

Networking sector

MWC 2024 – Proliferation of 5G applications

Key message

1. 5G applications were the focus of MWC 2024. Sercomm showcased its mmWave/sub-6GHz small cell base stations and FWA CPE, while Wistron NeWeb, Alpha Networks, and D-Link introduced their respective 5G private network solutions and Open RAN-related products. Accton was more focused on switches.
2. Taiwan OEMs, including Compal, Quanta Computer subsidiary QCT, Wiwynn, and Gigabyte unveiled 5G, AI, edge computing, and liquid cooling solutions. These products are designed to facilitate implementation of 5G and AI technologies in the manufacturing sector, with the aim to improve work efficiency and make AI more user-friendly.

Event

2024 Mobile World Congress (MWC) took place in Barcelona, Spain on February 26-29.

Impact

5G applications at the center of six major discussion topics. "Future First" was the theme of MWC 2024, with six major topics, including: (1) "5G and Beyond", focusing on 5G connectivity and future development trends; (2) "Connecting Everything", which examined technologies, such as FWA, Open RAN, and private networks, and their applications; (3) "Humanizing AI", considering how AI could help improve work efficiency and how AI should be empowered; (4) "Manufacturing DX", in which views were shared on how new technologies, including 5G, AR/VR, and AI could shape the future of the manufacturing sector; (5) "Game Changers", which looked at how new technologies are changing lifestyle habits, visual and audio experiences, and consumption behavior; and (6) "Our Digital DNA", which discussed issues that remain relevant and important, including gender equality, data security, and environmental protection, in the face of rapidly developing technologies. Taiwanese networking firms also participated in the event, with Sercomm (5388 TT, NT\$135.5, OP) showcasing its mmWave/sub-6GHz small cell base stations and FWA CPE, while Wistron NeWeb (6285 TT, NT\$153 OP), Alpha Networks (3380 TT, NT\$37.5, N), and D-Link (2332 TT, NT\$19.15, NR) introduced their respective 5G private network solutions and Open RAN-related products. Accton (2345 TT, NT\$502, OP) was more focused on switches, and Edgecore (unlisted), a subsidiary of Accton, displayed 400/800G data center switches.

Taiwan OEMs unveiled 5G, AI, edge computing, & liquid cooling solutions. At the event, Compal (2324 TT, NT\$36.5, NR) demonstrated its non-ground based satellite IoT solutions and 5G terminal devices, while Quanta Computer (2382 TT, NT\$232.5, OP) subsidiary Quanta Cloud Technology (unlisted) presented solutions for Intel (US) Xeon processors and 5G and AI infrastructure, with applications including intelligent auto manufacturing (design and manufacturing), image production by generative AI, and virtual golf coaching. Wiwynn (6669 TT, NT\$2,120, OP) revealed its liquid cooling products for Xeon and other edge computing processors. Gigabyte (2376 TT, NT\$334, OP) showcased immersion cooling and green computing solutions for the latest AMD (US) and Nvidia (US) server processors, alongside an array of new servers for building 5G mobile networks, with prospective customers, including telecom operators, cloud service providers, and businesses of all sizes, wishing to build their own IT facilities. These products are designed to facilitate implementation of 5G and AI technologies in the manufacturing sector, with the aim to improve work efficiency and make AI more user-friendly.

Stocks for Action

Overall, MWC 2024 was about value creation for 5G by exploring new applications and potential synergies when combined with other technologies, including Wi-Fi 6/6E/7, AI, and low-Earth orbit satellites. Based on discussions among telecom operators and other businesses, we believe FWA and private network solution providers, such as Sercomm, Wistron NeWeb, Arcadyan (3596 TT, NT\$180, OP), Zyxel (3704 TT, NT\$45.1, OP), Alpha Networks, and D-Link, will all benefit from the trend. Accton may also capture business opportunities stemming from growing demand for bandwidth from telecom operators as they roll out Open RAN and new AI/ML-related services.

Risks

Disappointing AI development; risk of a macroeconomic downturn.

Figure 1: Discussion topic – 5G and Beyond
5G in numbers
5.9B

Globally, connections are expected to reach 1.9 billion by end of 2023, rising to 5.9 billion by end of 2027.¹

\$2,208.25B

The global 5G services market is estimated to reach \$2,208.25 billion by 2030.²

20X

Smartphones connected to 5G will reach download speeds of around 87.5 MB/s - about 20x faster than 4G.

57%

57% of enterprises plan to invest in 5G in the next one to three years.³

Source: MWC; KGI Research

Figure 2: Discussion topic – Connecting Everything
Connecting Everything in numbers
\$88.5b

The FWA market is set to reach \$88.5 billion by 2027 - with a whopping CAGR of 99.3%.¹

\$19,170

The global AI In Telecommunication market was valued at \$2482 million in 2022 and is anticipated to reach \$19,170 million by 2029, witnessing a CAGR of 40.6% during the forecast period 2023-2029.²

\$19.2b

Open RAN deployments in public 5G networks will accelerate after 2025, with 1.3 million open RAN cells worth \$19.2 billion deployed by 2030.³

\$8.3b

IDC estimates that the private LTE/5G wireless TAM will reach \$8.3 billion by 2026.⁴

Source: MWC; KGI Research

Figure 3: Discussion topic – Humanizing AI
AI in numbers
16tn

US dollars worth of potential contribution to the global economy by 2030¹

+30.0%

Of respondents to our annual Hopes & Fears survey believe AI will help increase productivity and efficiency²

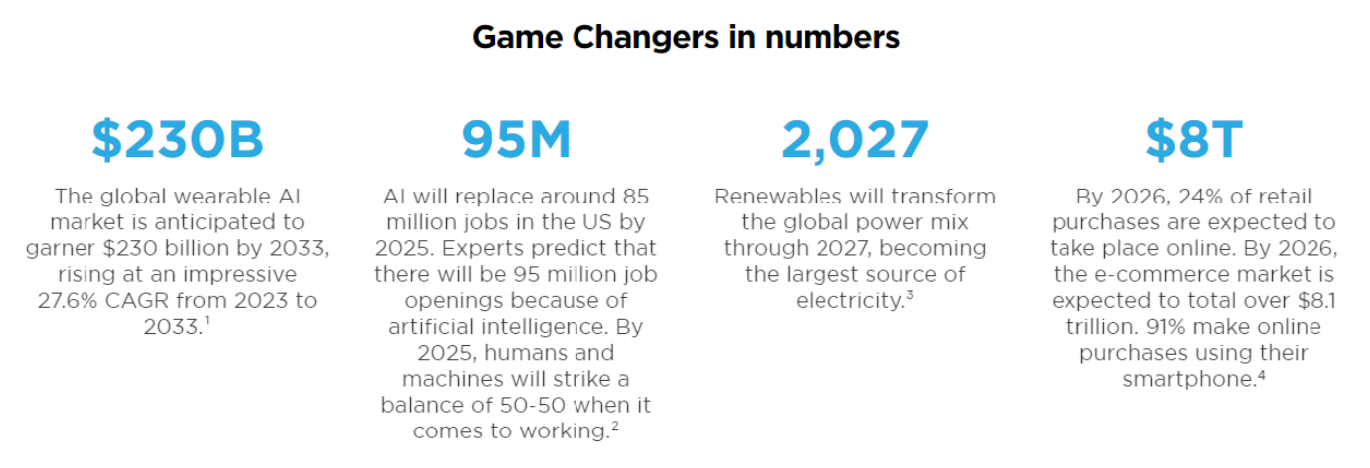
70%

of respondents expect Generative AI to significantly change the way their company creates value in the next three years. This is taken from the 2024 CEO Survey.³

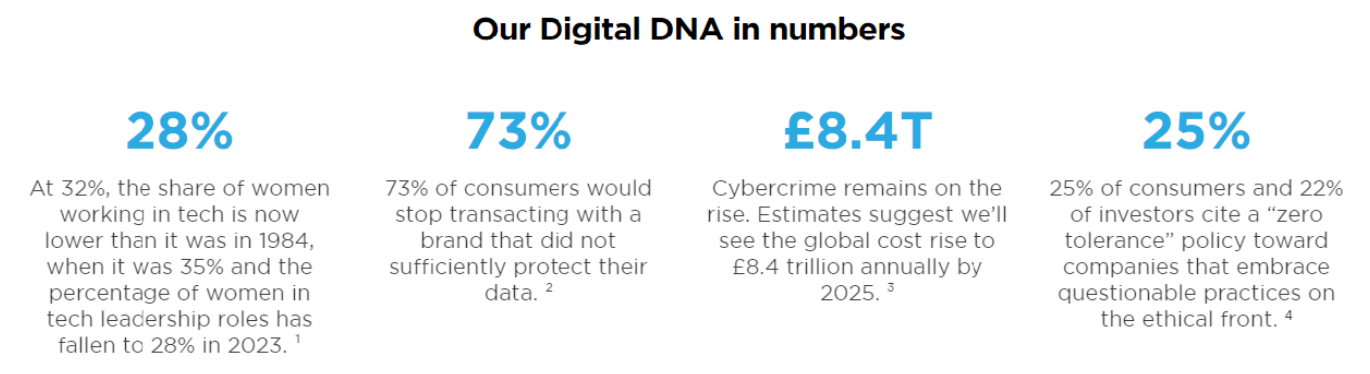
Source: MWC; KGI Research

Figure 4: Discussion topic – Manufacturing DX


Source: MWC; KGI Research

Figure 5: Discussion topic – Game Changers


Source: MWC; KGI Research

Figure 6: Discussion topic – Our Digital DNA


Source: MWC; KGI Research

Figure 7: Sercomm’s 5G small cell/FWA & O-Ran products



Source : Sercomm; KGI Research

Figure 8: Wistron NeWeb’s private network products



Source : WNC; KGI Research

Figure 9: Accton’s subsidiary Edgecore showcased AI/ML-related 800GbE switches



Source: Accton; KGI Research

Figure 10: Arcadyan's 5G small cell, FWA, & Wi-Fi 7 products



Source: Arcadyan; KGI Research

Figure 11: D-Link's private network products



Source: D-Link; KGI Research

Figure 12: Askey's 5G small cell, FWA, and Wi-Fi 7 products



Source: Askey; KGI Research

Figure 13: Alpha Network's O-RAN radio unit solutions



Source: Alpha Network; KGI Research

Figure 14: Gigabyte presented new AI servers & green computing solutions



Source: Gigabyte; KGI Research

Figure 15: Wiyynn's EP100G2 short-depth edge server platform



Source: Wiyynn; KGI Research

Figure 16: Compal's NTN satellite IoT solution


Source: Compal; KGI Research

Figure 17: Quanta Cloud Technology exhibited Intel Xeon scalable servers


Source: QCT; KGI Research

Figure 18: Peer valuation comparison – Networking

Company	Code	Market cap (US\$ mn)	Share price (LCY)	EPS (LCY)		EPS CAGR (%) (2022-2024F)	PER (x)		PBR (x)		ROE (%)		Dividend yield (%)	
				2023F	2024F		2023F	2024F	2023F	2024F	2023F	2024F	2023F	2024F
Sercomm	5388 TT	1,250	135.5	9.03	9.95	14.7	15.0	13.6	3.3	3.5	23.4	26.0	4.4	4.8
Wistron Neweb Corp*	6285 TT	2,359	153	8.98	11.62	21.1	17.0	13.2	2.9	2.6	18.1	23.7	3.9	4.6
Alpha Networks	3380 TT	647	37.5	1.09	2.13	12.2	34.3	17.6	2.0	2.0	5.8	11.4	2.7	5.3
D-Link*	2332 TT	368	19.15	0.95	N.A.	N.M.	20.2	N.M.	1.3	N.M.	6.3	N.A.	2.8	N.A.
Accton	2345 TT	8,966	502	16.57	20.95	19.6	30.3	24.0	11.2	9.0	40.5	41.4	1.6	2.0
Zyxel Group*	3704 TT	589	45.1	3.38	3.70	(2.3)	13.3	12.2	1.7	1.5	13.0	13.0	3.3	3.5
Arcadyan*	3596 TT	1,264	180.0	10.98	12.01	14.2	16.4	15.0	2.4	2.1	16.1	15.1	4.2	4.7

Source: Bloomberg; KGI estimates * 2023 numbers are results

Figure 19: Peer valuation comparison – ODM

Company	Ticker	Market cap. (US\$mn)	Share price (LCY)	Rating	Target Price (LCY)	EPS (LCY)			EPS YoY (%)			PE (x)			PB (x)			ROE (%)		Cash yield (%)		
						2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F
Inventec	2356 TT	6,188	54.1	Outperform	53.0	1.57	2.42	2.93	(8.1)	54.3	20.9	34.5	22.3	18.5	3.2	3.1	3.0	9.4	14.1	16.5	2.3	3.6
Quanta	2382 TT	28,633	232.5	Outperform	310.0	10.13	13.43	17.52	34.8	32.6	30.4	23.0	17.3	13.3	5.1	4.8	4.5	22.6	28.4	34.8	3.5	4.6
Pegatron	4938 TT	7,161	84.3	Neutral	84.0	6.14	7.00	8.16	8.4	14.1	16.5	13.7	12.0	10.3	1.2	1.2	1.1	8.8	9.8	11.0	4.7	5.4
Wistron	3231 TT	10,494	113.5	Outperform	140.0	4.08	6.03	7.93	1.7	47.9	31.5	27.8	18.8	14.3	3.1	2.7	2.4	11.3	14.9	17.5	2.3	3.4
Wiwynn	6669 TT	11,818	2,120	Outperform	2,600.0	68.88	103.17	133.23	(15.0)	49.8	29.1	30.8	20.5	15.9	8.8	6.8	5.4	29.7	37.4	37.9	2.0	2.7
Hon Hai	2317 TT	45,747	103.5	Outperform	126.0	8.55	10.40	12.92	(16.2)	21.6	24.3	12.1	10.0	8.0	1.0	0.9	0.9	8.0	9.3	11.1	4.3	5.2
Compal*	2324 TT	5,129	36.50	Not rated	N.A.	1.90	2.41	2.90	13.8	26.7	20.3	19.2	15.2	12.6	1.3	1.2	1.2	7.0	8.7	9.2	3.6	4.7

Source: Bloomberg; KGI estimates * Bloomberg forecasts

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