

比亚迪 BYD (002594 CH)

智电融合“璇玑”架构亮相，比亚迪智能化后发制人引领新能源汽车下半场

"Xuanji" Architecture Unveiled in Smart Electricity Integration, BYD Takes the Lead in the 2nd Half of NEV with a Late-Mover Advantage in Intelligence

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

事件

1月16日，比亚迪成功举行2024梦想日活动，展示了比亚迪在智能化领域的储备和未来战略规划。活动主题围绕公司智能化的最新战略——整车智能化，并首发众多技术成就，为行业智能化发展指明了新的方向。此外，比亚迪还宣布计划在国内多个城市建设世界首批全地形专业试驾场，旨在推动中国汽车文化在新能源时代的发展。

点评

整车智电融合架构“璇玑”架构亮相，引领整车智能进入下半场。比亚迪发布“璇玑”智电融合架构，并定义为集成电气化与智能化技术的革命性车辆架构。璇玑架构由一脑（中央主控芯片）、两端（云端 AI+车端 AI）、三网（车联网+5G 网+卫星网）、四链（传感链+控制链+数据链+机械链）组成，具备以下显著亮点：**1）整车智能化：**以智能“大脑”为核，神经网络联动，璇玑架构能够实时感知车辆内外环境的变化，并以毫秒级响应速度进行信息整合和决策，显著提升驾驶安全性和舒适性。**2）数据和算力：**璇玑架构拥有行业首个双循环多模态 AI 大模型，拥有行业领先的数据底座、算力集群和多模态 AI 模型库，覆盖超过 300 种车辆使用场景，为整车自学习和快速迭代提供强大支持。**3）先进的智能控制技术：**璇玑架构整合了智能动力控制（包括智能电池管理系统 BMS、智能扭矩控制技术 iTAC）、智能充电解决方案和智能热管理技术，为智能电动汽车提供了全面的技术支持。**4）兼容多种布置方式：**璇玑架构兼容前驱、后驱及四驱等多种布置方式，显示出高度的拓展性和适应性。**5）综合安全提升：**该架构通过高级别的智能进化能力，彻底释放智能化和电动化的潜力，从而在驾驶体验和安全性上实现全面提升。比亚迪基于其垂直整合、全栈自研的技术优势，通过璇玑架构将易四方、DMO、e 平台、云辇、DiLink 等黑科技整合为整车智能，标志着公司在智能化和电动化融合上的重大突破。

DiPilot 智驾+DiLink 座舱全面升级，比亚迪智能化后发制人。本次活动另一个重头戏是比亚迪智能驾驶和智能座舱终于出牌，向国内智能化第一梯队奋起直追。智能驾驶方面，比亚迪将其智驾平台分为 L2 级智驾系统和“天神之眼”L2+级高阶智驾系统。其中 L2 级分为 DiPilot 10/DiPilot 30，而 L2+级分为 DiPilot 100/DiPilot 300/DiPilot 600，并宣布未来智驾平台的命名将根据芯片算力划分。比亚迪还预计推出搭载 2000TOPS 的“舱驾一体”芯片，推出 DiPilot 1000、2000 等更高阶的智能驾驶。公司表示未来 30 万以上新车型将全面标配高阶智驾系统，而 20 万以上新车型则提供选装选项。比亚迪计划今年推出 10 款以上 L2+车型，其中高端越野 SUV 产品线还有望搭载易四方的四轮独立电机，能实现以类似“平移”的方式泊进车位。今年一到三季度旗下豪华车型仰望 U8 和腾势 N7 将陆续 OTA 推送近距代客泊车、高快领航、易四方泊车（仅 U8）、城市领航等创新功能。我们认为，比亚迪 2024 年智驾目标为加速普及，实现高端车型快速渗透，并逐步技术降本和下沉至大众车型上。智能座舱方面，比亚迪在业内首次提出“以跑分定义智能座舱”，DiLink 智能座舱焕新升级以跑分来命名，分为 D 100、D 150 以及 D 300 三大版本；此外还带来手掌钥匙、智能语音组合指令、全天候出行助理、车辆 VIN 点对点畅联、超感游戏车、户外露营 K 歌等特色功能，一举弥补了此前座舱功能相对匮乏的短板。比亚迪更与大疆合作，发布仰望 U8 玩家版并全球首发车载无人机，支持一键起飞、智能换电、一键大片、一键降落、智能返航、起飞即跟随等功能；U8 玩家版更将搭载全球唯一的车载无人机机库，支持自动换电、精准夹持、智能温控、防水防尘。我们预计本次智能化的后发制人将快速带动比亚迪高端品牌销量增长，以整车智能战略持续引领新能源汽车的下半场。

风险

行业竞争加剧，智驾迭代进度不及预期，产能扩张不及预期，宏观经济下行。

图 1 比亚迪“整车智能”全新战略框架



资料来源：比亚迪官网，海通国际

图2 行业首个智电融合架构——璇玑架构



资料来源：比亚迪官网，海通国际

图3 璇玑 AI 大模型是行业首个双循环多模态 AI



资料来源：比亚迪官网，海通国际

图 4 全新 DiPilot 智能驾驶平台



资料来源：比亚迪官网，海通国际

图 5 比亚迪智驾 OTA 升级时间轴



资料来源：比亚迪梦想日发布会，海通国际

图 6 比亚迪全新 DiLink 智能座舱平台



资料来源：比亚迪官网，海通国际

图 7 比亚迪 DiLink 座舱平台命名规则

全新座舱平台命名		定制芯片及跑分	
标准版	DiLink 20	D 20(12nm)	13万
	DiLink 50	D 50(11nm)	23万
高阶版	DiLink 100	D 100(6nm)	63万
	DiLink 150	D 150(4nm)	125万

资料来源：比亚迪梦想日发布会，海通国际

图 8 仰望 U8 玩家版全球首发车载无人机



资料来源：比亚迪官网，海通国际

APPENDIX 1

Summary

Event

On January 16, BYD successfully held its 2024 Dream Day event, showcasing its strength and future strategic planning in the field of intelligent technology. The event's theme centered around the Company's latest strategy of full-vehicle intelligence, launching numerous technological achievements, setting a new direction for the industry's intelligent development. Additionally, BYD announced plans to build the world's first all-terrain professional test-driving sites across multiple cities in China, aiming to promote the development of Chinese automotive culture in the NEV era.

Comments

The full-vehicle intelligent fusion architecture, "Xuanji," was introduced, leading the intelligent vehicle industry into a new phase. BYD has launched the "Xuanji" Intelligent Electric Architecture, described as a revolutionary vehicle framework integrating electrification with intelligent technologies. The Xuanji architecture is composed of a central brain (main control chip), two ends (cloud AI + vehicle AI), three networks (vehicle network + 5G + satellite), and four chains (sensor chain + control chain + data chain + mechanical chain). It features: **1) Full vehicle intelligence** with a neural network core for real-time perception and decision-making; **2) Data and computing power** with a dual-cycle multimodal AI model; **3) Advanced intelligent control technologies** including smart power control and battery management; **4) Compatibility with various configurations;** **5) Enhanced comprehensive safety.** This architecture signifies BYD's major breakthrough in integrating intelligence and electrification.

The DiPilot intelligent driving system and DiLink cockpit have been fully upgraded, marking BYD's significant progress in the field of intelligent technology. This event highlighted BYD's intelligent driving and intelligent cockpit technologies, propelling the Company towards the forefront of domestic intelligent technology. The intelligent driving aspect includes dividing BYD's platform into L2 level intelligent driving systems and the advanced "Eye of God" L2+ level systems. The L2 level is categorized into DiPilot 10/DiPilot 30, and L2+ into DiPilot 100/DiPilot 300/DiPilot 600, with future platform naming based on chip computing power. A high-end chip with 2000TOPS is expected to be launched, introducing more advanced intelligent driving levels like DiPilot 1000 and 2000. BYD models priced over Rmb300,000 will be fully equipped with high-level intelligent driving systems, while those over Rmb200,000 will offer it as an option. BYD plans to launch more than 10 L2+ models this year, with high-end SUVs potentially featuring independent four-wheel motors capable of maneuvering into parking spaces in a "sideways" manner. The Company's luxury models like the Yangwang U8 and Denza N7 will progressively receive OTA updates for innovative functions like short-distance valet parking, high-speed navigation, and city piloting. BYD aims to popularize intelligent driving in 2024, penetrating high-end models and gradually reducing costs for mass-market vehicles. For intelligent cockpits, BYD introduced a unique concept of defining them based on performance scores, upgrading DiLink to D 100, D 150, and D 300 versions. This includes features like palm key, intelligent voice commands, all-weather travel assistants, VIN point-to-point connection, immersive gaming experiences, and outdoor camping karaoke. In collaboration with DJI, BYD launched the Yangwang U8 Player Edition, featuring the world's first in-car drone with functionalities like one-touch takeoff, intelligent battery swapping, and precision control. This strategy is expected to rapidly boost BYD's high-end brand sales and continue leading the second half of the NEV era.

Risks

Industry competition intensifies; progress in intelligent driving iteration is not as expected; capacity expansion is not as expected; macroeconomic downturn.

APPENDIX 2

ESG Comments

Environmental:

BYD leads in the production of electric vehicles and renewable energy solutions, significantly reducing carbon emissions.

Social:

BYD is committed to creating sustainable urban development and transportation, enhancing the quality of life for communities.

Governance:

BYD upholds high standards of corporate governance, ensuring transparency, accountability, and ethical business practices.

附录 APPENDIX

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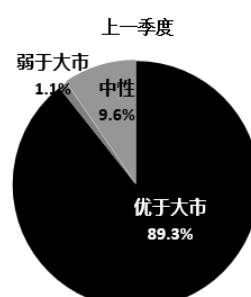
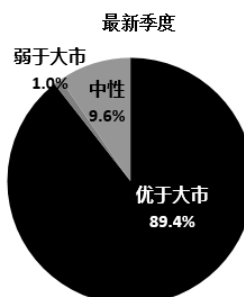
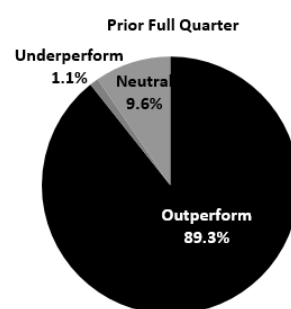
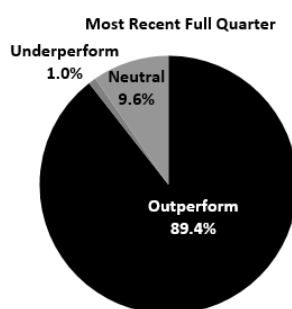
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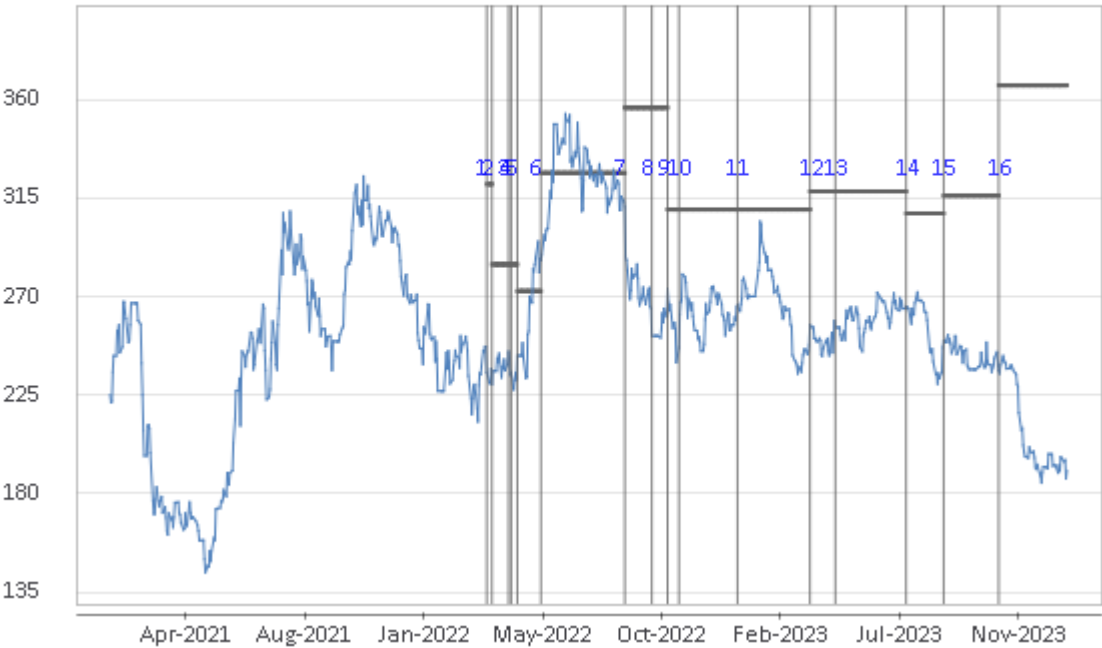
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1. 25 Mar 2022 OUTPERFORM at 247.08 target 321.4.
2. 31 Mar 2022 OUTPERFORM at 229.8 target 284.7.
3. 19 Apr 2022 OUTPERFORM at 239.1 target 284.7.
4. 24 Apr 2022 OUTPERFORM at 235.4 target 284.7.
5. 29 Apr 2022 OUTPERFORM at 243.0 target 272.5.
6. 26 May 2022 OUTPERFORM at 287.2 target 326.46.
7. 30 Aug 2022 OUTPERFORM at 313.55 target 356.3.
8. 2 Oct 2022 OUTPERFORM at 252.01 target 356.3.
9. 18 Oct 2022 OUTPERFORM at 273.67 target 309.8.
10. 31 Oct 2022 OUTPERFORM at 246.67 target 309.8.
11. 6 Jan 2023 OUTPERFORM at 266.2 target 309.8.
12. 30 Mar 2023 OUTPERFORM at 257.2 target 318.06.
13. 28 Apr 2023 OUTPERFORM at 255.86 target 318.06.
14. 18 Jul 2023 OUTPERFORM at 265.48 target 308.0.
15. 30 Aug 2023 OUTPERFORM at 246.71 target 316.14.
16. 1 Nov 2023 OUTPERFORM at 238.54 target 366.52.

Source: Company data Bloomberg, HTI estimates