Monday, 06 Oct, 2025

#### **Brian Chin Haoyan**

(603) 7890 8888 (ext 2064) brianchin@apexsecurities.com.my

Recommendation:	BUY
Current Price:	RM 4.25
PreviousTarget Price:	N/A
Target Price:	RM 5.00
Capit al Upside/ Downside:	17.6%
Dividend Yield (%):	0.3%
Total Upside/Downside	18.0%

#### Stock information

Board	MAIN
Sector	Technology
Bursa / Bloomberg Code	0097 / VITROMK
Syariah Compliant	Yes
ESGRating	***
Sharesissued (m)	1,893.1
Market Cap (RM' m)	8,045.8
52-Week Price Range (RM)	4.49-2.28
Beta(x)	1.2
Freefloat (%)	31.0
3M Average Volume (m)	2.0
3M Average Value (RM' m)	7.9

Top 3 Shareholders	( %)
Chu Jenn Weng	26.6
Siaw Kok Tong	17.7
Yeoh Shih Hoong	8.6

#### Share Price Performance



	1M	3 M	12 M
Absolute(%)	7.1	15.5	36.7
Relative (%)	3.3	9.5	36.2

#### Earnings summary

FYE (Jun)	FY24 F	Y25F F	Y26F
Revenue (RM'm)	552.3	695.3	854.1
PATAMI (RM'm)	90.4	126.2	180.0
CNP (RM'm)	107.7	126.2	180.0
EPS-core(sen)	5.7	6.7	9.5
P/E(x)	74.6	63.7	44.7

Source: Company, Apex Securities



# **ViTrox Corporation Berhad**

## Positioning for the next wave of upcycle

- ViTrox is poised to benefit from the surging capex for advanced packaging and Al server manufacturing to address the proliferation of Al applications.
- FY25/26/27F core earnings growth of 17%/43%/29% will be fuelled by (i) rising shipment
  units to the semiconductor and EMS industry, (ii) hike in portfolio ASP due to introduction
  of new products with enhanced performance and features as well as (iii) decline in ETR as
  the group qualifies for pioneer status incentive.
- We initiate coverage on ViTrox with a BUY rating and a target price of RM5.00, based on a 46x PE multiple on mid-FY26F EPS of 10.9 sen. Our target multiple represents +1SD above ViTrox's 5-year historical average PE of 40x.

### Key Investment Highlights

Suite of new models to ride on demand upcycle. ViTrox has unveiled a pipeline of new products across both ABI and MVS segments in 2025 to strengthen its competitiveness and penetrate into high-growth areas such as advanced packaging and AI servers, which we believe will propel the group's financial performance to new heights. Among ViTrox's New Product Introductions (NPI) are (i) WiX Ai: Smart Wafer AOI Machine that is designed for automated wafer handling and comprehensive defect control across the front, inner, and back surfaces of wafers in a single platform, (ii) new AXI models built on QX1 platform launched in 2025 targeting AI server programs and (iii) enhanced AOI V510i series with AI powered inspection and AI Smart Programming.

Acceleration of volume and ASP growth. ABI segmental contribution is set to record sequential expansion with RM120m in 3Q25 (c.+8% QoQ), supported by a strong equipment backlog of RM55m and sales funnel of over RM70m as of end-Jul. We expect momentum to accelerate in 4Q25 and into FY26, underpinned by the scaling of AXI QX1 system orders following successful evaluations by key accounts. The QX1 series commands a 30-40% ASP upside versus its previous AXI models. Similarly, MVS-T should register improvements in the coming quarters due to robust sales funnel of over 70 machines in 2H25. MVS-T is poised for a stronger 3Q25 with an estimated 35-45 machines scheduled for delivery (vs 33 units in 2Q25), marking the highest quarterly volume since 2022. Despite increasing competition in China, its MVS-T products ASP remained on an uptrend in China, reflecting its technological edge in the fiercely competitive market. The introduction of TH3000i Max later this year should also aid in sustaining ASP growth.

**Geopolitical friction a net positive.** ViTrox is well-positioned to gain greater share from the US and Taiwan markets as both countries seek to reduce its reliance on Chinese supply chains. We believe Taiwan would be a key growth area going forward given its deep exposure to advanced packaging and AI server manufacturing, areas where ViTrox's latest-generation products are gaining traction. Meanwhile, US reshoring policies are expected to accelerate semiconductor and manufacturing investments in the US, which should drive incremental demand for back-end equipment. Taiwan's contribution (currently c.13% of revenue) is expected to trend higher going forward, while the US (c.10%) could emerge as another growth driver over the longer term.

Valuation & Recommendation. We initiate coverage on ViTrox with a BUY rating and a target price of RM5.00, derived from a 46x PE multiple applied to mid-FY26F EPS of 10.9 sen. Our target multiple, which represents +1SD above ViTrox's 5-year historical average PE of 40x, reflects our view that the stock is poised for a rerating on the back of: (i) rising exposure to high-growth segments such as HPC/AI server manufacturing and advanced semiconductor packaging, and (ii) strong double-digit earnings growth over our forecast horizon, supported by the semiconductor capex upcycle to meet AI-driven demand. We also believe ViTrox warrants a premium to Bursalisted technology equipment and support players given its (i) consistent innovation track record to stay ahead in competition, (ii) superior corporate governance and management execution, and (iii) position as one of Malaysia's largest and most established listed technology companies.



### **Company background**

Founded in 2000 by Dato Chu Jenn Weng and Mr. Steven Siaw Kok Tong, ViTrox Corporation Bhd is a Penang-based technology company specialising in the design, manufacture and sale of automated machine vision inspection systems and equipment, primarily serving the semiconductor and electronics manufacturing industries. The group was listed in Bursa Malaysia's Mesdaq market (now known as ACE market) in 2005 and subsequently migrated to the Main Market in 2009.

ViTrox's operations are structured around three key pillars: (i) Automated Board Inspection (ABI), (ii) Machine Vision System (MVS) and (iii) Electronic Control System (ECS). The ABI unit provides advanced optical inspection (AOI) and automated X-ray inspection (AXI) systems for inspection of surface-mount printed circuit board assembly (PCBA). The MVS division focuses on back-end semiconductor inspection systems by offering tray-based (MVS-T) and system (MVS-S) solutions. Meanwhile, ECS is a minor revenue contributor (1-2% of total revenue), which specializes in providing integrated industrial embedded solutions that enhance automation and connectivity for various applications in the electronics manufacturing industry.

ViTrox Technologies Sdn. Bhd.

National Sdn. Bhd.

ViTrox International Sdn. Bhd.

National Sdn. Bhd.

ViTrox Technologies GmbH
(Germany)

100%

ViTrox Americas Inc.
(USA)

ViTrox Americas Inc.
(USA)

ViTrox Academy Sdn. Bhd.
(Malaysia)

ViTrox Academy Sdn. Bhd.
(Malaysia)

ViTrox Agritech Sdn. Bhd.
(Malaysia)

ViTrox Agritech Sdn. Bhd.
(Malaysia)

ViTrox Agritech Sdn. Bhd.
(Malaysia)

100%

ViTrox Agritech Sdn. Bhd.
(Malaysia)

ViTrox Corporation Berhad

100%

ViTrox Agritech Sdn. Bhd.
(Malaysia)

100%

ViTrox Corporation Berhad

100%

ViTrox Corporation Bhd.
(Malaysia)

Figure 1: Corporate Structure

### **Business Overview**

### **Automated Board Inspection (ABI)**

The ABI segment (60% of FY24 revenue) focuses on inspection systems for surface-mount printed circuit board assembly (PCBA), a crucial stage in electronics manufacturing where components are mounted onto PCBs. The ABI division mainly serves the electronic manufacturing services (EMS) industry which provides manufacturing solutions for diverse sectors such as telecommunications, automotive, high-performance computing (HPC), consumer electronics, and industrial. ViTrox's ABI division encompasses two primary solutions:



(i) Advanced optical inspection (AOI). ViTrox's AOI technology uses high-resolution cameras and visible light to capture 2D and 3D images of the PCB surface and employs advanced algorithms and AI to detect surface-level defects such as missing or misaligned components, solder bridges, insufficient solder, or polarity errors. These systems offer high speed, inline inspection for top-side and dual-sided PCBAs to provide immediate feedback to prevent defective boards from advancing in production. For instance, its V510i AOI for Advanced Packaging and Microelectronics scans tiny semiconductor dies and wire bonds with unique test coverage on advanced packaging application, while V150Ai DST is designed specifically for dual-sided assembly inspection, particularly post-THT wave-soldering and selective soldering processes.

Figure 2: Key AOI products



#### V510Ai ST

Revolutionary AOI platform designed for very tall component inspection coverage for top side (up to 100mm tall component)



### V510i R

Revolutionary AOI platform with 2-in-1 inspection capabilities (for conformal coating and final inspection)

Source: Company



#### V510Ai DST

Award-winning Smart 3D AOI System Solution designed to cater dual-sided assembly inspection, particularly post-THT wave-soldering and selective soldering processes.



### V510i Optimus 3D

Award-winning 3D AOI Solution designed to cater for PCB manufacturing

(ii) Advanced X-Ray inspection (AXI). Complementing AOI platforms, AXI segment (29% of FY24 top line) applies X-ray radiation to penetrate components and materials, generating internal 3D images through computed tomography (CT) reconstruction techniques. This allows non-destructive visualisation of hidden structures, detecting concealed defects such as voids, cracks, head-in-pillow (HIP) anomalies, or insufficient solder in obscured joints under components like Ball Grid Arrays (BGAs) or Chip Scale Packages (CSPs), which are invisible to optical methods. Its next-generation V810Ai QX1, aimed at AI server programs, is the pioneering AXI platform that delivers ultra-high-resolution imaging for reliable detection for miniature defects in 3D advanced packaging. Its V810i S3 system is also a market pioneer for AXI Dual Lane Solution capable of inspecting two PCBs simultaneously, enhancing throughput and cycle time in high-volume manufacturing environments like SMT production lines.



Figure 3: Key AXI products



#### V810Ai QX1

Revolutionary Smart 3D AXI System with A.I. Solutions. It is the pioneer AXI platform that delivers ultra-high resolution imaging for reliable detection of miniature defects like HiP and accurate reconstruction of internal structures in 3D advanced packaging. Equipped with Advanced Planar CT, enables dual-sided PCB inspection with selective slice analysis for comprehensive defect detection.

Source: Company



#### V810i S3

Award-winning Smart 3D AXI System Solution is designed to cater for the PCB manufacturing process. The new generation V810i S3 system with Dual Lane is the market-leading 3D AXI solution for fast cycle time and high throughput.

\* Dual lane is available for this system.

### **Machine Vision System**

The MVS segment plays a critical role in back-end semiconductor testing by using advanced cameras, sensors, and AI to capture and process images for automated defect detection. These systems inspect semiconductor components for dimensional and visual flaws, surface markings, pad and package quality, and lead/ball co-planarity, with images taken from multiple angles for precise analysis. ViTrox's MVS offerings comprise the MVS-S (System) and MVS-T (Tray-based) variants.

MVS-T machines are tailored for tray-based semiconductor handling by performing inspection on various IC packages arranged in trays. Its Tray-to-Tray series (TH3000i), capable of handling a wide array of packages (i.e. BGA, QFN, CSP, QFP), performs final inspection on packaged ICs that are loaded into JEDEC trays and uses six-sided inspection to verify package integrity. Meanwhile, Tray-to-Reel series (TR3000i) is designed for workflows where inspected dies or packages are transferred from trays to tape-and-reel formats for SMT assembly/PCB assembly lines.

Figure 4: Key MVS-T products

Tray to Reel Series

Tray to Tray Series

TR3000i Ai

TH3000i Ai

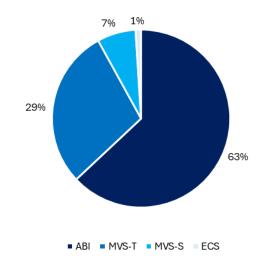
Source: Company



**MVS-S.** ViTrox's MVS-S solutions offer vision inspection modules covering various stages of workflow from an input point through multiple vision stations. Additionally, its new product WiX Ai (wafer inspection machine) is designed as an all-in-one platform for high-precision inspection of semiconductor wafers for foundries, IDMs and OSATs. ViTrox also provides die sorting machines (PX730i and PX40i) under its MVS-S segment, which are capable of performing 6-sided inspection and tape and reel packaging with high throughput performance.

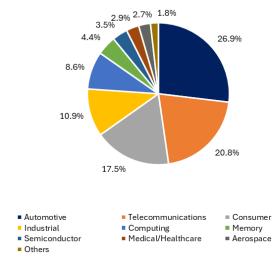
**Revenue Breakdown.** ViTrox reported total revenue of RM552.3m in FY24, with majority (63%) contributed by ABI segment, which serves as the group's main revenue generator through its advanced optical and X-ray inspection solutions. MVS-T and MVS-S accounted for 29% and 7%, respectively, of its total revenue. The ECS segment represented a modest 1% of its top line. In terms of market segment, ViTrox has a strong presence in the automotive industry, representing 27% of its top line, followed by telecommunications 21%, consumer electronics (18%), Industrial (11%) and computing at 9% (AI and data center), among others.

Figure 5: Revenue breakdown by product (FY24)



Source: Company

Figure 6: Revenue breakdown by market segment (FY24)



Source: Company



### **Industry Overview**

### Al and High-Performance Computing (HPC) driving semiconductor capacity growth...

The semiconductor industry experienced a downcycle over 2022-2023 — driven primarily by a post-pandemic demand normalisation that led to excess inventory buildup after years of shortages, compounded by macroeconomic headwinds such as rising inflation and interest rates as well as reduced consumer confidence. However, the advent and swift proliferation of Al applications, especially since generative AI gained popularity (i.e. OpenAI's ChatGPT, Google's Gemini etc), has fuelled rapid expansion of advanced process capacity (7nm and below) to support the demand for powerful training capabilities and larger AI model architectures. According to SEMI, the global semiconductor industry is expected to maintain strong momentum with capacity projected to grow at a CAGR of 7% from the end of 2024 through 2028, reaching a record high of 11.1m wafers per month (wpm). In tandem with the mushrooming leading-edge logic fabs, the corresponding advanced packaging technologies such as 2.5D/3D solutions and the integration of High Bandwidth Memory (HBM) are also required to support the need for massive data processing in AI and HPC demand. Yole Group forecasts the advanced packaging market to grow at a robust 9.4% CAGR from 2024 to USD80bn by 2030.

≤7nm YoY >7nm YoY 20% 14% YOY GROWTH (%) 10% 9% 8% 7% 7% 5% 0% 2024 2025 2026 2027 2028

Figure 7: Global Semiconductor Capacity Growth for ≤7nm vs. >7nm Nodes (2024-2028)

Source: SEMI



Figure 8: Advanced Packaging Market, Revenue (USD' bn)

Source: Yole Group

### ...and hence, the need for stronger process control

The fast-evolving advanced nodes and packaging techniques to support the AI boom is spurring greater process control intensity across the semiconductor industry ranging from Foundry, Integrated Device Manufacturer (IDM) to OSAT players. As chip nodes shrink below 5nm and packaging complexities escalate, systematic yield issues (i.e. material defects and design



complexities) make high yield rates increasingly difficult to maintain without Al-driven enhanced vision inspection solutions. Additionally, the growing reliance on advanced packaging techniques like 2.5D and 3D stacking, hybrid bonding, and wafer-level processes has made it much harder to detect defects consistently and early enough to protect yields (Semiengineering). As such, the demand for advanced vision solutions capable of inspecting high complexity packages with submicron accuracy for defect detection control is set to rise, supporting back-end testing and inspection operations of foundries and OSAT service providers, thereby driving the demand for ViTrox's latest-generation vision inspection machines catered for component level inspection.

### Electronic manufacturing industry boosted by HPC and AI boom

According to the Grand View Research, the global AI server market is projected to stage a staggering 38.7% CAGR from USD166.6bn in 2025 to USD854.2bn in 2030, fuelled by cloud computing and hyperscale DC expansion to support the rapid adoption of generative AI. The surging demand for cutting edge Al chipsets corresponds with the aggressive DC expansions across the globe, fuelling the demand for HPC and AI servers and boosting players who are engaged in Al server OEM/EMS business. For perspective, Foxconn, the world's largest iPhone manufacturer, has earned more from its AI server business than from Apple-related products for the first time in 2Q25. Its cloud and networking products accounted for 41% of its revenue in 2Q25, outpacing smart consumer products with 35%. The momentum is set to continue as Foxconn guided its Al server revenue to surge 170% YoY in 3Q25.

The demand for supercomputers will be further reinforced by the crystallisation of Stargate Project, a JV plan between OpenAI, Oracle, SoftBank and Abu-Dhabi-backed investment fund MGX, which intends to invest USD500bn over the next four years to develop AI infrastructure in the US amounting 10GW of DC capacity. Starting with an initial USD100bn commitment, the project kicks off with a flagship facility in Abilene, Texas, which is currently under construction and will deliver 1.2GW of power capacity (IBM). Bolstering this ambition, OpenAI and Oracle announced a USD30-300bn agreement in July 2025 to add 4.5GW of US data center capacity, enabling over 2m AI chips for training and inference. Hence, the need for AI servers will amplify as Stargate Project successfully scales up.

The core of an AI server is the motherboard that connects all components such as CPUs, GPUs, RAM and storage along with interfaces for networking and peripherals. The server-grade motherboards, which handle high-performance components and operate under demanding conditions, require extensive optical and X-Ray inspection at multiple stages to ensure defectfree production and reliable performance. Given the surging Al server demand, alongside the rising density of server boards and complexity of SMT components, we expect the demand for advanced optical and X-ray inspection machines from major electronics manufacturers to expand over the coming years and lift ViTrox's ABI business through the sale of its latest generation 3D AOI and AXI machines.

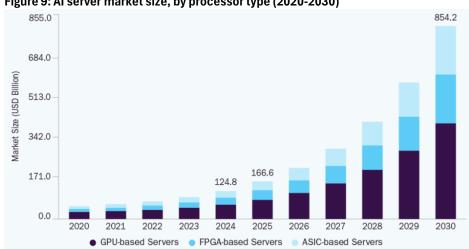


Figure 9: Al server market size, by processor type (2020-2030)

Source: Grand View Research

Monday, 06 Oct, 2025



### Automotive: electronic and chip content growth the key growth driver

The automotive semiconductor (auto semi) boom in 2021-2022 attributed to surging EV production, capacity shortage and rising chip content to support advanced driver-assistance systems (ADAS) had supercharged auto chipmakers (i.e. Infineon, Texas Instruments, Renesas, NXP) to log record high revenue in 2022-2023. However, post-pandemic chip shortage era, the auto semi players began experiencing a sales contraction through 2024 led by overbuilt inventory glut and aggressive destocking by automakers and tier-1 suppliers, coupled with decelerating global car sales growth at 2.5% in 2024 (vs 2023: +10%)(Acea).

Although auto semi revenue remains weakish in 1H25, we view the worst of the inventory correction cycle is over, with stabilisation signals emerging across key auto semi players. Taking cue from 2Q25 earnings calls, auto semi market is expected to see gradual recovery from hereon as Infineon, Onsemi, NXP, STMicro, among others, guided sequential expansion for their auto segment in the coming quarters. Citing Mordor Intelligence, the auto semi market is estimated to be USD100.5bn in 2025 and is forecast to expand at a 7.3% CAGR to USD142.9bn in 2030, buoyed by electrification mandates, rapid adoption of advanced driver-assistance (ADAS) features and pivot toward software-defined vehicles (SDV) are pushing silicon content higher across every vehicle class. While the automotive market may not be exciting in the near-term due to macro uncertainties and US tariffs, the auto semi market recovery will be aided by the structural rise in semiconductor content per vehicle, which is projected to increase from USD350 today to USD550 by 2030 (EE Times, S&P Global Mobility). ViTrox derives roughly a quarter of its revenue from automotive-related customers. Hence, we anticipate the increasing semiconductor content, alongside the electronic parts in vehicles to drive the usage of vision inspection machines for the inspection of automotive-grade chips and modules.

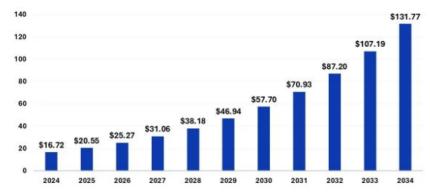
### Telecommunications: rising 5G deployment and satellite communication

Telecommunications is one of the industries that underpin the demand growth of vision inspection machines and represents c.20% of ViTrox's top line. 5G adoption continues to expand globally and reached 2.25bn 5G connections as of Apr 2025, growth rate four times faster than 4G due to its ability to offer high-speed and low-latency internet connectivity (5G Americas). To support the continuous escalation in 5G network deployment, the global 5G infrastructure market is projected to expand from an estimated USD16.7bn in 2024 to reach USD131.8bn by 2034, representing a CAGR of 22.9% (Precedence Research). The steady growth is bolstered by a multitude of catalysts, primarily a 2.5-fold jump in total worldwide mobile data traffic from 126 exabytes (EB) per month at the end of 2024 to 303 EB per month by 2030, per Ericsson. Furthermore, the growing demand for connected devices and the use of 5G IoT also support the industry growth due to increased applications in fleet management, smart building, logistics, smart agriculture, among others.

In addition to 5G technology, satellite communication has emerged as one of the substitutes to bridge the connection gaps where ground-based networks fall short or non-existent as well as remote and under-developed areas due to poorly developed land-based infrastructures such as fiber optic networks or cell towers. SpaceX's Starlink, specialises in mass-scale low earth orbit (LEO) consumer broadband expanded from 1m subscribers in Dec 2022 to 6m by Aug 2025.According to Markets and Markets, the global satellite communication market size was estimated at USD16.9bn in 2024 and is forecasted to reach USD33.2bn in 2029, growing at a CAGR of 14.5% during the period. In our view, the continued expansion in the telecommunication industry will continue driving demand growth for vision inspection machines for components like 5G modules, satellite communication transceivers, antennas, and optical components.

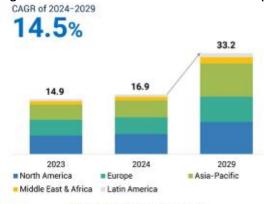


Figure 10: 5G infrastructure market size (USD' bn)



Source: Precedence Research

Figure 11: Satellite communication market size (USD' bn)



MARKET SIZE (USD BILLION)

Source: MarketsandMarkets

### Consumer electronics: stable demand amid growth headwinds

Consumer electronics represents one of the core market segments for ViTrox, forming over c.20% of the group's revenue. This segment encompasses a wide array of end applications, including mobile devices, laptops, computers, home appliances, wearable devices, gaming consoles, and more. Although the consumer electronics market is mature and has faced headwinds from subdued consumer spending over the past one to two years, rising disposable incomes, improving standards of living, and growing demand for home improvement products are driving market recovery and growth. According to <a href="Precedence Research">Precedence Research</a>, the global consumer electronics market, valued at USD 809.3bn in 2024, is projected to reach USD1,406.5bn by 2034, growing at a CAGR of 5.68%. This expansion supports semiconductor demand, with <a href="Yole Intelligence">Yole Intelligence</a> forecasting consumer semiconductor revenue to climb from USD 296bn in 2023 to USD 383bn by 2030, at a 2.1% CAGR over 2018–2030. While near-term growth remains tempered due to challenges faced by consumer-centric EMS players amid cautious consumer spending, we expect stable demand for ViTrox's vision inspection machines, particularly 3D AOI and AXI systems, to support quality assurance in high-volume PCB assembly and semiconductor packaging for consumer devices.



Figure 12: Consumer electronics

### SEMICONDUCTOR TRENDS - MOBILE AND CONSUMER FOCUS

Source: Semiconductor Trends in Mobile and Consumer report, Yole Intelligence, 2024

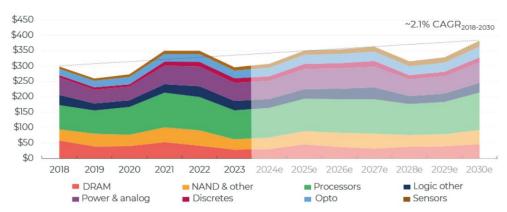


YOLE

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Source: Yole Intelligence

Figure 13: Semiconductor device revenue for mobile and consumer (USD' bn)



Source: Yole Intelligence

# **Investment Highlights**

**Suite of new generation models to ride on demand upcycle...** In the face of rising competition in the back-end equipment space, ViTrox has unveiled a pipeline of new products across both ABI and MVS segments in 2025 to strengthen its competitiveness and penetrate into high-growth areas such as advanced packaging and AI servers, which we believe will propel the group's financial performance to new heights. Among ViTrox's New Product Introductions (NPI):

(i) its MVS-S division introduced a new generation WiX Ai: Smart Wafer AOI Machine that is designed for automated wafer handling and sub-micron accuracy for comprehensive defect control across the front, inner, and back surfaces of wafers in a single platform. Equipped with Al-driven analytics, WiX Ai is catered for foundries' packaging division and OSAT's advanced packaging lines comprising WLP and 2.5D/3D packages. As per ViTrox's guidance in its Aug results briefing, WiX Ai is slated for its first delivery in 3Q25 for a customer in Penang. We believe the one of ViTrox's target customers for this segment is ASE Technology, who has launched its fifth plant in Penang focusing on advanced packaging and testing services. Under MVS-T (Traybased vision handler), ViTrox will also introduce TH3000i Max (newer version of TH3000i) by end of 2025. The machine is capable of handling extra-thick JEDEC tray targeted at thicker and taller IC packages to accommodate increasingly advanced chips and components.

Monday, 06 Oct, 2025



(ii) Launched in 2025, the new AXI series built on QX1 platform is available in two models: QX1 High Resolution (HR) and QX1 High Speed (HS). It is designed to deliver superior imaging resolution for a wide range of applications in the electronics manufacturing industry, encompassing flip chip, 008004 miniature SMT chips and 3D advanced packaging. The QX1 HR, which was launched in 2Q25 and started shipping to customers in Taiwan and Thailand targeting AI server programs, is equipped with X-ray tube featuring a spot size as small as 10nm and delivering image clarity of 2nm and 4nm. Meanwhile, the QX1 HS model, which prioritises throughput by operating 25-30% faster than the HR model through a higher power capacity X-ray tube, will be launched in 4Q25. Should it achieve successful commercialisation, the QX1 models would rank among the most advanced AXI systems globally, offering nanoscale precision and high-volume efficiency.

(iii) In the AOI segment, ViTrox has continued to expand its flagship **V510**i series to address the growing demand from the automotive, telecommunication and AI server industries. Its latest AOI flagship lineup — V510i for adv packaging & microelectronics, V510Ai ST, and V510Ai DST, among others — is equipped with advanced AI-powered inspection and after-inspection judgement, as well as AI Smart Programming.The V510i ST (Side Camera – Tall Component Inspection) provides top-side inspection, whereas the V510i DST (Dual Vision – Side Camera – Tall Component Inspection) enables simultaneous dual-sided, high-speed inspection that covers both SMT and through-hole ("THT") processes. Both systems are built to handle tall components, with the V510i ST and V510i DST supporting up to 100mm for top-side and up to 50mm for bottom-side inspection. Designed for SMT backend applications, these systems can detect a wide range of quality issues such as polarity, missing or damaged components, misalignment, gaps, foreign materials, as well as perform OCR, barcode and label checks, solder joint inspection, and height measurement.

With the semiconductor and HPC industry entering a cyclical recovery, particularly in advanced packaging and Al-related applications, we believe these new products strategically position ViTrox to capitalise on the upcycle over the next two years, driving stronger adoption across both back-end semiconductor and high-end electronics manufacturing industries.

...and thus, driving volume and ASP growth. With ViTrox's relentless pursuit of innovation, we believe the group is well-poised to ride on the upcycle in the semiconductor space and electronics manufacturing industry, particularly in the area of advanced packaging and AI server manufacturing. Already, signs of order acceleration emerged from the EMS industry (mainly AI server manufacturers) as management guided its ABI segmental revenue to reach about RM120m in 3Q25 (c.+8% QoQ), supported by an equipment backlog of RM55m and a strong sales funnel of over RM70m as of end-July. We expect momentum to accelerate in 4Q25 and into FY26, underpinned by the scaling of AXI QX1 system orders following successful evaluations by key accounts in the near term. Given its technological edge, the QX1 series commands a 30-40% ASP upside versus its previous generation AXI models, based on our channel checks. In addition to incremental upgrades on its AOI offerings, we expect the blended sales volume and ASP of ABI division to trend upward in the near-medium term.

Meanwhile, MVS segment is also guided to record sequential expansion in the coming quarters due to robust sales funnel with over 70 machines projected over the next six months, according to ViTrox. MVS-T is poised for a stronger 3Q25 with an estimated 35-45 machines scheduled for delivery (vs 33 units in 2Q25), marking the highest quarterly volume since 2022. Despite increasing competition in China due to its continuous advancement in back-end equipment offerings, management noted that its MVS-T products ASP remained on an uptrend in China, reflecting its technological edge in the fiercely competitive market. We believe the introduction of TH3000i Max later this year will aid in sustaining ASP growth.

Overall, we believe the strong demand momentum for ViTrox's vision inspection solutions, coupled with shortening order lead times that signal heightened urgency from customers, should underpin robust growth ahead. Continuous product innovation to address high-growth areas such as advanced packaging and AI server manufacturing, alongside a series of new



products, positions ViTrox to sustain both sales volume and ASP expansion over the coming years.

Geopolitical friction a net positive for ViTrox, in our view. We believe the rising geopolitical tensions surrounding the semiconductor space will benefit more than hurt ViTrox. Admittedly, China's semiconductor self-sufficiency drive has stoked intense competition in the back-end equipment space. Although management noted that ViTrox is technologically ahead against its Chinese competitors, the gap against Chinese peers is narrowing to about one year. Furthermore, the uncertainties of Section 232 investigation in the US (due by end-Dec) still poses potential risk to the semiconductor space. Nonetheless, we believe the downside risk is capped given the US market only accounts for c.10% of the group's revenue and the tariff charges (19% blanket rate) are currently absorbed by its US customers.

On the upside, we reckon ViTrox is well-positioned to gain greater share from the US and Taiwan markets as both countries seek to reduce its reliance on Chinese supply chains. We believe Taiwan would be a key growth area going forward given its deep exposure to advanced packaging and AI server manufacturing, areas where ViTrox's latest-generation products are gaining traction. Meanwhile, US reshoring policies such as the potential implementation of "1:1 domestic-to-import chip production policy (WSJ) are expected to accelerate semiconductor investments in the US. Already, TSMC has committed to invest USD165bn in the US to set up wafer fabs, advanced packaging facilities, and an R&D center. Alongside TSMC's expansion, its suppliers and supporting back-end ecosystem are also expected to follow and set up operations locally, which should drive incremental demand for vision inspection systems. Overall, we expect Taiwan's contribution (currently ~13% of revenue) to trend higher in the coming quarters, while the US could emerge as another growth driver over the longer term.

Meanwhile, China will remain a stronghold for ViTrox as the nation races towards semiconductor self-sufficiency. Despite rising domestic competition, the overall equipment demand should continue to rise, benefitting Vitrox provided it maintains its technological edge in the market. To strengthen its foothold, ViTrox disclosed in its 2Q25 briefing that it is exploring partnerships to establish a physical presence in China, which could enhance its ability to gain higher share in the vast market.

1HFY25

5%
2%
38%

10%
13%
15%

China Malaysia Taiwan US Mexico

India Vietnam Europe Others

Figure 14: 1HFY25 revenue breakdown by geography (%)

Source: Company

**Strong commitment to R&D spending and innovation.** In order to maintain and continuously enhance its technological edge to remain competitive in the rapid-evolving technological space, ViTrox has consistently allocated 8-11% of its revenue towards R&D to enable each business unit to launch at least two new or enhanced products annually. This is demonstrated by its



recent NPIs in MVS for semiconductor wafer AOI inspection, ABI for performance leap in its new generation AXI machines as well as Automated Robotic Vision for high precision manufacturing, among others. In parallel, ViTrox has been continuously enhancing its proprietary V-ONE AI software platform, which integrates real-time data collection, cross-machine defect traceability, predictive maintenance, and process optimization tools. The integration of its hardware systems with V-ONE's advanced analytics and automation capabilities adds differentiation and strengthens ViTrox's overall value proposition, improves yield and efficiency, and cement its competitiveness in the back-end equipment market.

800 16% 750 14.6% 13.4% 680 700 14% 12.3% 11.5% 575 11.0% 11.0% 600 552 12% 500 10% 395 400 8% 340 327 300 6% 234 160 200 100 2% 45 45 37 40 23 2015 2016 2017 2019 2020 2022 2023 2024 Revenue R&D Expenditure R&D/Revenue (%)

Figure 15: R&D Expenditure versus revenue

Source: Company

# **Financial Highlights**

**1HFY25** results review. Despite forex headwinds (1H25: RM4.38/USD vs. 1H24: RM4.72/USD), ViTrox's 1HFY25 revenue grew 26% YoY to RM324.2m thanks to double-digit sales growth across all business units – led by ABI (+24%), MVS-T (+21%) and MVS-S (+61%). The improved top line in 1H25 was driven by the broad-based demand recovery and aided partly by pull-in effect ahead of the tariff deadline. Its 1H25 core earnings rose at a faster clip to RM64.0m (+39% YoY) due to 180bps margin expansion to 19.7% on better operating leverage from higher volumes. Nonetheless, bottom line growth for the period was capped by the higher effective tax rate of 20.8% (1H24: 10.1%) due to the expiry of pioneer status incentive in 2Q25.

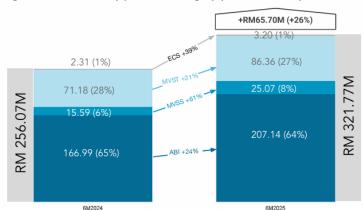


Figure 16: Revenue by product category (1H25 vs 1H24)

Source: Company

**Pioneer status incentive.** The group is in the process of renewing its pioneer status incentive, with the outcome expected in 2H25, though no specific timeline has been guided. We note that the tax incentives will apply only to its new products, with the full benefit materialising as legacy



products are gradually phased out. As such, we project FY25F ETR at c.20%, assuming the normal corporate tax rate is applied for the remainder of the year since Apr-25. We estimate the pioneer status incentive to come in effect from Jan-26 onwards, bringing down its ETR to c.15% in FY26F and subsequently c.8% in FY27F as the group gradually phases out its legacy products.

**Earnings outlook.** We project ViTrox's FY25/26/27F core earnings to grow 17%/43%/29%, representing a 3-year CAGR of 28% from FY24 to FY27F. The bottom-line growth will be fuelled by (i) escalation in shipment units attributed to the capex upcycle from the semiconductor and EMS industry, especially in the area of advanced packaging and AI server manufacturing, (ii) hike in blended portfolio ASP due to introduction of new products with enhanced performance and features such as the QX1 models, WiX wafer inspection machine and improved flagship A510i AOI series, as well as (iii) decline in ETR as sales of new models qualified for pioneer status incentive gradually replace its legacy products.

1000 30% 900 25% 800 22% 21% 20% 700 20% 600 500 15% 54. 400 695.3 10% 300 231.4 180.0 200 126.6 126.2 107.7 5% 100 0 0% FY23 FY24 FY25F FY26F FY27F Revenue (LHS) Core earnings (LHS) Net margin (RHS)

Figure 17: Earnings forecasts

Source: Apex Securities, Company

Balance sheet and dividend. As at 30 Jun 2025, ViTrox's net cash position stood at a healthy RM312.9m (end-24: RM292.3m), underpinned by strong cash flow generation and disciplined capital management. Its solid cash reserves provide flexibility for potential M&A opportunities and the ongoing expansion of ViTrox Campus 3.0 (VC3.0) to capture the anticipated demand upcycle. Floor space utilisation at VC2.0 and VC3.0 was 86% and 32% respectively early this year, with further increases expected as renovation and fit-out works progress. As for dividends, ViTrox has maintained a payout ratio of c.20–25% over the past several years. We assume a 20% payout for FY25–27F, translating into DPS of 1.3–2.4 sen, implying yields of 0.3–0.6% based on current share price.

**Forex sensitivity analysis.** We gathered that c.80–85% of ViTrox's revenue is denominated in USD, making its profitability considerably sensitive to RM/USD fluctuations and exposing the group to material forex risk. Our RM/USD assumptions for FY25/26/27F stand at 4.30/4.20/4.20. Based on FY26F as the reference point, we estimate that a 5% fluctuation (up or down) in MYR/USD would impact core net profit by a magnitude of RM7.5m, or ±4%.



### **Valuation & Recommendation**

Initiating Coverage. We initiate coverage on ViTrox with a BUY rating and a target price of RM5.00, derived from a 46x PE multiple applied to mid-FY26F EPS of 10.9 sen, alongside a three-star ESG rating. Our target multiple, which represents +1SD above ViTrox's 5-year historical average PE of 40x, reflects our view that the stock is poised for a rerating on the back of: (i) rising exposure to high-growth segments such as HPC/AI server manufacturing and advanced semiconductor packaging, and (ii) strong double-digit earnings growth over our forecast horizon, supported by the semiconductor capex upcycle to meet AI-driven demand. We also believe ViTrox warrants a premium to Bursa-listed technology equipment and support players given its (i) consistent innovation track record to stay ahead in competition, (ii) superior corporate governance and management execution, and (iii) position as one of Malaysia's largest and most established listed technology companies.

Figure 18: Peer comparison

Stock	Mid Can	Mkt Cap Price Rating	Target FYE	P/E (x)		P/B (x)		Yield (%)			
Stock	Mkt Cap Price Rating Target FYE	FIE	FY25	FY26	FY25	FY26	FY25	FY26			
Vitrox Corporation	8,046	4.25	BUY	5.00	DEC	63.7	44.7	7.2	6.4	0.3%	0.4%
Greatech	5,880	2.34	NR	NR	DEC	34.9	29.6	5.5	4.6	0.0%	0.0%
Pentamaster	2,931	4.12	NR	NR	DEC	41.6	34.0	3.8	3.4	0.6%	0.5%
Mi Technovation	2,349	2.64	NR	NR	DEC	28.1	25.9	2.3	2.2	1.7%	1.7%
Frontken	7,001	4.39	BUY	5.36	DEC	40.6	34.0	8.2	7.1	1.4%	1.4%
UWC*	4,621	4.19	NR	NR	JUL	47.6	35.2	8.1	6.5	0.3%	0.3%
SAM Engineering & Equipment*	3,080	4.55	NR	NR	MAR	34.2	29.0	2.1	1.9	0.6%	0.7%
Average						41.5	33.2	5.3	4.6	0.7%	0.7%

\*refers to FY26 & FY27
Source: Apex Securities, Bloomberg

### **Investment Risk**

**High forex exposure.** Majority of the group's revenue is denominated in USD while earnings are reported in RM. This exposes the group to foreign exchange volatility, with financial performance at risk in the event of a sharp appreciation of the RM against the USD.

**Risk of pioneer status non-renewal.** The group's application to renew its pioneer status incentive is still pending approval from government authorities, at the time of writing. Should the renewal not be granted, ViTrox's effective tax rate would increase, presenting downside risk to its net earnings.

**Tariff risks and geopolitical uncertainties.** Escalating US-China geopolitical tensions, particularly within the semiconductor and electronics sectors, could weigh on global investment sentiment and dampen equipment demand. Also, any escalation in US tariff measures may adversely affect ViTrox's profitability.

Monday, 06 Oct, 2025



### **Financial Highlights**

FY23	FY24	FY25F	FY26F	FY27F
574.9	552.3	695.3	854.1	949.4
156.8	120.2	173.3	226.0	268.5
145.7	107.4	159.9	213.5	254.5
141.6	103.3	156.6	210.7	250.5
-14.0	-13.9	-31.3	-31.6	-20.0
127.6	89.4	125.2	179.1	230.4
-0.7	-0.9	-1.0	-0.9	-1.0
128.3	90.4	126.2	180.0	231.4
-1.7	17.4	0.0	0.0	0.0
126.6	107.7	126.2	180.0	231.4
	574.9 156.8 145.7 141.6 -14.0 127.6 -0.7 128.3	574.9 552.3 156.8 120.2 145.7 107.4 141.6 103.3 -14.0 -13.9 127.6 89.4 -0.7 -0.9 128.3 90.4 -1.7 17.4	574.9 552.3 695.3 156.8 120.2 173.3 145.7 107.4 159.9 141.6 103.3 156.6 -14.0 -13.9 -31.3 127.6 89.4 125.2 -0.7 -0.9 -1.0 128.3 90.4 126.2 -1.7 17.4 0.0	574.9         552.3         695.3         854.1           156.8         120.2         173.3         226.0           145.7         107.4         159.9         213.5           141.6         103.3         156.6         210.7           -14.0         -13.9         -31.3         -31.6           127.6         89.4         125.2         179.1           -0.7         -0.9         -1.0         -0.9           128.3         90.4         126.2         180.0           -1.7         17.4         0.0         0.0

Key Ratios					
FYE Jun	FY23	FY24	FY25F	FY26F	FY27F
Core EPS (sen)	6.7	5.7	6.7	9.5	12.2
PÆ(x)	63.5	74.6	63.7	44.7	34.7
BVPS	0.51	0.54	0.59	0.67	0.76
P/B (x)	8.4	7.9	7.2	6.4	5.6
EV/EBITDA (x)	49.2	64.2	44.5	34.1	28.7
DPS (sen)	1.7	1.2	1.3	1.9	2.4
Dividend Yield (%)	0.4%	0.3%	0.3%	0.4%	0.6%
EBITDA margin (%)	27.3%	21.8%	24.9%	26.5%	28.3%
EBIT margin (%)	25.3%	19.4%	23.0%	25.0%	26.8%
PBT margin (%)	24.6%	18.7%	22.5%	24.7%	26.4%
PAT margin (%)	22.2%	16.2%	18.0%	21.0%	24.3%
NP margin (%)	22.3%	16.4%	18.2%	21.1%	24.4%
CNP margin (%)	22.0%	19.5%	18.2%	21.1%	24.4%
ROE (%)	13.2%	10.5%	11.2%	14.2%	15.9%
ROA (%)	10.9%	8.9%	9.5%	11.9%	13.4%
Net gearing (%)	NET CASH				
Assumptions					
RM/USD	4.56	4.57	4.30	4.20	4.20

FYE Jun (RM m)	FY23	FY24	FY25F	FY26F	FY27F
Cash & cash equivalent	389.0	340.1	317.8	351.9	477.1
Receivables	191.1	237.0	298.4	366.5	407.4
Inventories	198.6	201.4	250.4	307.5	341.9
Other current assets	22.9	44.4	44.4	44.4	44.4
Total Current Assets	801.6	822.9	910.9	1070.2	1270.7
PPE	210.3	222.1	248.8	281.4	297.3
Investment properties	46.6	55.6	55.6	55.6	55.6
Other non-current assets	107.9	108.3	108.3	108.3	108.3
Total Non-current assets	364.8	386.0	412.7	445.3	461.2
Short-term Debt	13.5	13.0	8.0	18.0	25.5
Payables	115.2	101.4	126.0	154.8	172.1
Other Current Liabilities	25.7	33.6	33.6	33.6	33.6
Total Current Liabilities	154.3	148.0	167.6	206.4	231.2
Long-term Debt	48.9	34.9	29.9	39.9	47.4
Other non-current liabilities	5.7	7.0	7.0	7.0	7.0
Total Non-current Liabilities	54.7	41.9	36.9	46.9	54.4
Shareholder's equity	958.9	1021.5	1122.5	1266.5	1451.7
Minority interest	-1.5	-2.4	-3.4	-4.3	-5.3
Total Equity	957.4	1019.1	1119.1	1262.2	1446.3
Cash Flow					
FYE Jun (RM m)	FY23	FY24	FY25F	FY26F	FY27F
Pre-tax profit	141.6	103.3	156.6	210.7	250.5
Depreciation & amortisation	11.1	12.8	13.3	12.4	14.1
Changes in working capital	3.5	-72.0	-85.7	-96.5	-58.0
Others	2.2	-4.2	-31.3	-31.6	-20.0
Operating cash flow	158.4	39.9	52.9	95.1	186.5
Net capex	-75.1	-35.9	-40.0	-45.0	-30.0
Others	2.4	-2.9	0.0	0.0	0.0
Investing cash flow	-72.7	-38.8	-40.0	-45.0	-30.0
Dividends paid	-51.0	-32.6	-25.2	-36.0	-46.3
Others	-16.2	-16.4	-10.0	20.0	15.0
Financing cash flow	-67.2	-49.0	-35.2	-16.0	-31.3
Currency translation differences	0.1	-0.9	0.0	0.0	0.0
Net cash flow	18.6	-48.9	-22.4	34.1	125.2
Beginning cash & cash equivalent	370.4	389.0	340.1	317.8	351.9

389.0

Ending cash & cash equivalent

340.1

317.8

351.9

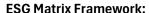
477.1

Balance Sheet

Valuations	Mid-FY26F
Core EPS (RM)	10.9
P/E multiple (x)	46.0
Fair Value (RM)	5.00
ESG premium/discount	0.0%
Implied Fair Value (RM)	5.00

Source: Company, Apex Securities

Monday, 06 Oct, 2025



### **Environment**

Parameters	Rating	Comments
Climate	***	Scope 2 emissions rose 7.4% yoy to 6.7m/kg in FY23
Waste & Effluent	***	Co2 emissions reduced from 3.0m kg in FY21 to 2.5m kg in FY23
Energy	***	Energy consumption reduced from 8,014,556 kWh to 7,810,114 kWh
Water	***	Water consumption rose 5.4% yoy to 112,658m3 in FY23
Compliance	***	In compliance with local and international environmental regulations

### Social

Diversity	***	73% of average employees age below 40, 21% of employees are female
Human Rights	***	Enforce and adopts Code of Ethics and Conduct
Occupational Safety and Health	**	292 hours of OSH trainings completed, one worksite incidence in FY23
Labour Practices	***	Pay scale based on prevailing industry market rates as stipulated by the Act 732 National Wages Consultative Council Act

#### Governance

CSR Strategy	***	Donation to Sekolah Semangat Maju and participated in the Pesta Makanan Amal 2023
Management	**	Average board members age @ 53, 2/9 female board composition, 4/9 Independent Directors
Stakeholders	***	4x analyst briefings per annum, 1x AGM per annum

Overall ESG Scoring: ★★★

#### **Recommendation Framework:**

**BUY:** Total returns\* are expected to exceed 10% within the next 12 months.

**HOLD:** Total returns\* are expected to be within +10% to – 10% within the next 12 months.

**SELL:** Total returns  $^{\star}$  are expected to be below -10% within the next 12 months.

**TRADING BUY:** Total returns\* are expected to exceed 10% within the next 3 months.

**TRADING SELL:** Total returns\* are expected to be below -10% within the next 3 months.

\*Capital gain + dividend yield

#### **Sector Recommendations:**

**OVERWEIGHT:** The industry defined by the analyst is expected to exceed 10% within the next 12 months. **NEUTRAL:** The industry defined by the analyst is expected to be within +10% to –10% within the next 12 months. **INDEPWEIGHT:** The industry defined by the analyst is expected to be below 10% within the next 12 months.

UNDERWEIGHT: The industry defined by the analyst, is expected to be below -10% within the next 12 months.

### ESG Rating Framework:

★★★★★: Appraised with 3% premium to fundamental fair value

\*\*\*\*: Appraised with 1% premium to fundamental fair value

 $\bigstar \bigstar \bigstar$  : Appraised with 0% premium/discount to fundamental fair value

★★: Appraised with -1% discount to fundamental fair value

 $\bigstar$  : Appraised with -5% discount to fundamental fair value

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As of Monday, 06 Oct, 2025, the analyst(s), whose name(s) appears on the front page, who prepared this report, has interest in the following securities covered in this report:

(a) nil.