

China Technology

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Implications of AirPods/Beats production base relocation to India

[Media](#) stated that Apple will move part of its AirPods/Beats headphone production to India for the first time, as India continued to push for local manufacturing. We believe this move is not surprising as Apple's iPhone supplier, Wistron, started to assemble iPhones in India since 2017. In addition, we expect Apple will start to build iPad/Watch in Vietnam as it continues to diversify its production bases. Major beneficiaries of Apple relocation plan include Luxshare for iPhone/Watch/ AirPods, Goertek for AirPods and FIT Hon Teng for Beats.

- **Apple supply chain diversification to accelerate.** [Media](#) reported Apple is asking suppliers to move some AirPods and Beats headphone production to India, as part of Apple's latest move of gradual diversification from China. We believe US-China ongoing tensions, COVID-19 disruption and supply chain decoupling risk will continue to accelerate production base diversification, especially the final product assembly stage. Several iPhone/Watch/iPad EMS companies (e.g. Foxconn, Wistron, Pegatron, BYDE) have relocated part of capacity to Vietnam and India, while some component suppliers (e.g. Goertek, Luxshare, FIT Hon Teng) have also expanded capacity in Vietnam and India.
- **“Omni-sourcing” trend to benefit Vietnam and India.** Starting from the US-China trade conflicts in 2018, Chinese supply chains are moving more automated assembly lines and shifting lower-cost manufacturing to India and Vietnam, which now become global No.2/No.3 handset production bases after China. Vietnam has long been the major hub for Samsung, Nokia and LG, while India focuses on Chinese brands backed by “Made in India” and Phase Manufacturing Programme (PMP). All three major OEMs, Foxconn, Wistron and Pegatron, currently make iPhones in Southern India, which targets to become a strategic production base for European markets in the future.
- **Luxshare, Goertek and FIT Hon Teng are major beneficiaries of relocation.** We believe this trend will benefit Airpods/Beats OEM, such as Luxshare, Goertek and FIT Hon Teng, as they will receive manufacturing incentives under production-linked incentive (PLI) plan in India. We believe recent sector corrections have priced in most concerns over inflation, RMB depreciation and geopolitical tensions, as most stocks under our coverage are trading below 1-SD of its 5-year average. For 4Q22E, we prefer Apple supply chain such as **Luxshare** for iPhone/Watch/AirPods OEM, **Goertek** for AirPods recovery and **FIT Hon Teng** for iPhone shipment upside.

Valuation Table

Name	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE
							FY22E	FY23E	FY22E	FY22E	
Luxshare	002475 CH	BUY	29,274	29.40	52.3	78%	20.9	16.9	3.8	18.2	
Goertek	002241 CH	BUY	12,724	26.50	44.7	69%	16.6	13.5	2.8	17.1	
FIT Hon Teng	6088 HK	BUY	955	1.03	1.8	73%	5.8	5.1	0.3	6.0	
Tongda	698 HK	BUY	114	0.09	0.2	139%	3.1	2.3	0.1	2.3	
AAC Tech	2018 HK	HOLD	1,974	12.82	14.0	9%	15.1	10.6	0.6	4.0	
Sunny Optical	2382 HK	HOLD	11,283	80.75	102.3	27%	29.0	19.6	3.4	11.8	
BYDE	285 HK	HOLD	5,718	19.92	19.3	-3%	26.7	15.1	1.6	6.0	

Source: Company data, CMBIGM estimates

China Technology Sector

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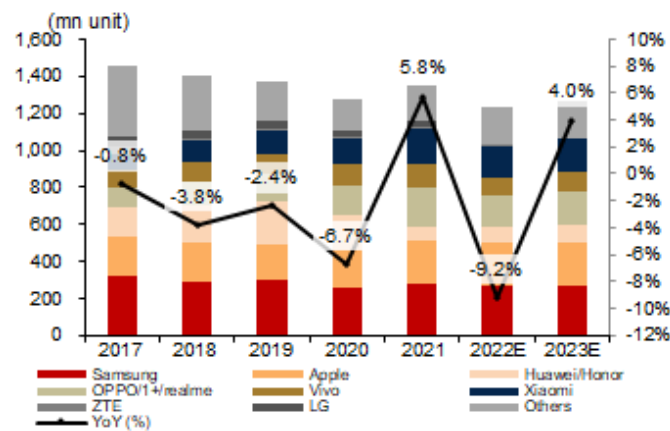
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Focus Charts

Figure 1: Global smartphone shipment forecasts



Source: IDC, CMBIGM

Figure 2: Global smartphone forecasts by brand

	2019	2020	2021	2022E	2023E
Samsung	296	257	273	268	272
Apple	191	203	236	230	232
Huawei+Honor	241	189	78	90	95
Oppo	146	160	212	168	175
Vivo	110	112	128	100	110
Xiaomi	126	148	191	165	180
Others	264	212	237	209	215
Total	1,373	1,281	1,355	1,230	1,279
YoY	-2.4%	-6.7%	5.8%	-9.2%	4.0%

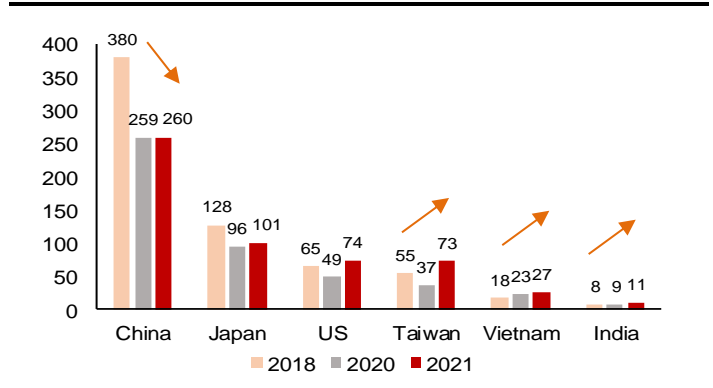
Source: IDC, CMBIGM

Figure 3: Honhai and Luxshare production lines

Supplier	Location	2015	2016	2017	2018	2020	2021
Foxconn	Brazil	1	2	1	1	1	2
	China	19	20	24	29	8	7
	India				1	1	1
	Taiwan	2	1	1	1		
	US			1	2	1	2
	Vietnam				1	1	1
Luxshare	China	5	4	5	7	4	5
	Vietnam				1	1	2

Source: Digitimes, CMBIGM

Figure 4: Location of Apple production lines (2021)



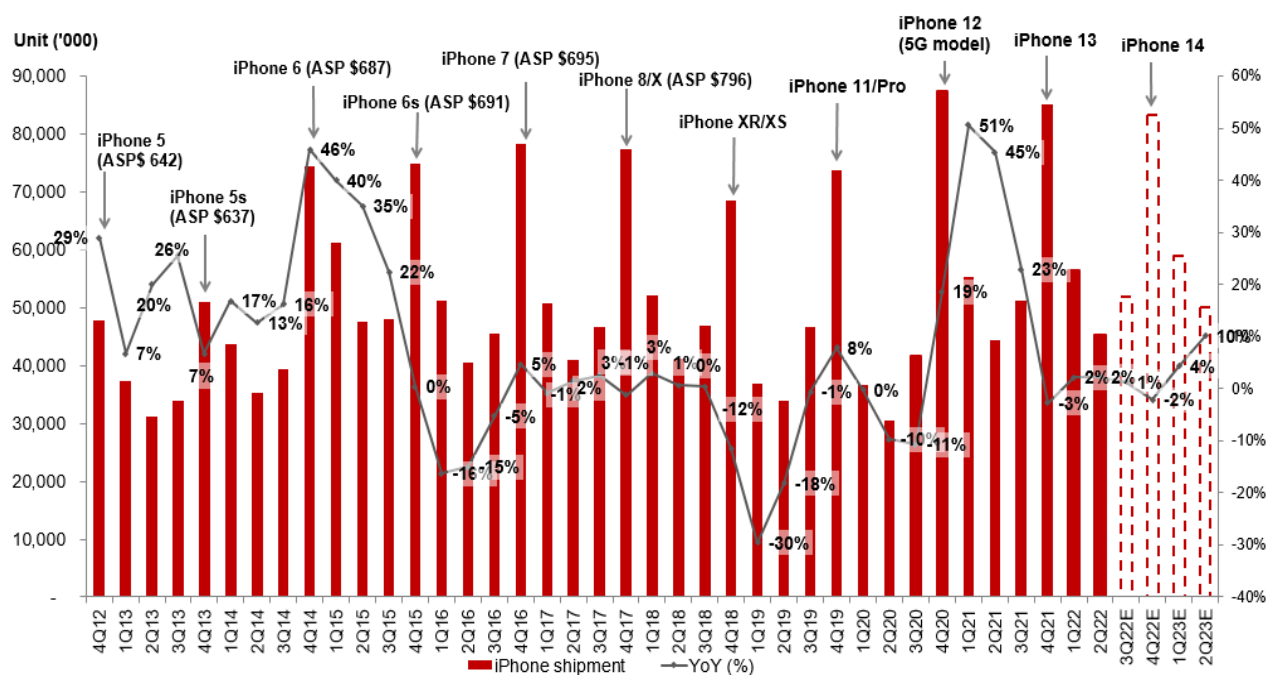
Source: Counterpoint, Digitimes, CMBIGM

Figure 5: Production location for China tech supply chain

	Ticker	China Revenue (1H22)	Overseas Revenue (1H22)	Production Location
AAC Tech	2018 HK	47%	53%	China, Vietnam, Philippines, Singapore, etc
FIT Hon Teng	6088 HK	38%	62%	China, Vietnam, Mexico
BYDE	285 HK	40%	60%	China, India, Vietnam, Malaysia, Germany, Hungary
Goertek	002241 CN	9%	91%	China, Vietnam
Luxshare	002475 CN	9%	91%	China, Vietnam, India, Taiwan
Sunny Optical	2382 HK	68%	32%	China, India, Vietnam
Q-tech	1478 HK	92%	8%	China, Taiwan
Tongda	698 HK	82%	18%	China
TK Group	2283 HK	36%	64%	China, Germany

Source: Company data, CMBIGM

Figure 6: Apple's iPhone shipment by quarter (CY)



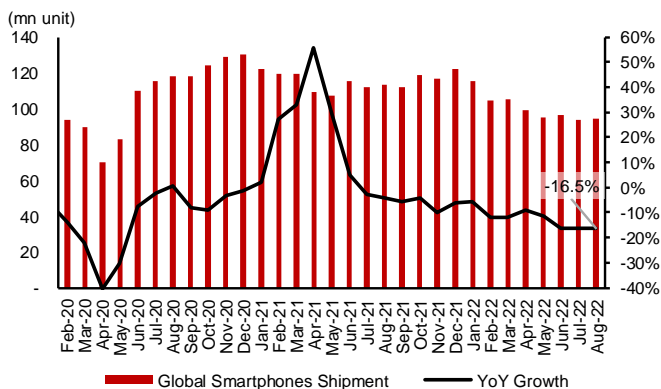
Source: Company data, CMBIGM estimates

Figure 7: Supply chain mapping and sales mix exposure (2022)

Company	Ticker	Apple	Huawei/ Honor	Samsung	Other CN brands	Others	Major Products
AAC Tech	2018 HK	45%	5%	25%	20%	5%	Acoustics, haptics, optics, casing
FIT Hon Teng	6088 HK	40%	3%			57%	Connector, wireless charging, accessories
Sunny Optical	2382 HK	2%	10%	20%	58%	10%	Camera module, handset lens sets, auto lens/module
BYDE	285 HK	40%	5%	10%	30%	15%	Metal/glass/plastics casing, ODM/OEM, e-cigarette
Tongda	698 HK	20%	5%	10%	35%	25%	Metal/plastic casing, waterproof
Q-Tech	1478 HK		5%		85%	15%	Cam module/lens, fingerprint modules, auto cam module
TK Group	2283 HK	10%				90%	Plastic molding, plastic precision
Truly	732 HK			3%	62%	35%	Camera modules, fingerprint, display modules
Cowell	1415 HK	90%		5%		5%	Camera Module
Luxshare	002475 CN	60%	10%	3%		27%	Wireless, iPhone/AirPods/Watch OEM, acoustics/haptics
Goertek	002241 CN	45%	5%	10%	15%	25%	Acoustics, AirPods, Watch, AR/VR, Wearables
Sunway	300136 CH	45%	5%	10%	30%	10%	Antenna, wireless charging, connector, RF
Lens Tech	300433 CN	50%	5%	10%	20%	15%	Glass/metal casing, EMS

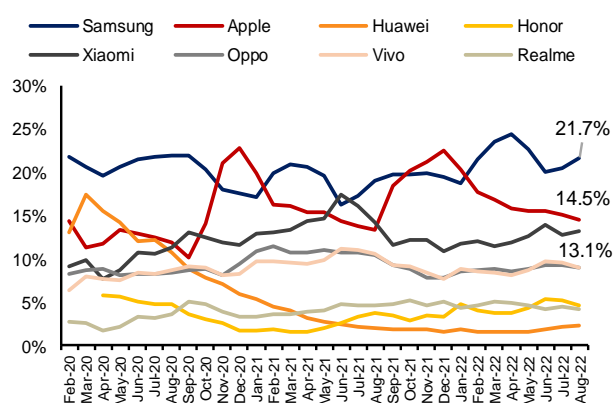
Source: Company data, CMBIGM estimates

Figure 8: Global smartphone: -16.5% YoY in Aug



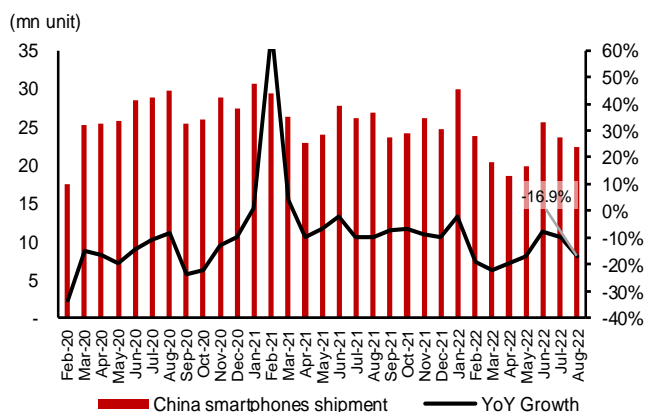
Source: Counterpoint, CMBIGM

Figure 9: Global smartphone market share trend



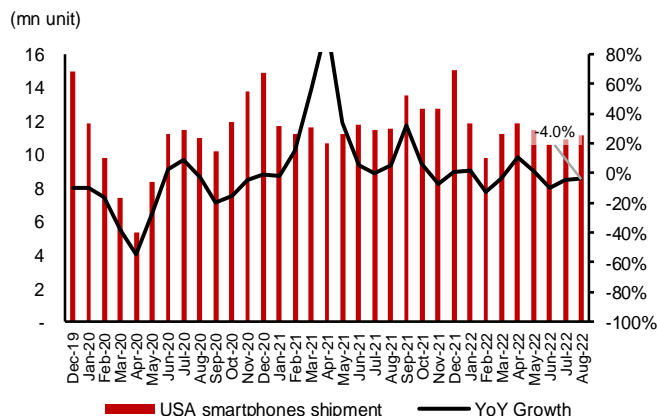
Source: Counterpoint, CMBIGM

Figure 10: China smartphone: -16.9% YoY in Aug



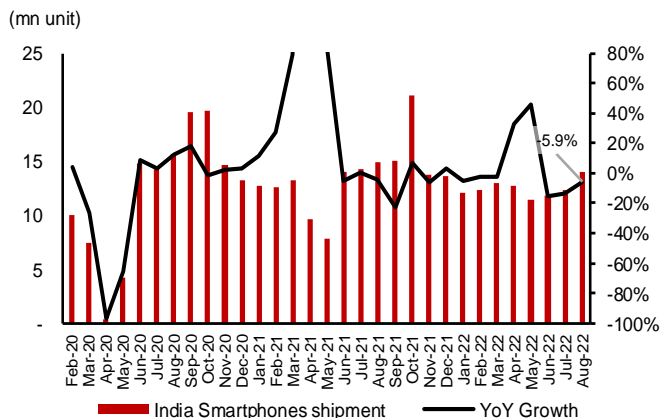
Source: Counterpoint, CMBIGM

Figure 11: US smartphone: -4.0% YoY in Aug



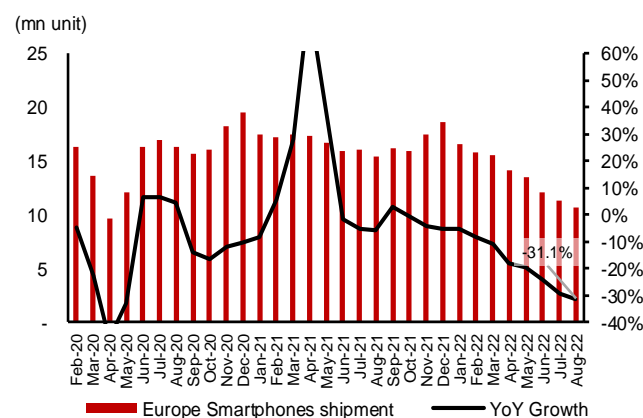
Source: Counterpoint, CMBIGM

Figure 12: India smartphone: -5.9% YoY in Aug



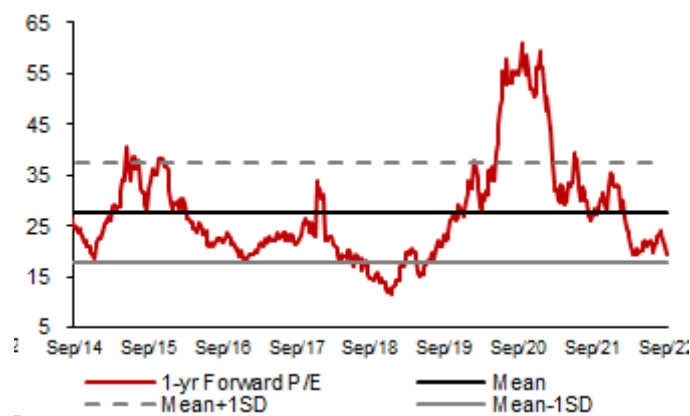
Source: Counterpoint, CMBIGM

Figure 13: Europe smartphone: -31.1% YoY in Aug



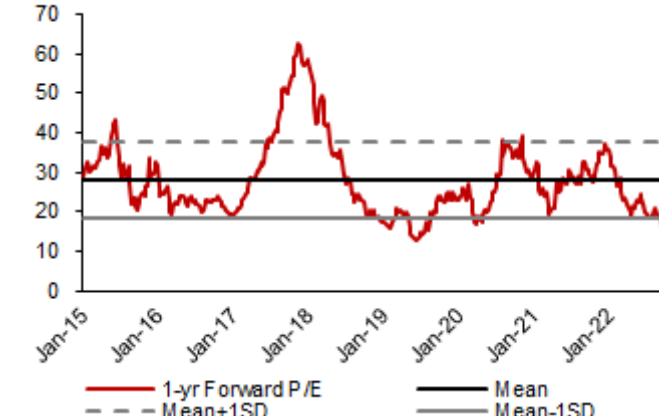
Source: Counterpoint, CMBIGM

Figure 14: Luxshare P/E Band



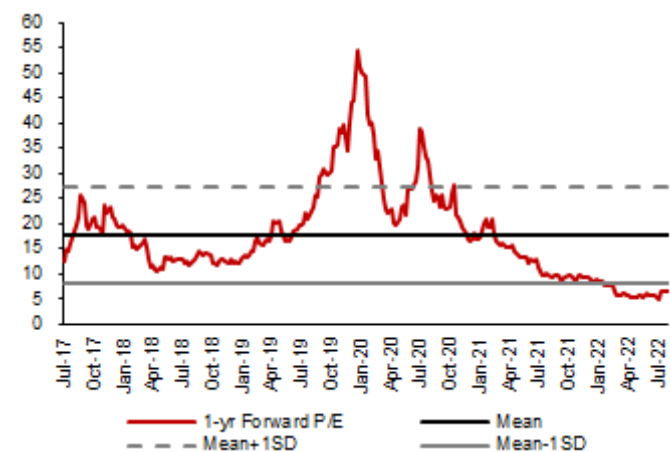
Source: Bloomberg, CMBIGM

Figure 15: Goertek P/E Band



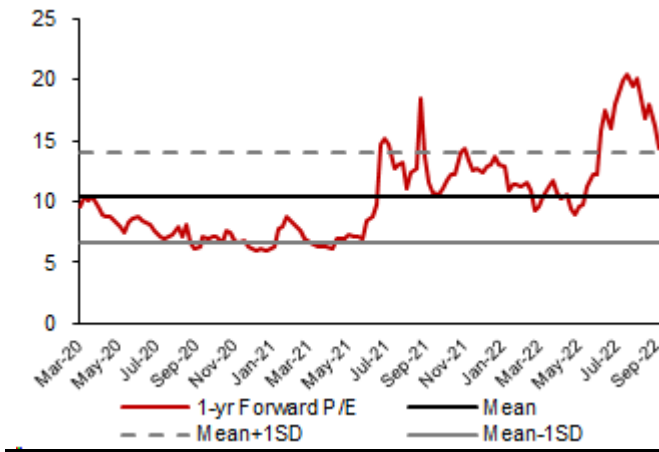
Source: Bloomberg, CMBIGM

Figure 16: FIT Hon Teng P/E Band



Source: Bloomberg, CMBIGM

Figure 17: BOEVx P/E Band



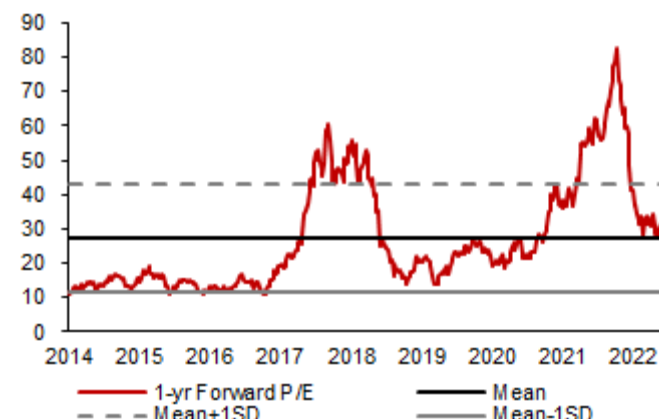
Source: Bloomberg, CMBIGM

Figure 18: Tongda P/E Band



Source: Bloomberg, CMBIGM

Figure 19: Sunny P/E Band



Source: Bloomberg, CMBIGM

Figure 20: Peers Comparison

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE (%)	
							FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
Optics												
Sunny Optical	2382 HK	HOLD	11,283	80.75	102.3	27%	29.0	19.6	3.4	3.0	11.8	15.3
Q Tech	1478 HK	BUY	501	3.32	5.6	69%	12.9	6.3	0.7	0.7	5.5	10.3
Truly	732 HK	NR	538	1.30	NA	NA	4.5	3.7	0.4	0.3	8.2	9.2
Cowell	1415 HK	NR	1,252	11.74	NA	NA	16.8	10.7	2.9	-	21.4	27.3
Largan	3008 TT	NR	7,773	1835	NA	NA	12.5	13.8	1.6	1.5	13.5	11.6
Genius	3406 TT	NR	1,322	370	NA	NA	15.0	13.3	2.2	2.0	15.2	15.6
Primax	4915 TT	NR	908	62.40	NA	NA	9.9	9.1	1.7	1.6	18.0	18.2
Lite-On	2301 TT	NR	4,954	66.40	NA	NA	10.9	10.0	2.0	1.9	18.8	19.7
O-Film	002456 CH	NR	2,413	5.27	NA	NA	-	-	2.3	2.3	(14.6)	(5.8)
Samsung Elec	009150 KS	NR	6,359	120000	NA	NA	8.4	7.7	1.2	1.1	15.1	14.7
Lg Innotek	011070 KS	NR	5,020	299000	NA	NA	6.2	5.7	1.6	1.3	29.5	24.2
Partron	091700 KS	NR	342	8180	NA	NA	11.6	8.4	1.0	0.9	8.6	11.2
Average							12.5	9.8	1.8	1.5	12.6	14.3
Acoustics/Haptics												
AAC Tech	2018 HK	HOLD	1,974	12.82	14.0	9%	15.1	10.6	0.6	0.6	4.0	5.6
Goertek	002241 CH	BUY	12,724	26.50	44.7	69%	16.6	13.5	2.8	2.4	17.1	17.8
Luxshare	002475 CH	BUY	29,274	29.40	52.3	78%	20.9	16.9	3.8	3.1	18.2	18.6
Sunway	300136 CH	NR	1,924	14.15	NA	NA	17.3	12.8	2.0	1.8	12.2	15.0
Merry	2439 TT	NR	624	90	NA	NA	12.5	12.7	1.6	1.5	12.5	11.7
Knowles	KN US	NR	1,198	13.07	NA	NA	10.5	9.4	-	-	-	-
Nidec	6594 JP	NR	35,224	8562	NA	NA	35.5	29.4	4.2	3.5	12.2	12.5
Alps Alpine	6770 JP	NR	1,687	1115	NA	NA	13.3	7.6	0.6	0.6	4.7	7.5
Average							17.7	14.1	2.2	1.9	11.6	12.7
Connector												
FIT Hon Teng	6088 HK	BUY	955	1.03	1.8	73%	5.8	5.1	0.3	0.3	6.0	6.5
Luxshare	002475 CH	BUY	29,274	29.40	52.3	78%	20.9	16.9	3.8	3.1	18.2	18.6
TE	TEL US	NR	37,738	117.99	NA	NA	16.2	15.3	3.5	3.2	21.9	21.7
Amphenol	APH US	NR	43,292	72.79	NA	NA	24.8	23.8	6.4	5.7	27.7	26.6
Average							16.9	15.3	3.5	3.1	18.4	18.4
EMS/OEM												
BYDE	285 HK	HOLD	5,718	19.92	19.3	-3%	26.7	15.1	1.6	1.4	6.0	9.6
Luxshare	002475 CH	BUY	29,274	29.40	52.3	78%	20.9	16.9	3.8	3.1	18.2	18.6
Hon Hai Precision	2317 TT	NR	47,298	107.50	NA	NA	9.9	9.0	1.0	0.9	10.2	10.6
Pegatron	4938 TT	NR	4,996	59.00	NA	NA	10.3	8.6	0.9	0.9	8.5	9.8
Wistron	3231 TT	NR	2,488	27.00	NA	NA	8.7	7.8	0.9	0.8	9.7	10.6
Average							29.0	20.9	6.6	5.0	13.6	19.9
Casing												
BYDE	285 HK	HOLD	5,718	19.92	19.3	-3%	26.7	15.1	1.6	1.4	6.0	9.6
Tongda	698 HK	BUY	114	0.09	0.2	139%	3.1	2.3	0.1	0.1	2.3	3.0
TK Group	2283 HK	BUY	189	1.78	3.4	90%	4.3	3.4	0.8	0.7	18.6	20.7
Ju Teng	3336 HK	NR	220	1.44	NA	NA	-	-	-	-	-	-
Everwin	300115 CH	NR	1,809	10.72	NA	NA	49.2	15.9	1.8	1.6	3.3	9.4
Lens Tech	300433 CH	NR	6,451	9.23	NA	NA	20.9	12.3	1.0	1.0	6.3	8.0
Chaozhou Three	300408 CH	NR	7,013	26.04	NA	NA	22.7	17.1	2.8	2.5	12.0	14.3
Catcher	2474 TT	NR	3,946	174.0	NA	NA	13.4	17.7	0.8	0.8	6.0	4.9
Jabil	JBL US	NR	8,541	62.09	NA	NA	8.3	7.5	3.3	2.8	45.8	41.3
Average							18.6	11.4	1.5	1.4	12.5	13.9

Source: Bloomberg, CMBIGM estimates, * TP under review

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