

Technology

Intelligence driving: Implications of BYD's "vehicle intelligence strategy" event

BYD announced plans to offer its "God's Eye" advanced intelligent driving system on all models priced above RMB100k and 3 models priced below 100k, during its "Vehicle Intelligent Strategy" event in Shenzhen on 10 Feb. Initial rollout includes 21 models, all equipped with industry-leading specs with end-to-end LLM, 5 mm-wave radars, 12 cameras and 12 ultrasonic radars. We believe BYD's acceleration of intelligent driving with strong new model pipeline will boost adoption of intelligent driving in China, and key beneficiaries include BYDE (ADAS/domain controller), Sunny Optical/Q-tech/Cowell (1415 HK, NR)/AAC (camera/LiDAR/radar), BOEVx (display), AAC Tech (acoustics) and Luxshare/FIT (connector).

- **Introduction of self-developed "God's Eye" system across all price segments.** The "God's Eye" system is divided into three levels (A/B/C). 1) God's Eye A: high-end intelligent driving with three LiDARs (DiPilot 600), primarily for Yangwang brand. 2) God's Eye B: high-end intelligent driving with one LiDAR (DiPilot 300), primarily for Denza and BYD brands. 3) God's Eye C: high-end intelligent driving with triple-cameras (DiPilot 100), primarily for BYD models. It will also support high-speed and urban memory navigation, with OTA updates planned by end of 2025.
- **Spec upgrades in DeepSeek AI models, sensors, smart cockpit, chips, and domain controllers.** Taking the entry-level "God's Eye C" as an example, BYD's intelligent driving technology is upgraded across multiple technologies. **1) AI models:** Integrate with DeepSeek for AI capabilities on vehicle and cloud platforms and adopt reinforced distillation for personalized services. **2) Sensors:** Feature global first "front triple-camera" system (8P), equipped with 12 cameras, 5 mm-wave radars, and 12 ultrasonic radars. The high-end "God's Eye" A/B systems are equipped with 1-3 LiDARs. **3) Chips & Domain Control:** Upgraded Delink 100 doubles the computing power, with DM and E platforms fully upgraded to Xuanji architecture. **4) Intelligent Cockpit:** Fully equipped with LCD dashboard, screen size upgraded from 10 inches to 12.8 inches, capacitive steering wheel, and dedicated intelligent driving paddles.
- **BYD's intelligent driving progress above expectations; Positive on intelligent driving supply chain.** We are constructive on BYD's leadership in universal intelligent driving and investment opportunities along intelligent driving supply chain, including 1) Domain controllers/chassis: BYDE, Intron Tech; 2) Sensors (cameras/LiDAR/radar): Sunny Optical, Q-tech, Cowell, AAC Tech; 3) Connectors: Luxshare, FIT Hon Teng; 4) Smart Cockpit (HUD/acoustics/display): BOEVx, AAC Tech.

Valuation Table

Name	Ticker	Rating	Mkt Cap (USD mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE
							FY24E	FY25E	FY25E	FY25E	
BYDE	285 HK	Buy	15,692	54.25	48.66	-10%	24.1	17.0	3.0	17.4	
Sunny Optical	2382 HK	Buy	11,595	82.50	72.52	-12%	32.9	27.6	3.1	11.2	
AAC Tech	2018 HK	Buy	7,010	45.80	40.83	-11%	27.4	21.6	1.9	8.8	
FIT Hon Teng	6088 HK	Buy	3,492	3.73	4.79	28%	19.0	11.0	1.2	10.7	
BOEVx	710 HK	Buy	789	7.76	10.48	35%	13.9	11.1	0.5	4.4	
Intron Tech	1760 HK	Buy	226	1.62	2.35	45%	6.9	4.3	0.6	13.3	
Luxshare	002475 CH	Buy	42,268	42.66	55.09	29%	22.7	18.5	3.0	16.4	

Source: Company data, CMBIGM estimates

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Focus Charts

Figure 1: BYD's self-developed "God's Eye" intelligent driving system



Source: Company data, CMBIGM

Figure 2: BYD's all models are equipped with "God's Eye" advanced intelligent driving



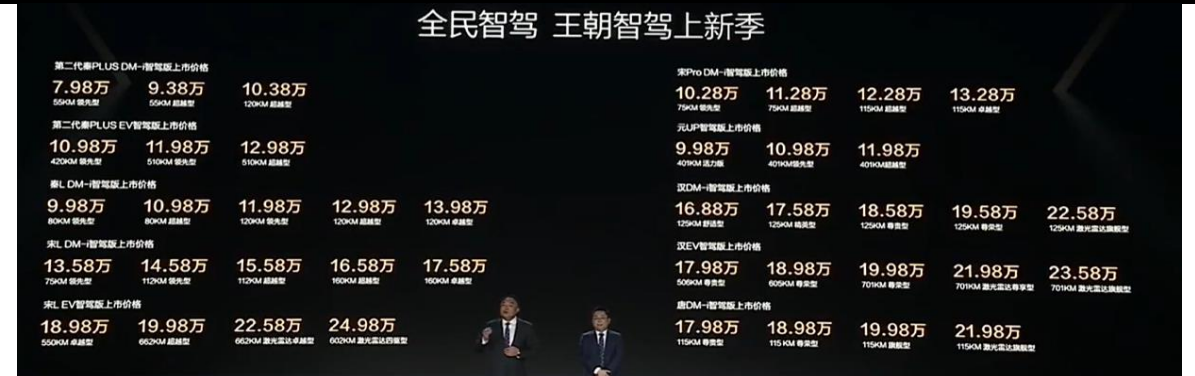
Source: Company data, CMBIGM

Figure 3: Integration with DeepSeek on both vehicle and cloud platforms



Source: Company data, CMBIGM

Figure 4: BYD's new product launches



Source: Company data, CMBIGM

Figure 5: BYD's intelligent driving supply chain mapping

Component		DiPilot 100	DiPilot 300	DiPilot 600
Domain Controller	Quantity	1	1	1
	ASP	RMB 3,000-4,000	RMB 5,000-7,000	RMB 8,000-12,000
	Supplier	BYDE (100 self-developed, 300/600 OEM)		
Chips	Quantity	1	1	2
	Supplier	Orin N (70%); Horizon Robotics J6 (30%)	Nvidia Orin X	Nvidia Orin X
Cameras	Quantity	12	12	12
	ASP	RMB 100	RMB 100	RMB 100
	Total ASP	RMB 1,200	RMB 1,200	RMB 1,200
	Supplier	Internal, Sunny Optical, LianChuang		
mm-wave radar	Quantity	5	5	5
	ASP	RMB 100	RMB 100	RMB 100
	Total ASP	RMB 500	RMB 500	RMB 500
LiDARs	Quantity	0	1	2-3
	ASP	-	RMB 2,000	RMB 2,000
	Total ASP	-	RMB 2,000	RMB 4,000-5,000
	Supplier	Hesai, RoboSense		

Source: Company data, CMBIGM

Figure 6: Auto electronics: Peers valuation

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
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Luxshare	002475 CH	Buy	42,268	42.66	55.09	29%	22.7	18.5	3.6	3.0	16.0	16.4
Desay SV	002920 CH	NR	9,876	130.00	NA	NA	33.7	25.7	7.4	6.0	23.7	24.6
Joyson	600699 CH	NR	3,787	19.64	NA	NA	20.3	16.2	1.9	1.7	9.5	11.0
Jingwei Hirain	688326 CH	NR	1,820	110.80	NA	NA	-	106.0	2.8	2.7	(6.4)	5.0
Foryou	002906 CH	NR	2,500	34.80	NA	NA	27.4	21.0	2.8	2.5	10.6	12.2
O-Film	002456 CH	NR	6,502	14.35	NA	NA	134.1	53.1	11.4	11.0	6.0	12.2
LianChuang	002036 CH	NR	1,782	12.29	NA	NA	614.5	85.9	4.3	4.2	(6.3)	3.0
Average							81.4	32.2	3.5	3.2	8.1	11.5

Source: Bloomberg, CMBIGM estimates. Data as of 10 Feb close.

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