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Meta Connect 2024: Quest 3S, Orion AR glasses, AI and Ray-Ban smart glasses updates

Meta officially unveiled the latest MR Quest 3S, prototype of its first Orion AR glasses, and updates on Meta AI and Ray-Ban smart glasses during the Meta Connect event. The new Quest 3S came at US\$ 299 as a more affordable version of Quest 3 (US\$ 499) launched last year, equipped with reduced specs on display, resolution and optical solution, but featuring the same processor, MR functions, hand tracking and full gaming/social/entertainment experience with Horizon OS. Meta also debuted Orion, its most advanced AR glass prototype, featuring wide FoV, holographic displays, see-through MR function, eye/hand tracking, new display architecture and wrist-based neural interface in a light design (100g). Meanwhile, Orion will only serve as a developer kit for internal use and industry partners, and Meta targets the next version of Orion to be consumer-grade full holographic AR glasses. For stocks, we believe AR/VR supply chain will benefit from the new product launches and spec upgrades, such as **Sunny Optical** for pancake lenses, **Goertek** for OEM/acoustics, **AAC Tech** for pancake lenses/acoustics/haptics and **TK Group** for structural components.

- **Quest 3S spec mostly in-line; Lower starting price (\$299) set to boost sales.** Meta unveiled a basic version of Quest 3 launched last year, featuring reduced specs and lower selling price. Key features of Meta Quest 3S came mostly in-line with expectations, and the lowered starting price (US\$ 299 vs. Quest 3 at US\$ 499) should help the proliferation of XR devices and further market penetration. Quest 3S is open for on-line pre-order today and start shipment on 15 Oct.
- **Meta AI updates, transparent frame limited edition Ray-Ban smart glasses and prototype version Orion AR glasses.** Meta introduced updated new open-source model Llama 3.2, which is a multi-model with upgraded parameters and can support implications such as natural language communication, live translation and automatic video dubbing. The new Meta AI functions and related software updates are available on the Meta Ray-Ban smart glasses, which had one limited edition of clear transparent frame design launched during the event. Also, Meta unveiled the prototype of its first holographic AR glasses, Orion, featuring light-weighted design, wide field of view, holographic displays, see-through mixed reality function, eye tracking/hand tracking, new display architecture, and is equipped with wrist-based neural interface.
- **Quest 3S release likely to boost XR market recovery, booming demand for Meta AR glasses; Positive to Goertek, Sunny Optical, AAC Tech and TK Group.** We believe the new product launch will aid AR/VR shipment recovery in the next few quarters, benefiting Sunny Optical for pancake lenses, Goertek for OEM/acoustics, AAC Tech for pancake lenses/acoustics/haptics and TK Group for structural plastic components.

Valuation Table

Name	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)	
							FY24E	FY25E	FY24E	FY25E
Luxshare	002475 CH	Buy	39,428	38.42	45.1	17%	20.4	16.7	3.3	2.7
Goertek	002241 CH	Buy	9,586	19.69	25.9	32%	23.2	18.9	1.9	1.8
Sunny Optical	2382 HK	Buy	7,082	50.35	72.5	44%	20.1	16.9	2.0	1.9
AAC Tech	2018 HK	Buy	4,681	30.40	37.8	24%	19.3	15.5	1.4	1.3
TK Group	2283 HK	Buy	182	1.70	2.8	66%	5.0	4.0	0.8	0.7
Cowell	1415 HK	NR	2,465	22.35	NA	NA	25.2	15.5	4.9	3.7
Everwin	300115 CH	NR	2,138	11.10	NA	NA	19.3	16.9	2.0	1.8

Source: Company data, Bloomberg, CMBIGM estimates

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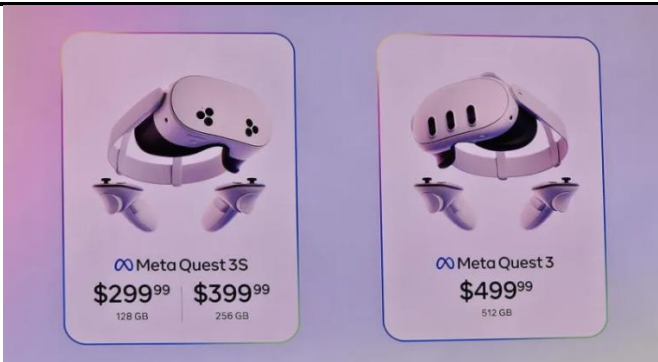
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- Takeaways of Meta Connect 2023: Quest 3, Ray-Ban smart glasses and Meta AI Chatbot - 29 Sep 2023 ([link](#))
- Apple MR: Long-awaited next “iPhone moment”- 5 Jun 2023 ([link](#)).

Figure 1: Meta Quest 3S vs. Meta Quest 3 vs. Apple Vision Pro vs. Meta Quest Pro vs. Meta Quest 2

	Meta Quest 3S	Meta Quest 3	Apple Vision Pro	Meta Quest Pro	Meta Quest 2	Pico Neo 4/4 Pro	Sony PSVR2	HTC Vive XR Elite
Type	Standalone	Standalone	Standalone	Standalone	Standalone	Standalone	Tethered	Standalone
Release Date	Sep-24	Sep-23	Jun-23	Oct-22	Oct-20	Sep-22	Feb-22	Mar-23
Processor	Qualcomm XR2 Gen 2	Qualcomm XR2 Gen 2	Apple M2	Qualcomm XR2+	Qualcomm XR2	Qualcomm XR2	MediaTek	Qualcomm XR2
Storage	128/256GB	128 GB/512GB	-	256GB	128/256GB	128/256GB/512GB	-	128GB
Display	Fast-LCD	Mini-LED	Micro OLED	Mini-LED	Fast-LCD	Fast-LCD	OLED	Fast-LCD
Resolution per eye	1832*1920	2064*2208	4K	1800*1920	1832*1920	2160*2160	2000*2040	1920*1920
Refresh Rate (Hz)	90, 120	90, 120	120	72, 90	60, 72, 90	72, 90	90, 120	90
Optical	Fresnel	Pancake	Pancake	Pancake	Fresnel	Pancake	Fresnel	Pancake
FOV (Deg)	96*90	110	120	120	100	105	110	110
Tracking	6DoF	6DoF	6DoF	6DoF	6DoF	6DoF	6DoF	6DoF
Weight	514g	515g	400g	722g	503g	586g	560g	625g
Price	\$299.99	\$499	\$3,499	\$1,499	\$299, \$399	RMB 2499	\$399	\$1,099

Source: Meta, Apple, CMBIGM.

Figure 2: Meta Quest 3S



Source: Meta, CMBIGM.

Figure 3: Limited edition Ray-Ban Meta glasses



Source: Meta, CMBIGM.

Figure 4: Llama 3.2 multi-model in 11B/90B parameters



Source: Meta, CMBIGM.

Figure 5: Ray-Ban Meta glasses with new Meta AI



Source: Meta, CMBIGM.

Figure 6: Meta Orion, the prototype of its first full holographic AR glasses



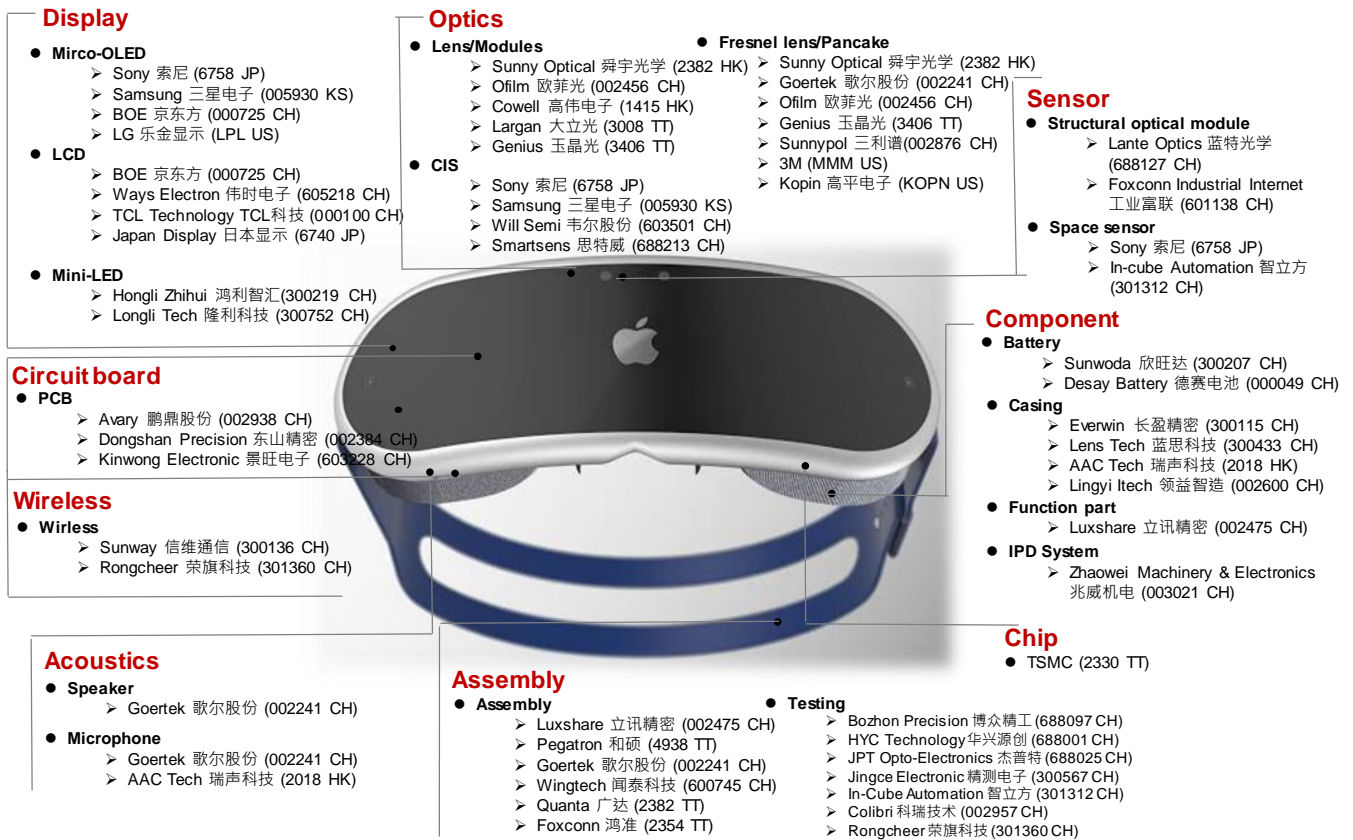
Source: Meta, CMBIGM.

Figure 7: Meta Orion-projectors in glasses arms that shoot the lights into wave guides



Source: Meta, CMBIGM.

Figure 8: Overview of VR/AR headset supply chain



Source: CMBIGM

Figure 9: Peers Comparison

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE (%)	
							FY24E	FY25E	FY24E	FY25E	FY24E	FY25E
Optics												
Sunny Optical	2382 HK	Buy	7,082	50.35	72.5	44%	20.1	16.9	2.0	1.9	10.1	11.2
Q Tech	1478 HK	Buy	756	4.97	6.4	29%	14.9	9.9	1.0	0.9	6.9	9.6
Cowell	1415 HK	NR	2,465	22.35	NA	NA	25.2	15.5	4.9	3.7	20.1	25.9
Largan	3008 TT	NR	10,927	2,610.00	NA	NA	14.7	14.1	2.0	1.8	13.6	13.3
Genius	3406 TT	NR	1,758	497.00	NA	NA	12.2	11.9	2.3	2.1	19.6	17.7
Primax	4915 TT	NR	1,287	88.60	NA	NA	14.4	12.7	2.2	2.1	15.0	16.2
Lite-On	2301 TT	NR	7,363	100.00	NA	NA	17.5	14.7	2.7	2.5	15.2	17.3
O-Film	002456 CH	NR	4,060	8.61	NA	NA	49.8	31.5	6.8	6.5	7.8	12.2
Samsung Elec	009150 KS	NR	7,875	140,100.00	NA	NA	15.4	11.9	1.3	1.2	8.7	10.1
LG Innotek	011070 KS	NR	4,088	229,500.00	NA	NA	6.9	6.2	1.0	0.9	15.4	14.9
Partron	091700 KS	NR	330	7,450.00	NA	NA	10.0	8.9	0.9	0.8	9.0	9.5
Average							18.3	14.0	2.5	2.2	12.9	14.4
Acoustics/Haptics												
AAC Tech	2018 HK	Buy	4,681	30.40	37.8	24%	19.3	15.5	1.4	1.3	7.0	8.2
Goertek	002241 CH	Buy	9,586	19.69	25.9	32%	23.2	18.9	1.9	1.8	8.4	9.5
Luxshare	002475 CH	Buy	39,428	38.42	45.1	17%	20.4	16.7	3.3	2.7	16.0	16.4
Sunway	300136 CH	NR	2,583	18.74	NA	NA	24.6	18.8	2.4	2.1	9.8	11.7
Merry	2439 TT	NR	987	131.50	NA	NA	15.4	14.3	2.2	2.3	13.8	15.0
Nidec	6594 JP	NR	25,799	6,265.00	NA	NA	25.0	18.9	2.4	2.0	10.1	11.3
Alps Alpine	6770 JP	NR	2,375	1,568.00	NA	NA	-	10.2	0.9	0.8	(8.6)	8.3
Average							21.0	15.9	1.8	1.7	6.7	10.7
Connector												
FIT Hon Teng	6088 HK	Buy	2,173	2.32	4.3	83%	11.6	7.1	0.8	0.7	7.0	10.3
Luxshare	002475 CH	Buy	39,428	38.42	45.1	17%	20.4	16.7	3.3	2.7	16.0	16.4
TE	TEL US	NR	44,305	145.78	NA	NA	19.3	17.7	3.5	3.4	19.0	19.1
Amphenol	APH US	NR	78,712	65.36	NA	NA	36.9	31.7	8.2	7.2	24.3	24.7
Average							22.1	18.3	3.9	3.5	16.6	17.6
EMS/OEM												
BYDE	285 HK	Buy	8,917	30.80	40.9	33%	14.3	10.0	3.4	2.7	23.8	27.5
Luxshare	002475 CH	Buy	39,428	38.42	45.1	17%	20.4	16.7	3.3	2.7	16.0	16.4
Hon Hai Precision	2317 TT	NR	82,406	189.50	NA	NA	16.6	12.6	1.6	1.5	9.7	11.7
Pegatron	4938 TT	NR	8,607	103.00	NA	NA	14.3	13.6	1.4	1.4	9.1	9.4
Wistron	3231 TT	NR	9,406	103.50	NA	NA	15.6	12.2	2.4	2.1	16.6	18.3
Average							28.98	20.90	6.61	5.02	13.58	19.86
Casing												
BYDE	285 HK	Buy	8,917	30.80	40.9	33%	14.3	10.0	3.4	2.7	23.8	27.5
Tongda	698 HK	Buy	94	0.08	0.1	63%	25.0	3.8	0.1	0.1	0.4	2.7
TK Group	2283 HK	Buy	182	1.70	2.8	66%	5.0	4.0	0.8	0.7	15.2	17.4
Everwin	300115 CH	NR	2,138	11.10	NA	NA	19.3	16.9	2.0	1.8	11.3	11.7
Lens Tech	300433 CH	NR	11,835	16.67	NA	NA	21.3	16.7	1.7	1.6	8.0	9.7
Chaozhou Three	300408 CH	NR	8,655	31.70	NA	NA	28.4	22.4	3.1	2.8	10.8	12.5
Catcher	2474 TT	NR	5,069	237.50	NA	NA	11.7	15.0	1.0	1.0	8.2	6.4
Jabil	JBL US	NR	12,868	113.43	NA	NA	13.5	13.1	7.4	6.9	44.5	49.8
Average							17.3	12.7	2.4	2.2	15.3	17.2

Source: Bloomberg, CMBIGM estimates.

Note: Data as of 26 Sep 2024 close.

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