

# China Technology Sector

## Supply chain implications on Huawei Mate 40 launch

Huawei launched its Mate 40 series (Mate 40/40 Pro/40 Pro+) in an online event on 22 October, with key spec upgrades: 1) 5 nm Kirin 9000 5G SoC chipset, 2) 17x optical zoom periscope quad-cam with 3D ToF (vs tri-cam + ToF on Mate 30 Pro), and 3) 50W wireless fast charging (vs 27W on Mate 30). Huawei also unveiled new wearables/IoT products including Freebuds Studio, Eyewear II and Huawei Sound speaker. Although we expect challenging outlook for Huawei smartphones in FY21E (30-40mn, vs 190mn in FY20E) amid US ban, we believe Mate 40 Pro+'s rear quad-cam will set a new standard for Android flagship models, driving spec upgrade to re-accelerate in 1H21E. Overall, we continue to favor camera supply chain and wearables names, and reiterate Buy on Sunny Optical for camera leadership, Luxshare/Goertek for AirPods/Watch, FIT Hon Teng for Belkin TWS/wireless charger, and BYDE for Apple share gain.

- **Huawei Mate 40 set a new bar for cameras; Sunny/Luxvisions are major CCM suppliers.** Mate 40 Pro+ features an array of quad-cams offering 17x optical zoom, which includes a 50MP main camera, a 20MP ultrawide-cam, a 8MP periscope-cam (10x zoom) and a 12MP telephoto-cam (3x zoom). It was upgraded from Mate 30 Pro's tri-cam (40MP/40MP/8MP) with 3x optical zoom last year. We believe Sunny and Luxvisions are rear-cam CCM suppliers, and Sunny, O-film and Q-tech are front-cam CCM suppliers. We expect optical zoom and periscope design to remain major focus for flagship models in FY21E, benefiting Sunny Optical and Q-tech as CCM leaders.
- **Freebuds Studio and Eyewear II ahead of Apple launch.** Huawei also unveiled several wearables/IoT products, including Freebuds Studio, Eyewear II and Huawei Sound, ahead of Apple's launch next year. Given ongoing US ban, we expect Huawei will continue to step up expansion into non-smartphone categories, such as PC, IoT and software platforms (OS, HMS). We believe major Freebuds suppliers are Luxshare and Goertek.
- **Expect component restocking to persist into 4Q20-1Q21E.** Our recent checks suggested that restocking demand for smartphone components remains strong in 4Q20E despite recent sell-through weakness due to product launch delays. We believe Android brands' aggressive restocking aim to capture opportunities from Huawei share and upcoming 11.11 festival.
- **Prefer Sunny Optical, Luxshare, Goertek, FIT Hon Teng and BYDE for camera/wireless/wearables trend.** Since most components will be under ASP pressure in 2H20E due to higher 5G-semi BOM cost, we like spec upgrade themes and wireless/wearables plays, such as Sunny Optical for camera upgrade, Luxshare/Goertek for TWS/AirPods/Watch, FIT Hon Teng for Belkin TWS/wireless charger, and BYDE for Apple share gain and iPad/Watch components.

### Valuation Table

Name	Ticker	Rating	Mkt Cap (USD mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x) FY20E FY21E	P/B (x) FY20E FY21E	ROE
Sunny Optical	2382 HK	Buy	18,172	128.4	146.1	14%	29.4 21.7	7.6	26.0
FIT Hon Teng	6088 HK	Buy	3,616	4.07	*4.1	1%	21.6 14.8	1.6	7.3
BYDE	285 HK	Buy	11,411	39.25	50.4	28%	13.5 12.7	3.6	26.3
Luxshare	002475 CH	Buy	60,168	57.59	74.2	29%	43.3 32.5	10.9	25.2
Goertek	002241 CH	Buy	20,661	42.56	46.0	8%	56.0 37.0	7.7	13.7

Source: Bloomberg, CMBIS estimates, \* TP under review

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#### China Technology Sector

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## Focus Charts

Figure 1: Huawei Mate 40 series vs Apple iPhone 12 series

	Huawei			Apple			
	Mate 40	Mate 40 Pro	Mate 40 Pro+	iPhone 12 mini	iPhone 12	iPhone 12 Pro	iPhone 12 Pro Max
							
<b>CPU</b>	Kirin 9000 (5nm)	Kirin 9000 (5nm)	Kirin 9000 (5nm)	Apple A14 (5nm)	Apple A14 (5nm)	Apple A14 (5nm)	Apple A14 (5nm)
<b>Storage (RAM)</b>	8 GB	8 GB	12 GB	6 GB	6 GB	6 GB	6 GB
<b>Storage (NAND)</b>	256 GB	256 GB	256 GB	64/128/256 GB	64/128/256 GB	128/256/512 GB	128/256/512 GB
<b>Display</b>	6.5" OLED	6.76" OLED	6.76" OLED	5.4" OLED	6.1" OLED	6.1" OLED	6.7" OLED
<b>Front-Camera</b>	Single: 13MP	Dual: 13MP + SL 3D	Dual: 13MP + SL 3D	Dual: 12MP + SL 3D	Dual: 12MP + SL 3D	Dual: 12MP + SL 3D	Dual: 12MP + SL 3D
<b>Rear-Camera</b>	Triple: 5x Optical 50MP Wide 16MP Ultra-Wide 8MP Telephoto	Triple: 7x Optical 50MP Wide 20MP Ultra-Wide 12MP Telephoto	Quad: 17x Optical 50MP Wide 20MP Ultra-Wide 12MP Telephoto 8MP SuperZoom ToF 3D	Dual: 2x Optical 12MP Wide 12MP Ultra-Wide	Dual: 2x Optical 12MP Wide 12MP Ultra-Wide	Quad: 4x Optical 12MP Wide 12MP Telephoto 12MP Ultra-Wide LiDAR 3D ToF	Quad: 5x Optical 12MP Wide 12MP Telephoto 12MP Ultra-Wide LiDAR 3D ToF
<b>Battery</b>	4200 mAh	4400 mAh	4400 mAh	2,227 mAh	2815 mAh	2815 mAh	3,687 mAh
<b>Wireless Charging</b>	NA	Max 50W	Max 50W	15W	15W	15W	15W
<b>Announced</b>	10/22/2020	10/22/2020	10/22/2020	10/14/2020	10/14/2020	10/14/2020	10/14/2020
<b>Availability</b>	TBC	TBC	TBC	11/13/2020	10/23/2020	10/23/2020	11/13/2020
<b>Starting price</b>	EU€899	EU€1199	EU€1399	USD699	USD799	USD999	USD1,099

Source: Company data, CMBIS estimates

Figure 2: Supply chain mapping and sales mix exposure (2021)

Company	Ticker	Apple	Huawei	Samsung	Other CN brands	Others	Major handset products
AAC Tech	2018 HK	45%	5%	25%	20%	5%	Acoustics, haptics, handset lens, casing
FIT Hon Teng	6088 HK	40%	3%			57%	Connector, wireless charging, TWS, MagSafe
Sunny Optical	2382 HK	1%	5%	15%	64%	15%	Camera module, handset/auto lens sets
BYDE	285 HK	30%	5%	15%	35%	15%	Metal/glass/plastics casing, ODM/OEM
Tongda	698 HK	20%	5%	10%	35%	25%	Metal/plastic casing, waterproof
Q-Tech	1478 HK		5%		85%	15%	Camera module/lens, fingerprint
TK Group	2283 HK	10%				90%	Plastic molding
Truly	732 HK			3%	62%	35%	CCM, fingerprint, display modules
Cowell	1445 HK	90%		5%		5%	Camera Module
Luxshare	002475 CN	60%	10%	3%		27%	Wireless, AirPods, Watch, acoustics/haptics, EMS
Goertek	002241 CN	45%	5%	10%	15%	25%	Acoustics, AirPods, Watch, AR/VR, Wearables
O-film	002456 CN	15%	5%	15%	55%	10%	CCM, fingerprint, touch panel
Lens Tech	300433 CN	50%	5%	10%	20%	15%	Glass/metal casing

Source: Company data, CMBIS estimates

**Figure 3: Peers Comparison**

Figure 9: FY20E Company												
Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE (%)	
							FY20E	FY21E	FY20E	FY21E	FY20E	FY21E
Optics												
Sunny Optical	2382 HK	Buy	18,172	128.40	146.1	14%	29.4	21.7	7.6	5.9	26.0	27.1
Q Tech	1478 HK	Buy	1,390	9.19	16.6	81%	12.1	10.0	2.7	2.2	22.0	21.8
Truly	732 HK	NR	386	0.91	NA	NA	-	-	-	-	-	-
Cowell	1415 HK	NR	428	3.99	NA	NA	8.7	7.3	1.5	1.4	12.2	15.9
Largan	3008 TT	NR	14,664	3140	NA	NA	16.6	14.7	3.0	2.6	19.0	19.2
Genius	3406 TT	NR	2,220	575	NA	NA	19.9	14.2	4.0	3.3	22.2	24.8
Primax	4915 TT	NR	702	44.70	NA	NA	9.8	9.0	1.4	1.4	13.2	15.2
Lite-On	2301 TT	NR	3,697	45.40	NA	NA	9.8	9.9	1.4	1.3	14.3	13.8
O-Film	002456 CH	NR	6,208	15.40	NA	NA	30.4	22.5	3.8	3.3	12.3	14.4
Samsung Elec	009150 KS	NR	9,022	137000	NA	NA	21.1	15.3	1.8	1.7	9.0	11.3
Lg Innotek	011070 KS	NR	3,287	157500	NA	NA	10.7	8.8	1.5	1.3	14.5	15.7
Partron	091700 KS	NR	480	10050	NA	NA	19.4	9.4	1.4	1.3	7.7	14.7
Average							17.1	13.0	2.7	2.3	15.7	17.6
Acoustics/Haptics												
AAC Tech	2018 HK	Hold	6,760	43.35	47.5	10%	28.0	20.5	2.3	2.2	8.3	10.6
Goertek	002241 CH	Buy	20,661	42.56	46.0	8%	56.0	37.0	7.7	6.7	13.7	18.0
Luxshare	002475 CH	Buy	60,168	57.59	74.2	29%	43.3	32.5	10.9	8.4	25.2	25.8
Sunway	300136 CH	NR	7,036	48.85	NA	NA	34.9	24.8	7.8	6.0	22.9	24.5
Merry	2439 TT	NR	1,106	152	NA	NA	14.9	12.3	2.6	2.4	16.8	20.4
Knowles	KN US	NR	1,476	16.11	NA	NA	29.1	14.0	1.2	1.2	4.1	8.2
Nidec	6594 JP	NR	59,395	10445	NA	NA	73.4	56.4	5.9	5.9	8.6	10.8
Alps Alpine	6770 JP	NR	3,266	1562	NA	NA	36.4	57.3	0.9	1.0	2.2	1.8
Average							39.5	31.8	4.9	4.2	12.7	15.0
Connector												
FIT Hon Teng	6088 HK	Buy	3,616	4.07	*4.1	1%	21.6	14.8	1.6	1.4	7.3	9.8
Luxshare	002475 CH	Buy	60,168	57.59	74.2	29%	43.3	32.5	10.9	8.4	25.2	25.8
TE	TEL US	NR	35,383	107.21	NA	NA	27.1	21.4	3.8	3.4	10.5	16.7
Amphenol	APH US	NR	35,493	118.96	NA	NA	32.9	28.5	7.2	6.6	23.3	24.0
Delphi	DLPH US	NR	1,470	17.02	NA	NA	-	11.9	13.3	8.6	(5.4)	27.2
Average							31.2	21.8	7.4	5.7	12.2	20.7
EMS/OEM												
BYDE	285 HK	Buy	11,411	39.25	50.4	28%	13.5	12.7	3.6	2.8	26.3	22.4
Luxshare	002475 CH	Buy	60,168	57.59	74.2	29%	43.3	32.5	10.9	8.4	25.2	25.8
Hon Hai Precision	2317 TT	NR	38,998	80.80	NA	NA	10.8	8.9	0.9	0.8	7.9	9.4
Pegatron	4938 TT	NR	5,662	62.30	NA	NA	9.1	9.5	1.0	0.9	11.0	10.1
Wistron	3231 TT	NR	2,845	28.75	NA	NA	10.5	9.7	1.1	1.1	9.9	10.6
Average							29.0	20.9	6.6	5.0	13.6	19.9
Casing												
BYDE	285 HK	Buy	11,411	39.25	50.4	28%	13.5	12.7	3.6	2.8	26.3	22.4
Tongda	698 HK	Hold	355	0.43	0.5	18%	15.2	6.1	0.4	0.4	2.8	6.9
TK Group	2283 HK	Buy	272	2.53	*2.3	-8%	4.6	3.9	1.6	1.6	35.7	41.7
Ju Teng	3336 HK	NR	354	2.35	NA	NA	7.5	8.2	0.4	0.4	5.6	4.9
Everwin	300115 CH	NR	3,433	25.22	NA	NA	42.2	29.0	4.7	4.3	11.3	14.6
Lens Tech	300433 CH	NR	22,658	34.55	NA	NA	35.5	28.0	5.5	4.7	17.0	18.0
Chaozhou Three	300408 CH	NR	8,384	32.25	NA	NA	45.4	34.3	6.7	5.7	14.4	16.3
Casetek	5264 TT	NR	1,268	86.60	NA	NA	319.6	25.1	1.2	1.1	1.4	4.8
Catcher	2474 TT	NR	4,813	181.5	NA	NA	8.8	9.7	0.9	0.8	11.9	9.4
Jabil	JBL US	NR	5,299	35.19	NA	NA	13.6	8.7	3.3	2.4	22.6	31.2
Average							50.6	16.6	2.8	2.4	14.9	17.0

Source: Bloomberg, CMBIS estimates, \* TP under review

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