)	(209)	(225)
Net proceeds from disposal of short-term investments	6	3	7	40	46	54
Others	0	0	(2)	14	(32)	(23)
<b>Net cash from investing</b>	<b>(2,631)</b>	<b>(2,899)</b>	<b>(4,017)</b>	<b>(3,021)</b>	<b>(2,126)</b>	<b>(2,324)</b>
<b>Financing</b>						
Dividend paid	(413)	(569)	(822)	(658)	(628)	(798)
Net borrowings	1,567	3,066	3,242	(1,746)	1,228	759
Proceeds from share issues	683	1,203	273	683	217	(0)
Others	(3)	(767)	(438)	(262)	(220)	(229)
<b>Net cash from financing</b>	<b>1,835</b>	<b>2,932</b>	<b>2,255</b>	<b>(1,983)</b>	<b>597</b>	<b>(268)</b>
<b>Net change in cash</b>						
Cash at the beginning of the year	3,116	5,423	7,630	3,995	7,112	9,947
Exchange difference	(241)	(18)	120	0	0	0
Others	2,548	2,226	(3,755)	3,117	2,835	3,187
<b>Cash at the end of the year</b>	<b>5,423</b>	<b>7,630</b>	<b>3,995</b>	<b>7,112</b>	<b>9,947</b>	<b>13,134</b>

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