

AAC Technologies (2018 HK)

3Q21 in-line; Remain cautious on 4Q21 recovery

AAC's 3Q21 revenue/net profit declined 6.1%/58% YoY, in-line with its profit warning earlier (down 51-61% YoY), mainly due to weak demand of domestic smartphones, chip shortage, supply chain disruption, and higher operating cost in China. Blended GPM of 22.7% (-0.9ppt YoY/-2.7ppt QoQ) suggested continued margin pressure due to lower utilization, lack of upgrade and intense competition. While mgmt. expects optics shipment/GPM to recover in 4Q21E, we think semi shortage, COVID-19 and smartphone demand weakness will continue to drag smartphone demand in 4Q21E, and plastic lens ASP pressure and HCM ramp will dilute AAC's margin into FY22/23E. Our new FY21-23E EPS are 19-25% below consensus. Maintain Hold with new SOTP-based TP HK\$37.4 implies 18.5x FY22E P/E.

- 3Q21 in-line; demand weakness across all segments.** By segment, acoustics grew 1.9% YoY on US client's peak season while MEMS/ haptics & casings was down 31%/7.9% YoY given Android weakness and competition. We are also disappointed by weak optics revenue (-18% YoY), and 3Q plastic lens shipment decline of 50% YoY and weak optics margin of 15% (vs 22% in 2Q) suggested intensified competition in handset lens industry. Looking ahead, we remain cautious that plastic lens pricing, expansion in lower-margin HCM and WLG's initial lower yield will continue to impact optics GPM into FY22-23E.
- Expansion into automotive market: lens for LiDAR/cam and audio for smart cockpit.** AAC also announced to accelerate expansion into automotive market by promoting comprehensive solution for smart cars across products including optics, acoustics, haptics and MEMs microphones. In particular, mgmt. expected to offer auto lens products for LiDAR and video camera and audio solution for smart cockpit. AAC also announced in Oct to invest into a next-gen image sensor company, SWIR Vision Systems, and aims to leverage its WLG technology to enhance overall competitiveness.
- Headwinds on semi shortage, de-spec and weak demand; Maintain HOLD.** We think 2H21E will remain a slow year for smartphone spec upgrade given semi shortage and sluggish consumer demand. We trimmed FY21-23E EPS by 19-24% for lower GPM and weaker optics revenue. Our FY21-23E EPS remain 19-25% below consensus for more conservative upgrade and margin in FY22/23E. Our new SOTP-based TP is HK\$37.4, implying 18.5x FY22E P/E. Trading at 16.7x FY22E P/E, the stock is fairly valued in our view.

Earnings Summary

| (YE 31 Dec) | FY19A | FY20A | FY21E | FY22E | FY23E |
|---------------------|--------|--------|--------|--------|--------|
| Revenue (RMB mn) | 17,884 | 17,140 | 17,938 | 20,485 | 21,978 |
| YoY growth (%) | (1.4) | (4.2) | 4.7 | 14.2 | 7.3 |
| Net income (RMB mn) | 2,222 | 1,507 | 1,582 | 2,026 | 2,217 |
| EPS (RMB) | 1.84 | 1.25 | 1.31 | 1.68 | 1.83 |
| YoY growth (%) | (41.1) | (32.1) | 5.0 | 28.0 | 9.4 |
| Consensus EPS (RMB) | 1.84 | 1.27 | 1.61 | 2.06 | 2.45 |
| P/E (x) | 15.2 | 22.4 | 21.4 | 16.7 | 15.2 |
| P/B (x) | 1.7 | 1.5 | 1.5 | 1.4 | 1.4 |
| Yield (%) | 4.5 | 2.2 | 2.3 | 3.0 | 3.3 |
| ROE (%) | 11.5 | 6.9 | 7.0 | 8.6 | 9.0 |

Source: Company data, Bloomberg, CMBIS estimates

HOLD (Maintain)

| | |
|---------------|-----------|
| Target Price | HK\$37.4 |
| (Previous TP | HK\$48.3) |
| Up/Downside | +11% |
| Current Price | HK\$33.7 |

China Technology Sector

Alex Ng

(852) 3900 0881

alexng@cmbi.com.hk

Stock Data

| | |
|--------------------------|--------------|
| Mkt. Cap. (HK\$m) | 40,726 |
| Avg. 3mths t/o (HK\$m) | 272.50 |
| 52W High/Low (HK\$) | 60.00/ 31.15 |
| Total Issued Shares (mn) | 1,209 |

Source: Bloomberg

Shareholding Structure

| | |
|----------------|--------|
| Chunyuan Wu | 21.75% |
| Zhengmin Pan | 19.24% |
| JPMorgan Chase | 10.59% |

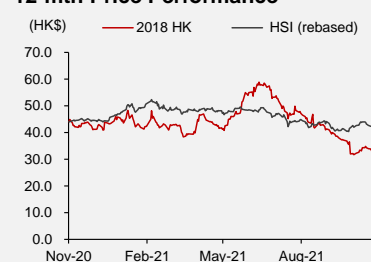
Source: HKEx

Share Performance

| | Absolute | Relative |
|-------|----------|----------|
| 1-mth | 4.8% | 5.1% |
| 3-mth | -28.5% | -24.5% |
| 6-mth | -18.2% | -9.2% |

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Deloitte Touche Tohmatsu

Related Reports:

- 1Q21 in-line with better acoustics; Maintain HOLD on fair valuation – 17 May 2021
- 1Q profit alert on normalised demand; Maintain HOLD on fair valuation – 13 Apr 2021
- 4Q20 beat on one-off gain; Optics ASP/GPM weaker than expected – 26 Mar 2021

3Q21 Results Review

Figure 1: 3Q21 results review

| RMB mn | 1Q20 | 2Q20 | 3Q20 | 4Q20 | 1Q21 | 2Q21 | 3Q21 | QoQ | YoY |
|------------------------|-------|-------|-------|-------|-------|-------|-------|----------|----------|
| Revenue | 3,560 | 4,277 | 4,520 | 4,783 | 4,292 | 4,317 | 4,246 | 1% | -6% |
| Gross Profit | 823 | 995 | 1,067 | 1,342 | 1,337 | 1,078 | 964 | -19% | -10% |
| Operating Profit | 95 | 262 | 376 | 617 | 640 | 342 | 239 | -46% | -36% |
| Net profit | 53 | 268 | 430 | 756 | 536 | 385 | 188 | -28% | -56% |
| EPS (RMB) | 0.04 | 0.22 | 0.36 | 0.63 | 0.44 | 0.32 | 0.15 | -28% | -57% |
| Margin (%) | | | | | | | | | |
| Gross Margin | 23.1% | 23.3% | 23.6% | 28.1% | 31.1% | 25.0% | 22.7% | -2.3 ppt | -0.9 ppt |
| Operating Margin | 2.7% | 6.1% | 8.3% | 12.9% | 14.9% | 7.9% | 5.6% | -2.3 ppt | -2.7 ppt |
| Net Margin | 1.5% | 6.3% | 9.5% | 15.8% | 12.5% | 8.9% | 4.3% | -4.6 ppt | -5.2 ppt |
| Growth (%) | | | | | | | | | |
| Revenue (YoY) | -5% | 12% | -10% | -10% | 21% | 1% | -6% | | |
| Revenue (QoQ) | -33% | -76% | 27% | 12% | -10% | -75% | -1% | | |
| Operating profit (YoY) | -81% | -26% | -55% | -23% | 574% | 31% | -36% | | |
| Net profit (YoY) | -88% | -21% | -38% | 0% | 918% | 44% | -57% | | |

Source: Company data, Bloomberg, CMBIS

Figure 2: Revenue breakdown

| RMB mn | FY20 | 1Q21 | 2Q21 | 3Q21 | 4Q21E | FY21E | FY22E | FY23E |
|----------------------------|---------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Revenue | | | | | | | | |
| Dynamic components | 7,560 | 2,096 | 1,953 | 2,200 | 1,819 | 8,068 | 8,039 | 8,496 |
| MEMS components | 1,083 | 283 | 310 | 254 | 295 | 1,191 | 1,310 | 1,441 |
| Haptics & RF | 6,847 | 1,228 | 1,310 | 1,395 | 1,702 | 5,635 | 6,937 | 7,303 |
| Others (incl. optics) | 1,650 | 685 | 689 | 397 | 1,145 | 3,045 | 4,199 | 4,738 |
| Optics | 1,634 | 674 | 683 | 390 | 1,142 | 3,014 | 4,168 | 4,707 |
| Others | 16 | 11 | 6 | 7 | 3 | 31 | 31 | 31 |
| Total | 17,140 | 4,292 | 4,262 | 4,246 | 4,960 | 17,938 | 20,485 | 21,978 |
| Revenue mix | | | | | | | | |
| Dynamic components | 44% | 49% | 46% | 52% | 37% | 45% | 39% | 39% |
| MEMS components | 6% | 7% | 7% | 6% | 6% | 7% | 6% | 7% |
| Haptics & RF | 40% | 29% | 31% | 33% | 34% | 31% | 34% | 33% |
| Others (incl. optics) | 10% | 16% | 16% | 9% | 23% | 17% | 20% | 22% |
| YoY Growth (%) | | | | | | | | |
| Dynamic components | -7% | 48% | 2% | 2% | -12% | 7% | -0.4% | 6% |
| MEMS components | 17% | 42% | 20% | -31% | 15% | 10% | 10% | 10% |
| Haptics & RF | -11% | -27% | -24% | -8% | -11% | -18% | 23% | 5% |
| Others (incl. optics) | 51% | 175% | 79% | -17% | 113% | 85% | 38% | 13% |
| Optics | 53% | 176% | 80% | -18% | 113% | 84% | 38% | 13% |
| Total | -4% | 21% | 0% | -6% | 4% | 5% | 14% | 7% |
| Gross profit margin | | | | | | | | |
| Dynamic components | 27.9% | 37.4% | 33.0% | 26.3% | 28.5% | 30.5% | 32.0% | 31.5% |
| MEMS components | 17.5% | 16.7% | 17.0% | 15.3% | 16.0% | 14.4% | 17.0% | 20.0% |
| Haptics & RF | 23.8% | 25.5% | 23.2% | 20.3% | 23.3% | 22.9% | 23.3% | 22.9% |
| Others (incl. optics) | 18.2% | 28.1% | 27.7% | 14.5% | 15.3% | 19.6% | 24.4% | 25.1% |
| Total | 24.7% | 31.1% | 28.0% | 22.7% | 22.9% | 25.2% | 26.5% | 26.5% |

Source: Company data, CMBIS

Earnings Revision

Figure 3: CMBIS earnings revisions

| RMB mn | New | | | Old | | | Change (%) | | |
|------------------|--------|--------|--------|--------|--------|--------|------------|----------|----------|
| | FY21E | FY22E | FY23E | FY21E | FY22E | FY23E | FY20E | FY21E | FY22E |
| Revenue | 17,938 | 20,485 | 21,978 | 18,790 | 20,799 | 22,324 | -5% | -2% | -2% |
| Gross Profit | 4,520 | 5,439 | 5,830 | 4,982 | 5,625 | 6,120 | -9% | -3% | -5% |
| Operating Profit | 1,643 | 2,289 | 2,483 | 2,102 | 2,531 | 2,832 | -22% | -10% | -12% |
| Net profit | 1,582 | 2,026 | 2,217 | 2,088 | 2,321 | 2,606 | -24% | -13% | -15% |
| EPS (RMB) | 1.31 | 1.68 | 1.83 | 1.73 | 1.92 | 2.16 | -24% | -13% | -15% |
| Gross Margin | 25.2% | 26.5% | 26.5% | 26.5% | 27.0% | 27.4% | -1.3 ppt | -0.5 ppt | -0.9 ppt |
| Operating Margin | 9.2% | 11.2% | 11.3% | 11.2% | 12.2% | 12.7% | -2 ppt | -1 ppt | -1.4 ppt |
| Net Margin | 8.8% | 9.9% | 10.1% | 11.1% | 11.2% | 11.7% | -2.3 ppt | -1.3 ppt | -1.6 ppt |

Source: Company data, CMBIS estimates

Figure 4: CMBIS estimates vs consensus

| RMB mn | CMBIS | | | Consensus | | | Diff (%) | | |
|------------------|--------|--------|--------|-----------|--------|--------|----------|----------|----------|
| | FY21E | FY22E | FY23E | FY21E | FY22E | FY23E | FY21E | FY22E | FY23E |
| Revenue | 17,938 | 20,485 | 21,978 | 18,890 | 22,197 | 25,217 | -5% | -8% | -13% |
| Gross Profit | 4,520 | 5,439 | 5,830 | 5,136 | 6,192 | 7,114 | -12% | -12% | -18% |
| Operating Profit | 1,643 | 2,289 | 2,483 | 2,097 | 2,799 | 3,298 | -22% | -18% | -25% |
| Net profit | 1,582 | 2,026 | 2,217 | 1,931 | 2,473 | 2,972 | -18% | -18% | -25% |
| EPS (RMB) | 1.31 | 1.68 | 1.83 | 1.61 | 2.06 | 2.45 | -19% | -19% | -25% |
| Gross Margin | 25.2% | 26.5% | 26.5% | 27.2% | 27.9% | 28.2% | -2 ppt | -1.4 ppt | -1.7 ppt |
| Operating Margin | 9.2% | 11.2% | 11.3% | 11.1% | 12.6% | 13.1% | -1.9 ppt | -1.4 ppt | -1.8 ppt |
| Net Margin | 8.8% | 9.9% | 10.1% | 10.2% | 11.1% | 11.8% | -1.4 ppt | -1.3 ppt | -1.7 ppt |

Source: Bloomberg, CMBIS estimates

Figure 5: P&L forecast

| RMB mn | FY20 | 1Q21 | 2Q21 | 3Q21 | 4Q21E | FY21E | FY22E | FY23E |
|-------------------------|---------------|--------------|--------------|-------------|--------------|---------------|---------------|---------------|
| Revenue | 17,140 | 4,292 | 4,317 | 4,246 | 4,960 | 17,938 | 20,485 | 21,978 |
| ...YoY | -4.2% | 20.6% | 0.9% | -6.1% | 3.7% | 4.7% | 14.2% | 7.3% |
| Cost of sales | (12,913) | (2,955) | (3,239) | (3,282) | (3,824) | (13,300) | (15,051) | (16,154) |
| Gross profit | 4,227 | 1,337 | 1,078 | 964 | 1,136 | 4,516 | 5,434 | 5,824 |
| GPM (%) | 24.7% | 31.1% | 25.0% | 22.7% | 22.9% | 25.2% | 26.5% | 26.5% |
| ...YoY | -17.2% | 62.5% | 8.3% | -9.6% | -15.4% | 6.8% | 20.3% | 7.2% |
| SG&A | (957) | (244) | (295) | (290) | (268) | (1,098) | (1,096) | (1,143) |
| ...% of rev | -5.6% | -5.7% | -6.8% | -6.8% | -5.4% | -6.1% | -5.4% | -5.2% |
| R&D | (1,920) | (453) | (441) | (434) | (446) | (1,775) | (2,049) | (2,198) |
| ...% of rev | -11.2% | -10.6% | -10.2% | -10.2% | -9.0% | -9.9% | -10.0% | -10.0% |
| Operating profit | 1,350 | 640 | 342 | 239 | 422 | 1,643 | 2,289 | 2,483 |
| OPM (%) | 7.9% | 14.9% | 7.9% | 5.6% | 8.5% | 9.2% | 11.2% | 11.3% |
| ...YoY | -45.4% | 573.7% | 30.7% | -36.3% | -31.6% | 21.7% | 39.3% | 8.5% |
| Income Tax | (147) | (86) | 32 | (13) | (65) | (131) | (275) | (301) |
| Effective Tax Rate | 8.9% | 13.8% | -9.0% | 6.9% | 12.0% | 7.7% | 12.0% | 12.0% |
| Net profit | 1,507 | 536 | 385 | 183 | 477 | 1,582 | 2,026 | 2,217 |
| NPM (%) | 8.8% | 12.5% | 8.9% | 4.3% | 9.6% | 8.8% | 9.9% | 10.1% |
| ...YoY | -32.2% | 917.5% | 43.8% | -57.4% | -36.8% | 5.0% | 28.0% | 9.4% |

Source: Company data, CMBIS

Valuation

Maintain HOLD with new TP HK\$37.4

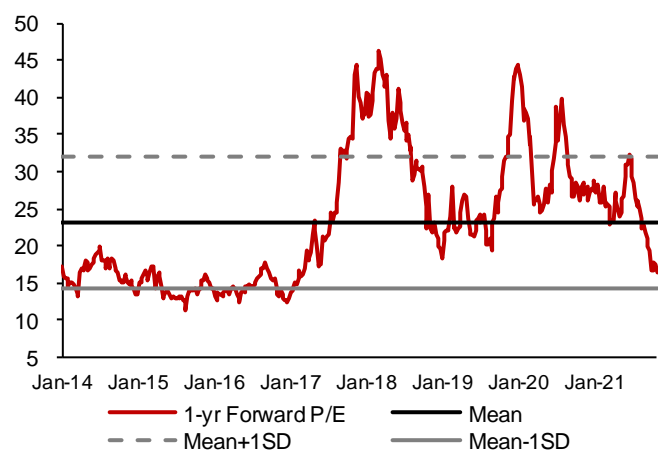
We derived our new TP of HK\$ 37.4 based on SOTP to reflect business diversification with different growth profiles and visibility. Our new TP is based on weighted-average target P/E multiple of 18.5x FY22E P/E and valuation of optics segment at RMB 17.9bn. We assign 15x P/E to AAC's acoustics, MEMS, and 12x P/E to haptics & mechanical RF, in-line with HK-listed peers.

Figure 6: AAC Tech – SOTP valuation

| Business segment | Value per share (RMB) | Valuation Methodology | Target P/E | % of FY22E Profit | FY22E EPS (RMB) |
|------------------|-----------------------|-----------------------|--------------|-------------------|-----------------|
| Acoustics | 11.9 | P/E target multiple | 15x | 47% | 0.79 |
| MEMS | 1.4 | P/E target multiple | 15x | 4% | 0.07 |
| ED & PM | 6.0 | P/E target multiple | 12x | 30% | 0.50 |
| Optics | 12.1 | 82% of RMB 17.9bn | | | 0.32 |
| TP (RMB) | 31.0 | | 18.5x | | 1.68 |
| TP (HK\$) | 37.4 | | | | |

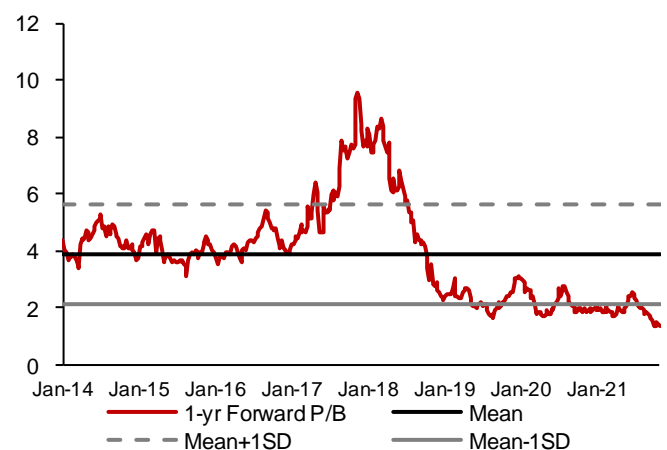
Sources: Company data, CMBIS

Figure 7: 12M forward P/E band



Source: Company data, CMBIS

Figure 8: 12M forward P/B band



Source: Company data, CMBIS

Financial Summary

Income statement

| YE 31 Dec (RMB mn) | FY19A | FY20A | FY21E | FY22E | FY23E |
|-------------------------|--------------|--------------|--------------|--------------|--------------|
| Revenue | 17,884 | 17,140 | 17,938 | 20,485 | 21,978 |
| COGS | (12,777) | (12,913) | (13,300) | (15,051) | (16,154) |
| Gross profit | 5,107 | 4,227 | 4,516 | 5,434 | 5,824 |
| Selling and marketing | (275) | (285) | (309) | (348) | (352) |
| Administrative | (643) | (672) | (788) | (748) | (791) |
| R&D | (1,717) | (1,920) | (1,775) | (2,049) | (2,198) |
| Operating profit | 2,472 | 1,350 | 1,643 | 2,289 | 2,483 |
| Financial cost | (248) | (353) | (353) | (353) | (353) |
| Other income/(losses) | 329 | 650 | 416 | 357 | 379 |
| Pre-tax profit | 2,552 | 1,648 | 1,707 | 2,293 | 2,510 |
| Tax | (330) | (147) | (131) | (275) | (301) |
| Minority interest | - | (6) | (6) | (8) | (8) |
| Net profit | 2,222 | 1,507 | 1,582 | 2,026 | 2,217 |

Cash flow summary

| YE 31 Dec (RMB mn) | FY19A | FY20A | FY21E | FY22E | FY23E |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|
| Profit before taxation | 2,552 | 1,648 | 1,707 | 2,293 | 2,510 |
| Depreciation | 1,529 | 3,409 | 3,467 | 3,834 | 4,147 |
| Change in working capital | (509) | (231) | (442) | (1,550) | 799 |
| Others | (109) | (1,233) | 229 | 102 | 66 |
| Net cash from operating | 3,464 | 3,593 | 4,962 | 4,680 | 7,522 |
| Capex | (3,000) | (3,262) | (4,327) | (3,678) | (3,126) |
| Other | 68 | | | | |
| Net cash from investing | (2,932) | (3,262) | (4,327) | (3,678) | (3,126) |
| Net borrowings | | | | | |
| Interest paid | (248) | (353) | (353) | (353) | (353) |
| Dividend paid | (1,531) | (753) | (791) | (1,013) | (1,109) |
| Other | | 3,688 | | | |
| Net cash from financing | (1,779) | 2,582 | (1,144) | (1,366) | (1,461) |
| Net change in cash | (1,247) | 2,913 | (509) | (363) | 2,935 |
| Cash at beg of year | 4,059 | 5,512 | 7,540 | 7,032 | 6,669 |
| Exchange difference | | | | | |
| Cash at end of year | 5,512 | 7,540 | 7,032 | 6,669 | 9,603 |

Balance sheet

| YE 31 Dec (RMB mn) | FY19A | FY20A | FY21E | FY22E | FY23E |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Current assets | 14,808 | 16,850 | 16,385 | 18,342 | 20,615 |
| Cash & equivalents | 5,512 | 7,540 | 7,032 | 6,669 | 9,603 |
| Trade and other rev. | 5,576 | 5,176 | 7,745 | 6,821 | 8,950 |
| Inventories | 3,664 | 3,995 | 1,471 | 4,715 | 1,924 |
| Other current assets | 55 | 138 | 138 | 138 | 138 |
| Non-current assets | 19,400 | 22,062 | 22,922 | 22,765 | 21,744 |
| PPE | 16,911 | 18,592 | 19,452 | 19,295 | 18,274 |
| Lease prepayments | | | | | |
| Intangible assets | 434 | 373 | 373 | 373 | 373 |
| Other non-curr. assets | 2,055 | 3,096 | 3,096 | 3,096 | 3,096 |
| Total assets | 34,207 | 38,911 | 39,307 | 41,107 | 42,359 |
| Current liabilities | 7,711 | 9,380 | 8,990 | 9,785 | 9,937 |
| Short-term borrowings | 1,876 | 3,349 | 3,349 | 3,349 | 3,349 |
| Trade & other payables | 5,474 | 5,205 | 4,807 | 5,577 | 5,715 |
| Tax payables | 178 | 167 | 175 | 199 | 214 |
| Other current liabilities | 182 | 660 | 660 | 660 | 660 |
| Non-current liabilities | 7,136 | 7,711 | 7,711 | 7,711 | 7,711 |
| Government grants | 209 | 604 | 604 | 604 | 604 |
| Deferred tax liabilities | 65 | 49 | 49 | 49 | 49 |
| Other non-current liab. | 6,861 | 7,058 | 7,058 | 7,058 | 7,058 |
| Total liabilities | 14,846 | 17,090 | 16,701 | 17,496 | 17,648 |
| Share capital | 98 | 98 | 98 | 98 | 98 |
| Reserves | 19,253 | 21,061 | 21,852 | 22,865 | 23,973 |
| Minority interest | 10 | 662 | 656 | 649 | 640 |
| Shareholders' equity | 19,361 | 21,821 | 22,606 | 23,611 | 24,711 |
| Total equity & liabilities | 34,207 | 38,911 | 39,307 | 41,107 | 42,359 |

Key ratios

| YE 31 Dec | FY19A | FY20A | FY21E | FY22E | FY23E |
|-----------------------------|--------|----------|----------|----------|----------|
| Sales mix (%) | | | | | |
| Dynamic components | 45.7 | 44.1 | 45.0 | 39.2 | 38.7 |
| MEMS (microphone) | 5.2 | 6.3 | 6.6 | 6.4 | 6.6 |
| Electro. (haptics) | 43.0 | 39.9 | 31.4 | 33.9 | 33.2 |
| Other | 6.1 | 9.6 | 17.0 | 20.5 | 21.6 |
| Growth (%) | | | | | |
| Revenue | (1.4) | (4.2) | 4.7 | 14.2 | 7.3 |
| Gross profit | (24.3) | (17.2) | 6.8 | 20.3 | 7.2 |
| Operating Income | (42.0) | (45.4) | 21.7 | 39.3 | 8.5 |
| Net profit | (41.5) | (32.2) | 5.0 | 28.0 | 9.4 |
| Profitability (%) | | | | | |
| Gross Margin | 28.6 | 24.7 | 25.2 | 26.5 | 26.5 |
| Operating Margin | 13.8 | 7.9 | 9.2 | 11.2 | 11.3 |
| Net margin | 12.4 | 8.8 | 8.8 | 9.9 | 10.1 |
| Balance sheet ratios | | | | | |
| Net debt/total equity (x) | 0.0 | Net cash | Net cash | Net cash | Net cash |
| Current ratio (x) | 1.9 | 1.8 | 1.8 | 1.9 | 2.1 |
| Receivable turnover days | 87.8 | 87.8 | 90.0 | 90.0 | 90.0 |
| Inventory turnover days | 88.6 | 88.6 | 75.0 | 75.0 | 75.0 |
| Payable turnover days | 84.7 | 84.7 | 70.0 | 70.0 | 70.0 |
| Returns (%) | | | | | |
| ROE | 11.5 | 6.9 | 7.0 | 8.6 | 9.0 |
| ROA | 6.5 | 3.9 | 4.0 | 4.9 | 5.2 |
| Per share data (RMB) | | | | | |
| EPS | 1.84 | 1.25 | 1.31 | 1.68 | 1.83 |
| DPS | 1.27 | 0.62 | 0.65 | 0.84 | 0.92 |

Source: Company data, CMBIS 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.

CMBIS 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 CMBIS

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 Securities Limited

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

CMB International Securities Limited ("CMBIS") 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. CMBIS 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. CMBIS 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 CMBIS, solely for the purpose of supplying information to the clients of CMBIS 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 CMBIS 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. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS 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. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS 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 CMBIS 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 CMBIS 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 CMBIS. 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 CMBIS.

For recipients of this document in the United States

CMBIS is not a registered broker-dealer in the United States. As a result, CMBIS 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.