



ELAN Smart-Input™ Solutions

Dual Transformation through AI

2024/09/04

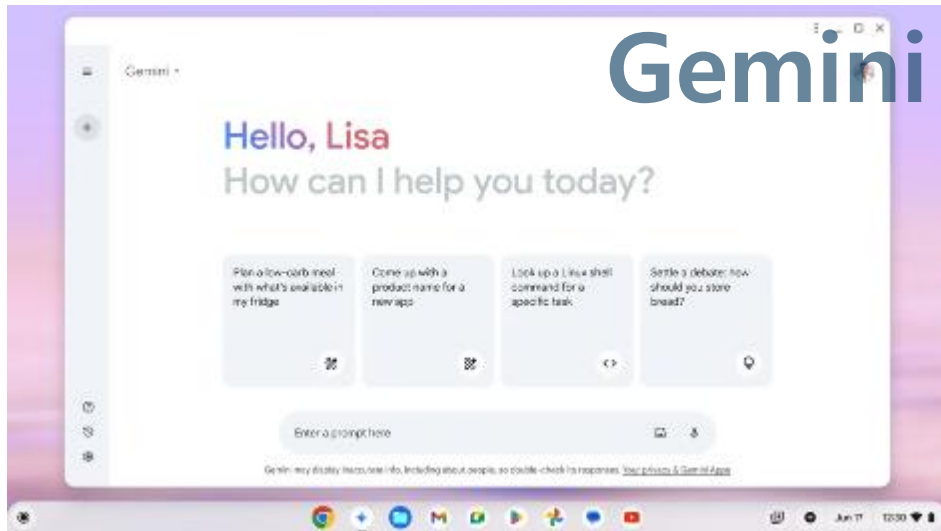
“2024 Q3 Trend of Investment Forum”
hosted by Horizon Securities



ELAN Microelectronics Corporation

Google's New Chromebook Plus with AI Features

Google Chromebook Plus



Chromebook CM30 Detachable



Chromebook Plus Spin 714



Chromebook Plus CX34



Chromebook 14 inch

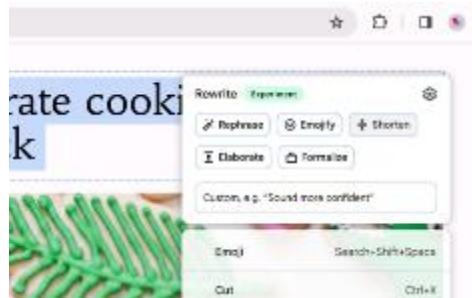


ASUS Chromebook Plus 514



HP Chromebook Plus x360

AI Writing Tool



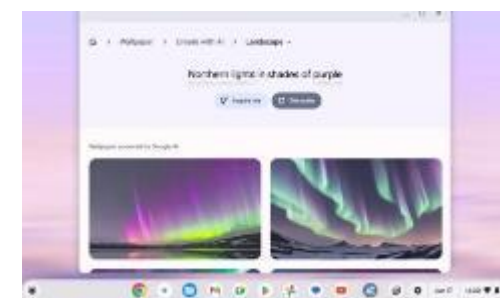
AI Magic Editor



Gemini Workspace



AI Wallpaper Generate



AI PCs: The Hottest Topic in the Market

55+ AI PCs Announced at CES 2024 , ELAN Share 90%



XPS 16
XPS 14
XPS 13



ALIENWARE m16 R2
ALIENWARE x16 R2



OMEN 14



OMEN 16



OMEN 14



OMEN 16



Lenovo Yoga Book 9i (13", 9)



Legion 9i Gen 9 (16" Intel)



Legion 7i Gen 9 (16" Intel)



ThinkBook Plus G5 Hybrid



ThinkBook 13x Gen 4 (13" Intel) & Thinkbook 13x Gen 4 E-Ink Prism (POC)



Zenbook Duo



Zenbook 14



Vivobook S 14 OLED



ExpertBook B9 OLED



Zephyrus G14



Aspire Vero 16



Aspire 3D 15 SpatialLabs™



Swift Go 16



Swift Go 14



Swift X 14

Global PC Shipment Forecast by Market Research Agencies

Unit in million

	2023	2024		2025		2026	
	Shipment	Shipment	YoY Growth%	Shipment	YoY Growth%	Shipment	YoY Growth%
DTPC	62.4	63.3	1.4%	66.2	4.6%	67.1	1.4%
NBPC	179.9	184.9	2.8%	201.7	9.1%	212.1	5.2%
Total	242.3	248.2	2.4%	267.9	7.9%	279.2	4.2%



NB replacement cycle is due to Windows 10 announced to stop upgrading by 4Q25 and PC purchased during COVID-19 have been 6 years.



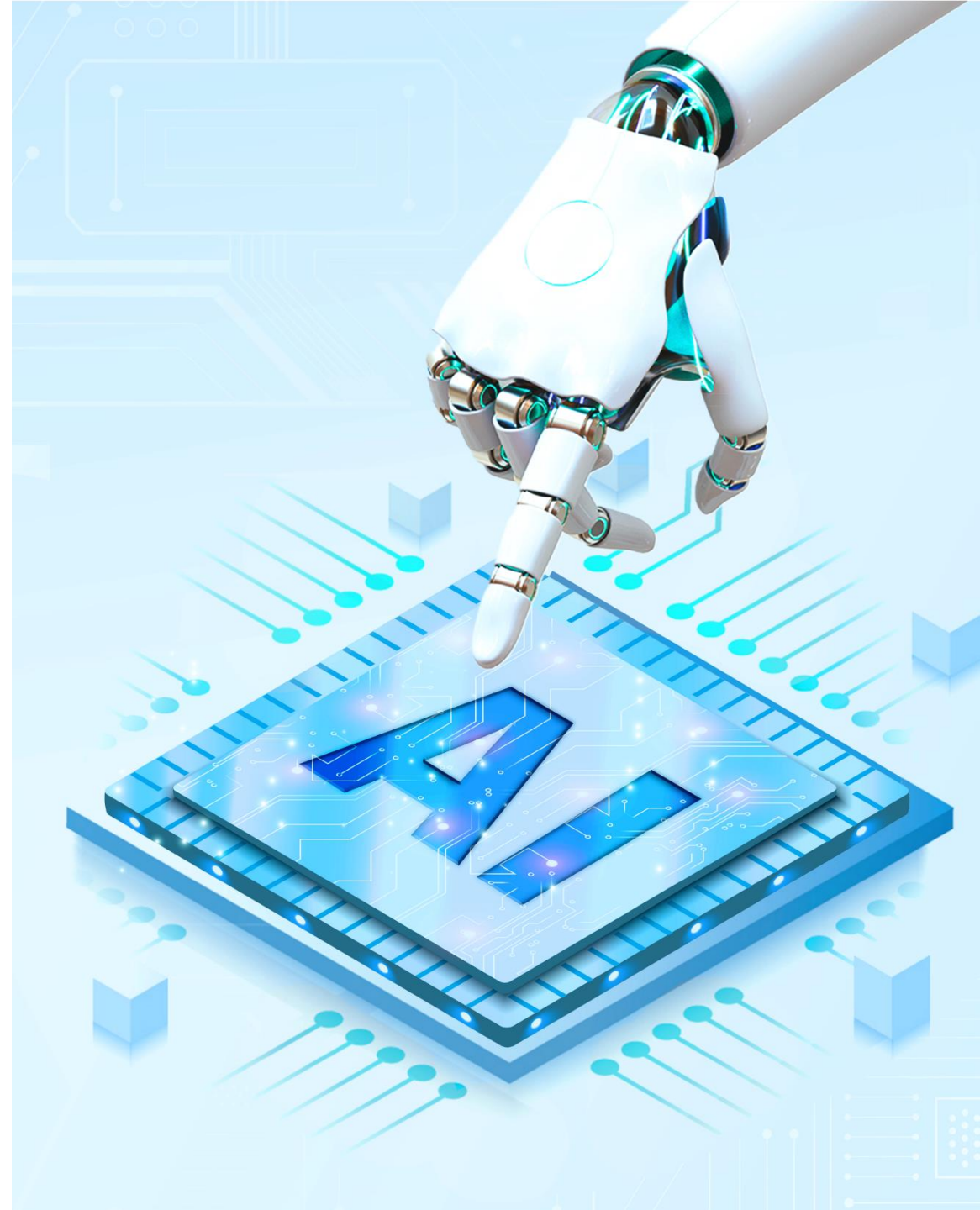
AI PCs and Windows updates have been driving new demand.



Integration of AI hardware and software is the key to determining the future growth potential of AI PCs.



Master the Trend of AI PC & Integrate AI into Products



Why AI at the Edge

- **Faster Response Time**

Immediate processing reduces latency

- **Cost**

Decreases data transmission and storage costs

- **Hardware Utilization**

Optimizes hardware resources

- **Privacy & Security**

Local data processing enhances security

- **Offline Functionality**

Operates without internet connectivity

- **Efficiency**

Streamlines operations and reduces energy usage

- **Hyper-Personalization**

Tailors experiences to individual users

- **Environmental Impact (ESG)**

Reduces the carbon footprint of data centers

ELAN AIXTouchpad Highlights

#1

Touchpad Market

Smart-UsabilityTM

Best In-Class Palm Prevention

100⁺

MP Projects / YR

AI Enabled

Palm Rejection
Gesture
Noise Immunity
Moisture Proof

Touchpad

50%+

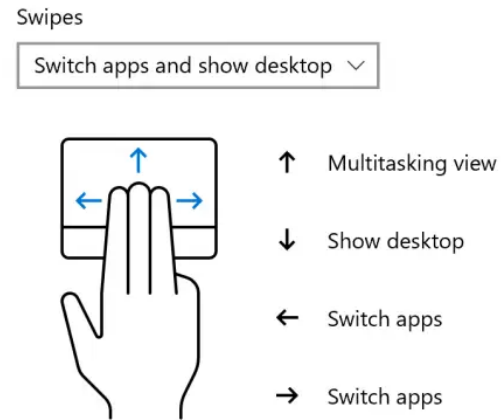
Market Share



Touchpad Size Trends

Windows Multi-Finger Gesture Drives Large Touchpad Becoming Mainstream

Windows 11 Multi-Finger Gesture



1-Finger



Left Click
Double-Click



Move
Cursor



Tap + Slide

2-Finger



Right Click



Scroll / Pan



Pinch / Zoom

3-Finger



Invoke
Cortana

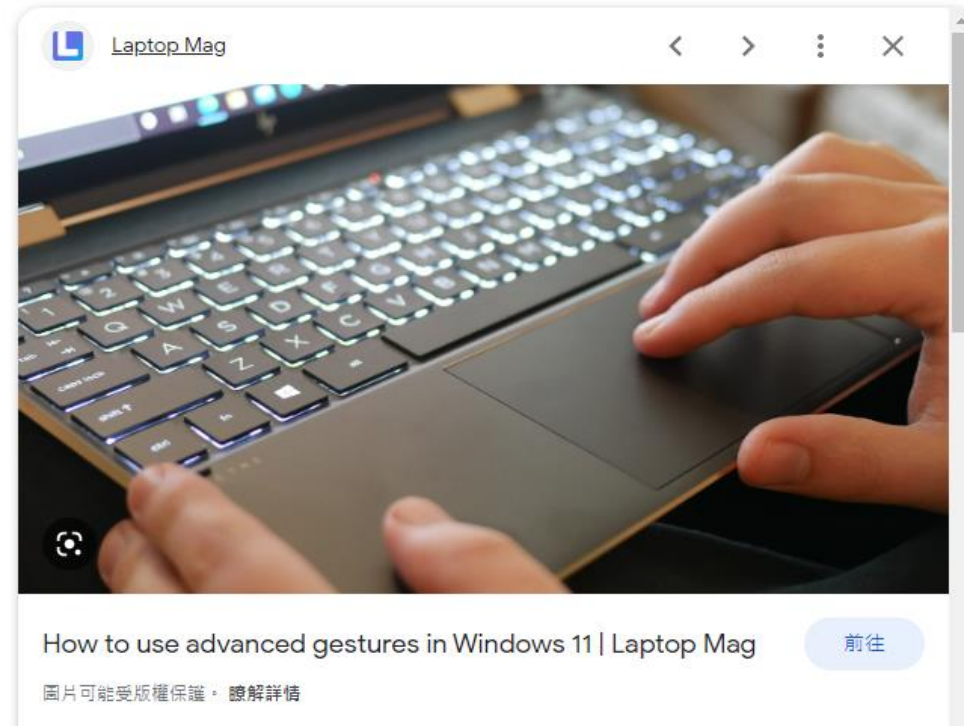


Multitasking
Gestures

4-Finger



Invoke
Action Center



Source: Laptop Mag

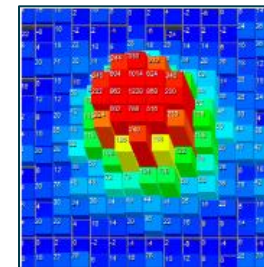
New Challenge of Large Touchpad

Palm Rejection Become Critical Issue



Expansion of Palm Contact Area

ELAN AI×Touchpad



Self/Mutual Hybrid Sensing
for Best In-Class 3D Images



Keep Best Palm Rejection Performance
With Automatic Multi-Testing

- Two Palm Tapping / Moving / Swiping



Low Accidental Touch Rate
as Normal Size Touchpad

Google, and Microsoft's Latest Accessibility Innovations



Global Accessibility Awareness Day



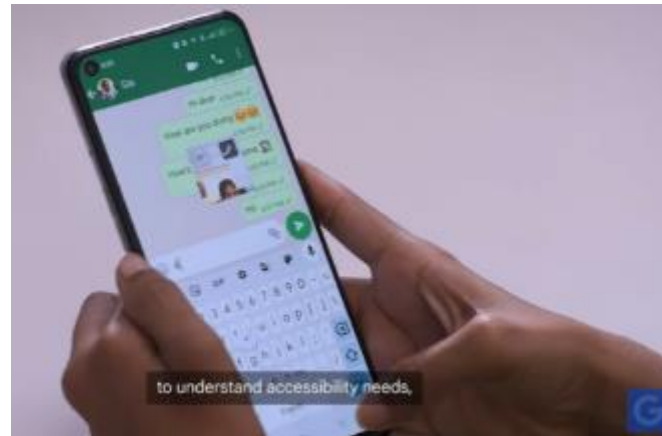
Eye Tracking



Music Haptic



Project Gameface



Proteus Controller



Windows Accessibility Mode for Touchpad

ELAN is ready to implement Windows accessibility mode for touchpad

- To support friendly operation environment for person with a disability



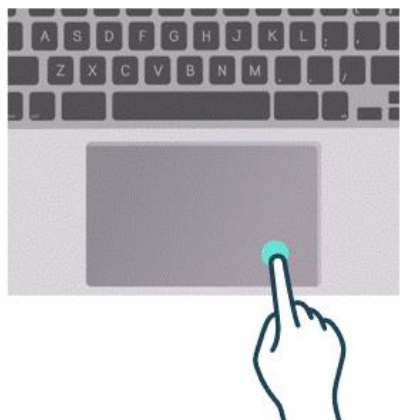
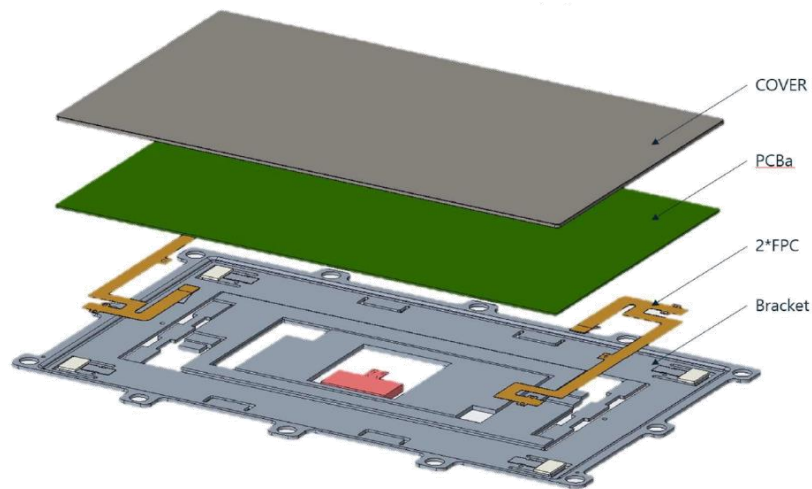
The new adaptive touchmode in Surface Laptop Studio 2



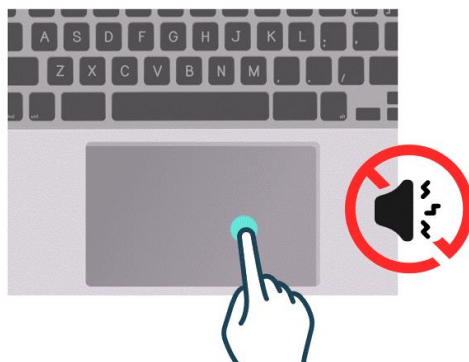
<https://www.youtube.com/watch?v=fKtBCqZ6ZfE>

AIX Hapticpad Features and Advantages

Gen2 (Premium)

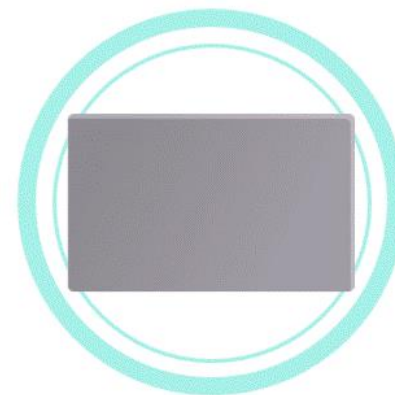
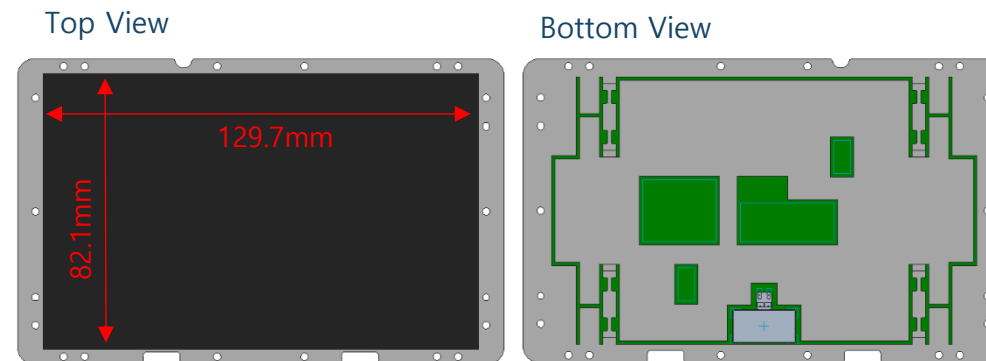


**All-Zone
Clickable**



**Silent
Click Sound**

Gen3 (Mainstream)



**Different
Haptic Performs**



**Gesture
Control**

© 2018 LAN

AIx Hapticpad Launching with ELAN Solution

hp



Dragonfly Chromebook
ELAN Gen 1 HapticPad

Lenovo



Lenovo Z13
Piezo Solution

Lenovo



Lenovo Z16
Piezo Solution

DELL



Dell XPS 13 Plus
Piezo Solution

hp

Windows



HP Dragonfly Pro
ELAN Gen 2 HapticPad

hp

Chrome OS



HP Dragonfly Pro
ELAN Gen 2 HapticPad

ASUS



ProArt Studiobook H7604
ELAN Gen 2 HapticPad

12+ Projects
On-going

2024

Application Fields



Education

- Digital Note-taking
- Textbook Notes
- Whiteboard



Creativity

- Drawing
- Design
- Video Editing
- Music Editing
- 3D Modeling



Business

- Signatures
- Note-taking
- Whiteboard
- Precise Control



ELAN AIXTouchscreen Highlights

#1

Touch IC Market

10 – 18"

Support Size

Development with
Stylus Manufactures

MAXEYE

Wacom®

SUNWODA

Hanvon

Chicony

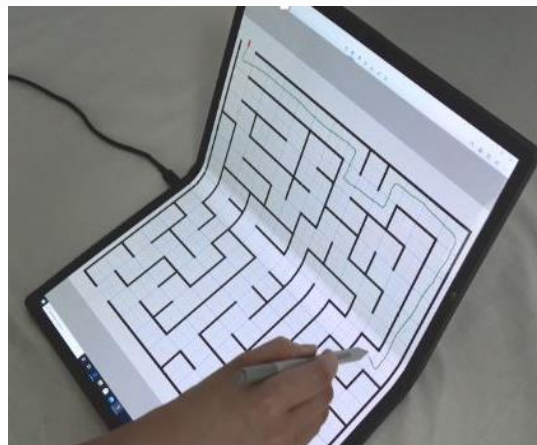
AI Enabled

Pen Track Prediction
Palm Rejection
Power Saving
Gesture Recognition
Moisture Proof

Touchscreen

50%+

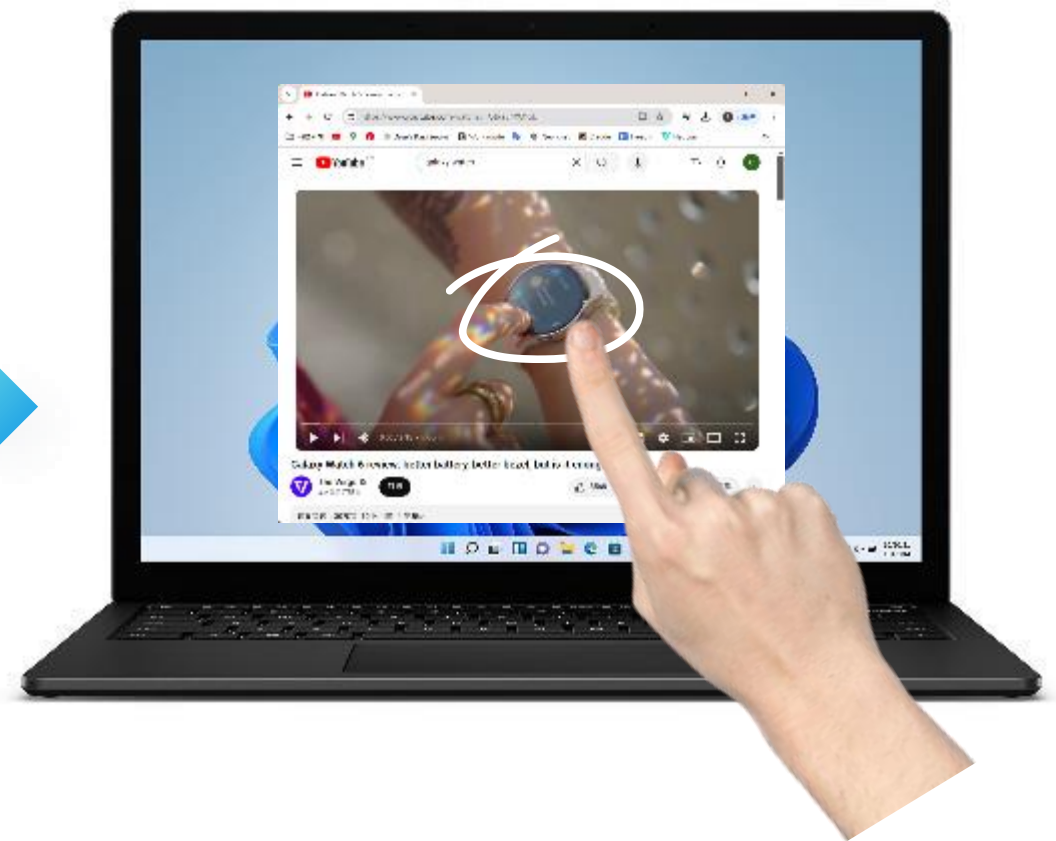
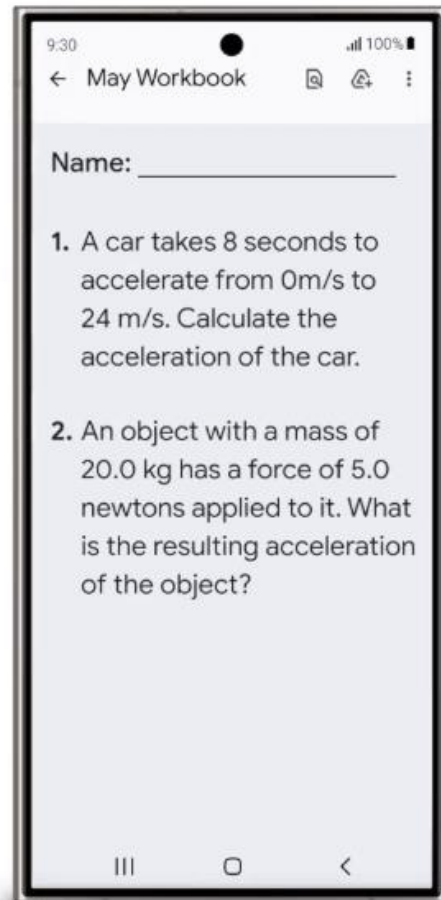
Market Share



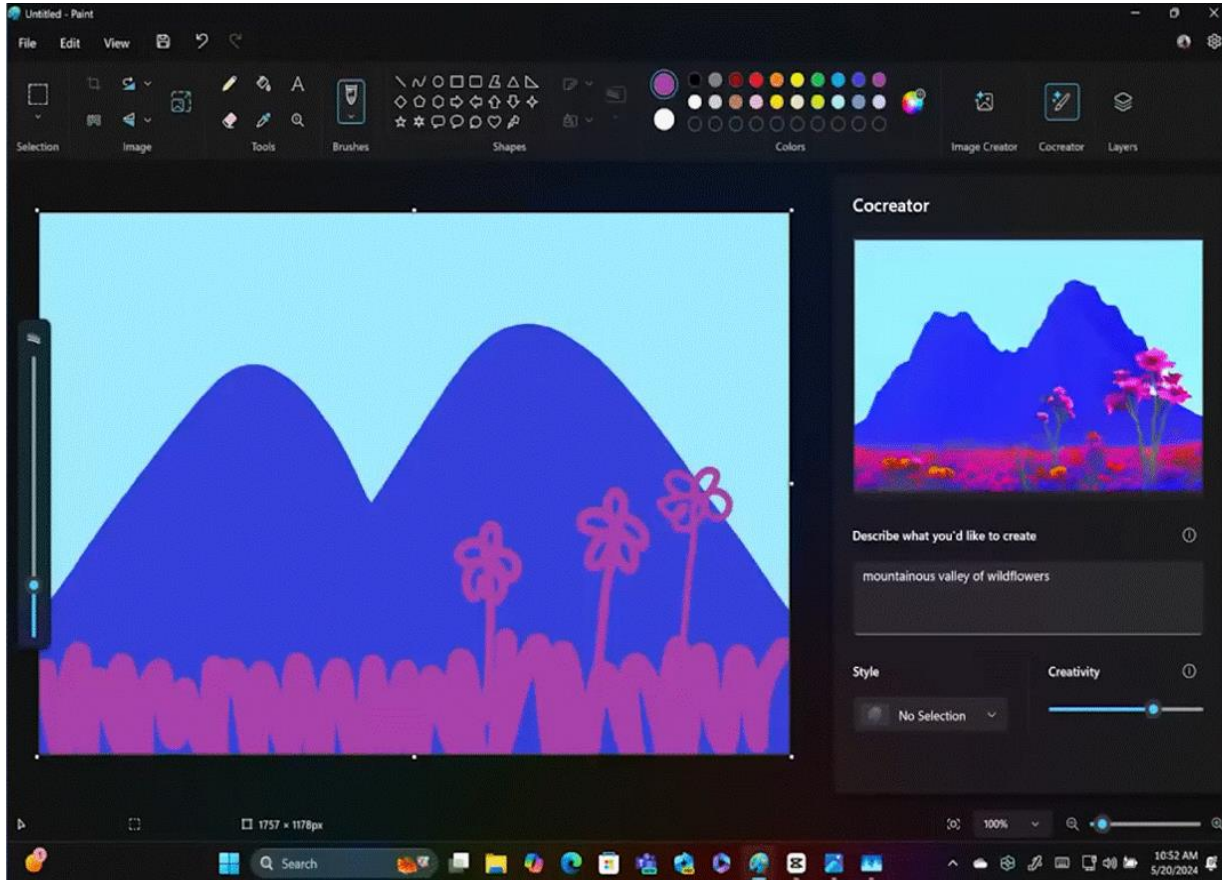
Circle to Search: Mobile AI Searches with a Vision for Touchscreen Laptops

Google Circle to Search

Touchscreen Penetration Rate Increasing!



Microsoft Paint Cocreator New AI Function- Sketch & Generate With ELAN Pen on Touchscreen Solution



<https://www.youtube.com/watch?v=aZbHd4suAnQ&t=3380s>



Pen on Touchscreen can help
Cocreator work effectively.

Support

MPP

AES

Developing

USI



ELAN AIxTouchscreen - AI Enabled Pen Track Prediction

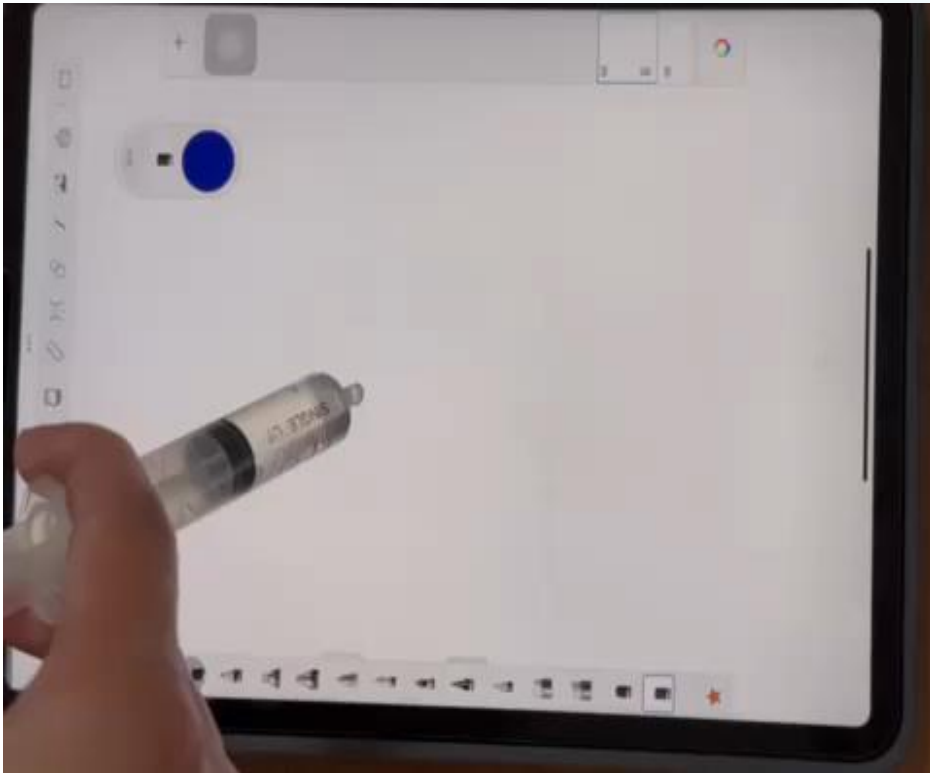
Shorter Latency



AI Prediction

ELAN AIxTouchscreen – Moisture Proof Performance Comparison

w/o AI Moisture Proof



iPad Pro-11

Test Condition : Water 5 mL

w/ AI Moisture Proof

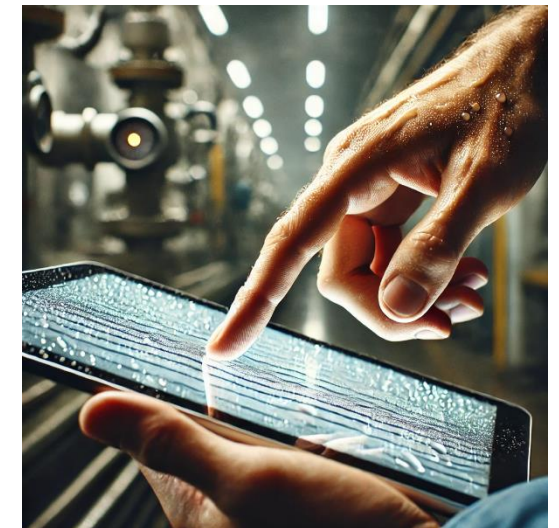


ELAN IPC New Solution For Waterproof And Glove Operation



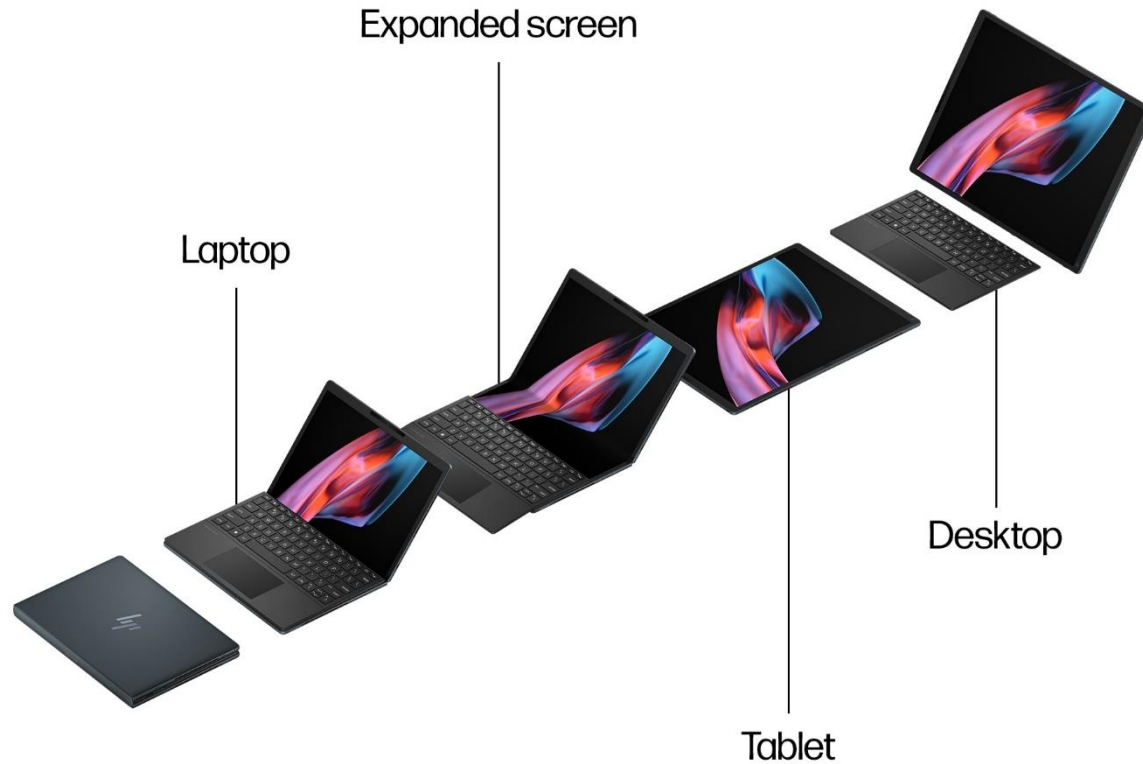
Industrial Control

Touch Controller with Innovative Geometry Design for Industry



ELAN AIXTouchscreen Solution for 17.3 Foldable Notebook

Inside HP Spectre Foldable 17 & LG Gram Fold 17 with MPP 2.0



Spectre Foldable 17



Gram Fold 17



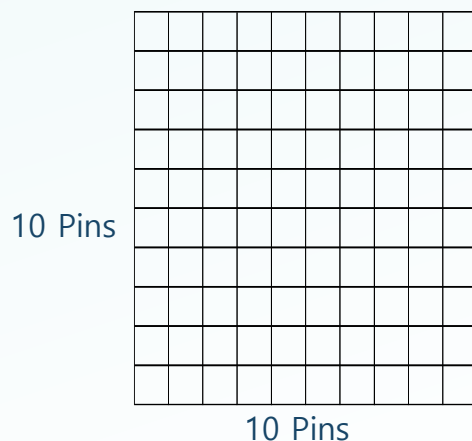
ELAN Single Layer On Cell (SLOC) Touch

ELAN Solution for SLOC

*Example

Multi Layer (Count Line)

Total 20 Pins



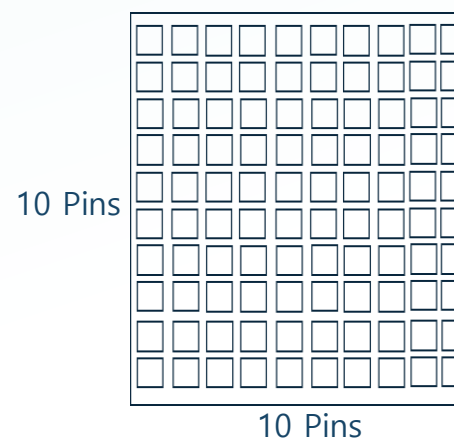
Single Chip

ELAN Solution for SLOC

- ✓ Up to 16.0"
- ✓ Support Windows/Chrome OS
- ✓ Support On Cell LCD/On Cell OLED

Single Layer (Count Pad)

Total 100 Pins



Multi (3~4pcs) Chips



Better Display Performance

High Transparency
Less reflection



Higher SNR / Report Rate

165 Hz for Gaming
Self mode sensing
Glove support
Water Proof



On-Cell LCD/OLED

Support
High Resistance
Heavy C_loading



Simple Process

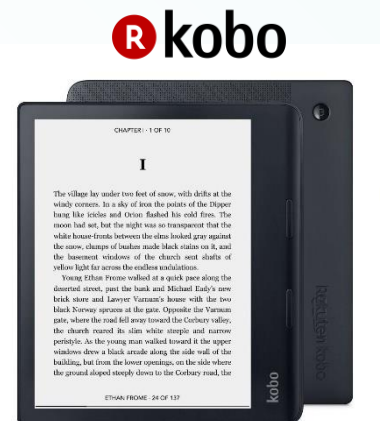
Shorter process cycle
time for Panel maker

ELAN Touchscreen IC Shipping Record for EPD

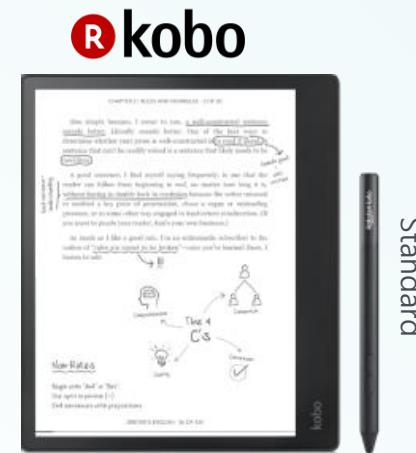
Black & White E-paper



Libra 7"



Sage 8"
MPP2.0

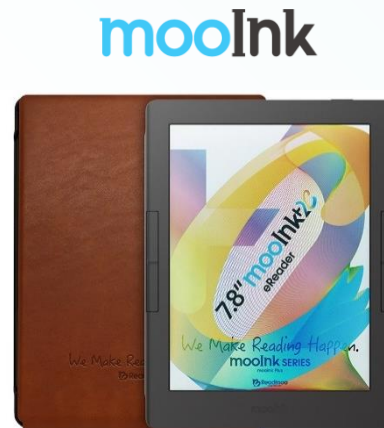


Elipsa 10.3"
MPP2.0

Optional

Standard

Color E-paper



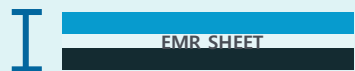
Plus 2C 7.8"



Bigme 10.3"

EMR v.s. Capacitive Active Stylus on EPD Comparison

Thickness



EMR

Thinner



Capacitive Active Stylus

Cost

10.3" ~ 13": <30%~50%

EMR Stylus

EMR film

EMR

Cheaper

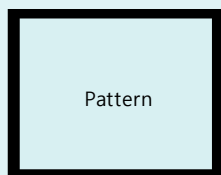


ITO Film

Active Stylus

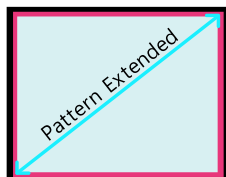
Capacitive Active Stylus

Linearity



EMR

Better



Capacitive Active Stylus

Pen Vendor

wacom

EMR

More

MAXEYE

wacom

SUNWODA

Hanvon

Chicony

Capacitive Active Stylus

ELAN AIxFingerprint Highlights

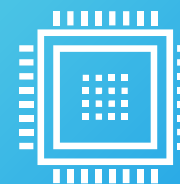
#2

Notebook Market

100%

In-House
Algorithm

Smallest MOC Highly Brand-Compatible



AI Enabled

2.5D/3D
Anti-Spoof

Fingerprint

MOH&MOC

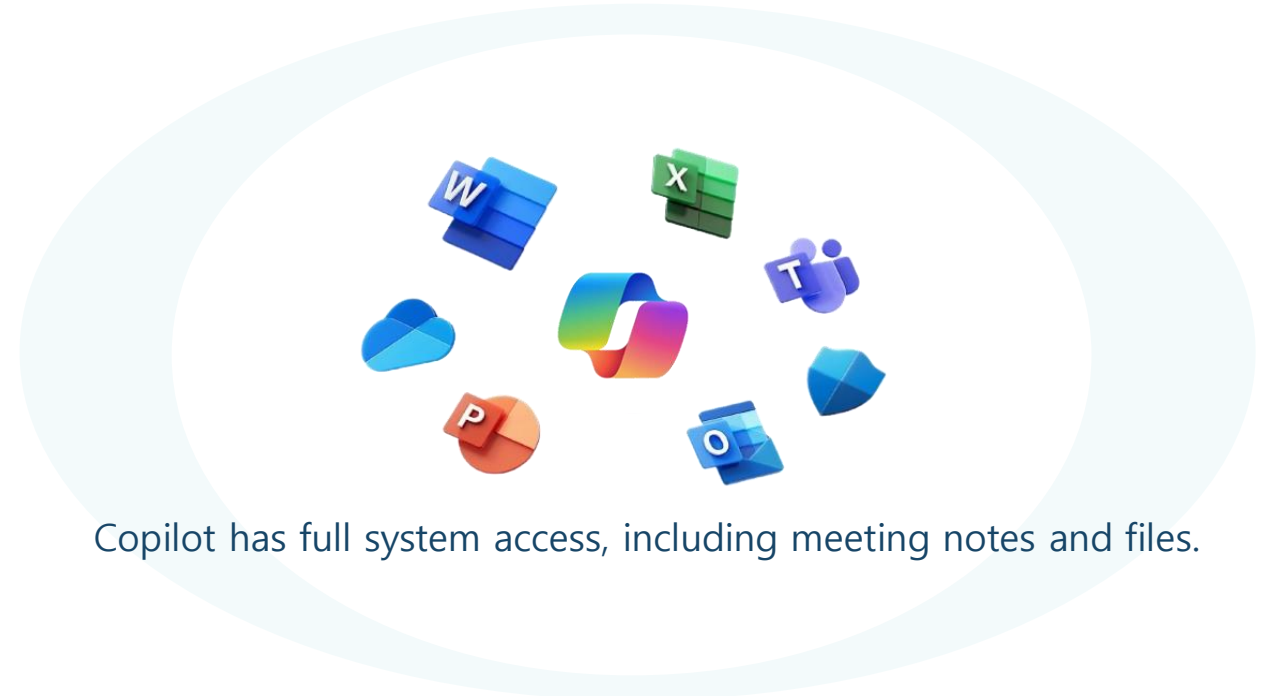
Single-Chip
Encryption





AI Copilot with ELAN Fingerprint Solution

Fingerprint protects all your personal data



Copilot has full system access, including meeting notes and files.



Enhanced Security

Ensures only the user can access their personal Copilot.



AI Data Protection

Secures sensitive information with fingerprint.



User-Friendly

Seamless one-touch Copilot activation.



1H24 Income Statement

YoY Comparison (Consolidated)

NT\$M

	1H24	%	1H23	%	YoY(%)
Sales	6,257	100.0	5,447	100.0	14.9
Gross profit	3,019	48.2	2,323	42.6	30.0
Sales expense	184	2.9	229	4.2	
G&A expense	257	4.1	241	4.4	
R&D expense	1,161	18.6	1,079	19.8	
OPEX	1,602	25.6	1,549	28.4	3.4
Operating profit	1,417	22.6	774	14.2	83.1
Non-operating income & exp.	285	4.6	80	1.5	
Profit before tax	1,702	27.2	854	15.7	99.3
Net profit	1,365	21.8	694	12.7	
Belong					
Parent company	1,421	22.7	801	14.7	77.4
Non-Controlling Interests	(56)		(107)		
* EPS (NT\$)	4.98		2.82		76.6

* 304 million shares issued: 286.2/ 284.6 million shares outstanding as of the end of June 2024/ June 2023.

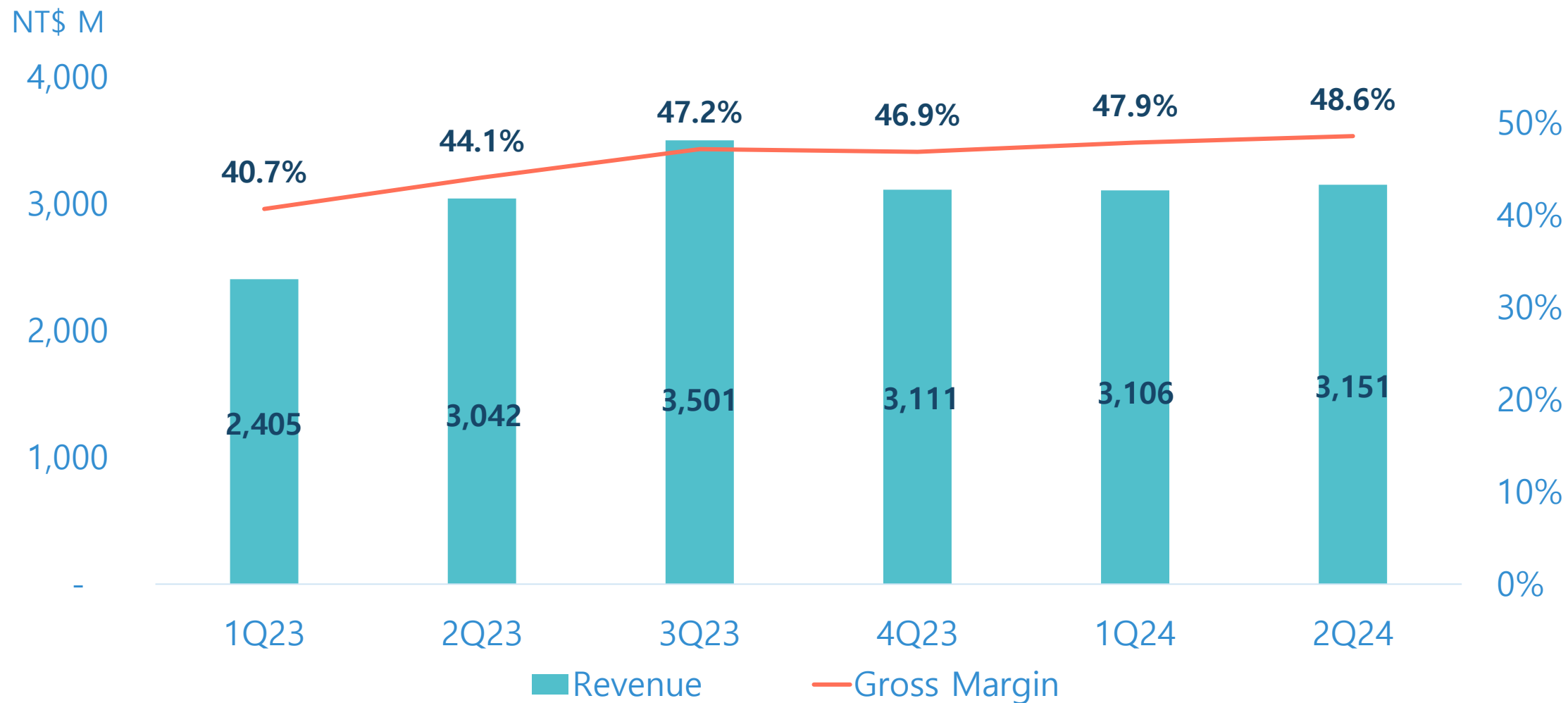
* Consolidated Statement of Financial Position (Reviewed).

3Q24 Guidance

Based on Current Assumptions of Future Prospects, ELAN Expects:

- Consolidate Revenue to be Approximately between NT\$ 3.1 Billion and NT\$ 3.4 Billion
 - Gross Margin to be about 47.5% to 49.5%
 - Operating Margin to be about 22.1% to 26.3%
-
- ELAN's forward-looking statements are subject to significant risks and uncertainties that could cause actual results to differ materially from the forward-looking statements made in this presentation.
 - Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

Performance Highlight



Evolving Trend of AI is On The Horizon

1. Generative AI brings technological innovation into human machine interface. Touch, touch with pen function and voice activated device could replace traditional one, further improve market penetration of touch screen.
2. AI PC gives enterprise a competitive edge and improve personal productivity.
3. AI Copilot with ELAN Fingerprint solution can provide enhanced security, AI data protection and user-friendly features.
4. AI PC is the best solution to popularize personal AI models. The device must provide powerful data calculation, large storage capacity, diversified interactive devices and applications.
5. By 2024, AI PC will be equipped with comprehensive supply chain, including OS, platform, components...etc., boosting AI PC momentum in 2025.



Thank You



ELAN Microelectronics Corporation