# maranca

## INTELLOTRACKER

## SEMICONDUCTORS: AI HARDWARE ACCELERATOR

JUNE 2023



### ARANCA'S QUARTERLY SECTORIAL UPDATE ACROSS FOUR DIMENSIONS....

Disruptive innovations      Comp     New product     Unde	pany expansions petitor tracking er-research hologies 01	02 .	namics New entrants/ start-ups Supply chain activities New business	models Company financials Other initiatives
& regulations Influe	uct ratings encers 04 r details	- /	versification Mergers & acquisitions VC investments Company collaborations	Licensing activities Exploring alternate applications



	Developi	MENTS
New product launches	intel.	Intel announces a significant update to its client compute branding with the launch of the new Intel® Core <sup>™</sup> Ultra and Intel® Core <sup>™</sup> processor brands. The new client branding begins with Intel's upcoming Meteor Lake processors. Source: Intel Blog
Technology/Innovations	GRADIENT	According to Gradient flow 2023, the "Generative AI" has the ability to create entirely new content, rather than simply analyzing or responding to pre-existing data. Source: Gradient Flow Blog
New product launches		NVIDIA today announced that the NVIDIA® GH200 Grace Hopper Superchip is in full production, set to power systems coming online worldwide to run complex AI and HPC workloads. Source: NVIDIA Press Release
New product launches		AMD launches AMD Instinct MI200 series to empower mainstream servers, supercomputers, and exascale systems in addressing critical global challenges such as climate change and vaccine research. <i>Source:</i> AMD Blog
Disruptive innovations	scientific computing world	Celestial-ai is planning to build photonics-based AI accelerators which will revolutionize the CMOS based chips and offer enormous potential advantages to data processing speeds for large-scale computing infrastructure. Source: : <u>Beritaja report</u>
Competitor tracking	tom'sHARDWARE	AMD and Intel are both seeking to position their processors as the best choice for powering all the new AI frills coming to Windows 11. Source: Tomhardware blog
	DYNAMIC	S
Company financials	FIERCE	Nvidia's data center revenue grew by 30% in the fiscal third quarter, driven by a reported annual growth rate of 23.5% for dat center GPUs, expected to continue until the end of the decade, as told by Harsh Chauhan at The Motley Fool. Source: FierceElectronics
		ATION
Company collaboration	intel.	Cisco and Intel drive sustainable energy-efficient performance with new M7 servers paired with the latest Intel Xeon Scalabl processor capabilities. Source: Cisco blog
Company collaboration	brainchip	BrainChip Holdings Ltd, world's first commercial producer of ultra-low power, fully digital, event-based, neuromorphic Al IF today announced that University of Oklahoma (OU) has joined the University Al Accelerator Program to develop Al solutions Source: BrainChip Press Release
VC Investments		NeuReality lands \$35M to bring AI accelerator chips to market. Source: <u>TechCrunch</u>
VC Investments	AyarLabs	U.S. silicon photonics chip startup Ayar Labs gets AI funding boost. They raised another \$25 million after its latest fundin round closed, as demand has increased for faster, more energy-efficient computing for artificial intelligence applications. <i>Source: <u>Reuters</u></i>
VC Investments		Lightmatter Gains US\$154 Million in new financing. Developer of integrated-photonics processors, interconnects and softwar targeting artificial-intelligence and high-performance computing (HPC) application

	Drivers	
Government policies	GOV.UK	The UK Government's semiconductor chip plan aims to leverage industry strengths, protect supply chains, mitigate national security risks, and contribute to economic growth. Source: gov.uk
Government policies		US officials are considering tightening an export control rule designed to slow the flow of artificial intelligence chips to China by clamping down on the amount of computing power the chips can have. Source: <u>ITnews website</u>
Influencers	WIRE19	According to Daniel Newman, CEO of The Futurum Group: "A monster day for \$NVDA. AI is going to change every industry. The @nvidia result is indicative of an arms race to build out infrastructure to support the next wave of growth fueled by AI." Source: <u>WIRE19 news</u>



### SOLUTION PORTFOLIO – TECHNOLOGY RESEARCH & ADVISORY

<b>الم</b> IP STRATEGY	TECHNOLOGY INTELLIGENCE	GROWTH & STRATEGY	
How best can we proactively manage and monetise our technical knowhow / intellectual property?	How best can we keep abreast of technology trends, competitor activity and headwinds / tailwinds in our domain?	Which technologies do we invest in? How do we ensure quick wins? Speed to market?	
<ul> <li>IP Portfolio Analysis</li> </ul>	<ul> <li>Competitor Benchmarking</li> </ul>	<ul> <li>R&amp;D Strategy Roadmaps</li> </ul>	
IP Monetisation	<ul> <li>Tech / IP Landscapes</li> </ul>	<ul> <li>Technology Scouting</li> </ul>	
IP Valuation	<ul> <li>Technology Watch</li> </ul>	Open Innovation	
<ul> <li>Prior Art Searches</li> </ul>	<ul> <li>Market Analysis / Trends</li> </ul>	<ul> <li>Product Development</li> </ul>	

