



ELAN Smart-Input™ Solutions

Dual Transformation through AI

2024/03/21

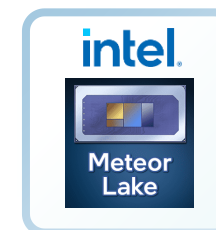
2024 APAC TMT Conference



ELAN Microelectronics Corporation

Intel AI PC Market Forecast

intel AI Everywhere



ASUS

acer



msi

Lenovo

Google



SAMSUNG



GIGABYTE

dynabook

Nearly **50** Products Featuring **Intel AI PC (NB+DT) Chips** to Launch in Taiwan in Q1,2024

Over **230** AI PC (NB+DT) Products with New Intel Processors to Launch in 2024

Targeting **80%** Market Share by 2028

Brands and Models Claiming AIPC in 2024 CES



XPS 16
XPS 14
XPS 13



ALIENWARE m16 R2
ALIENWARE x16 R2



OMEN 14



OMEN 16



Spectre X360



Spectre X360



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



Aspire Go 15



Global NB Shipment Forecast by Market Research Agencies

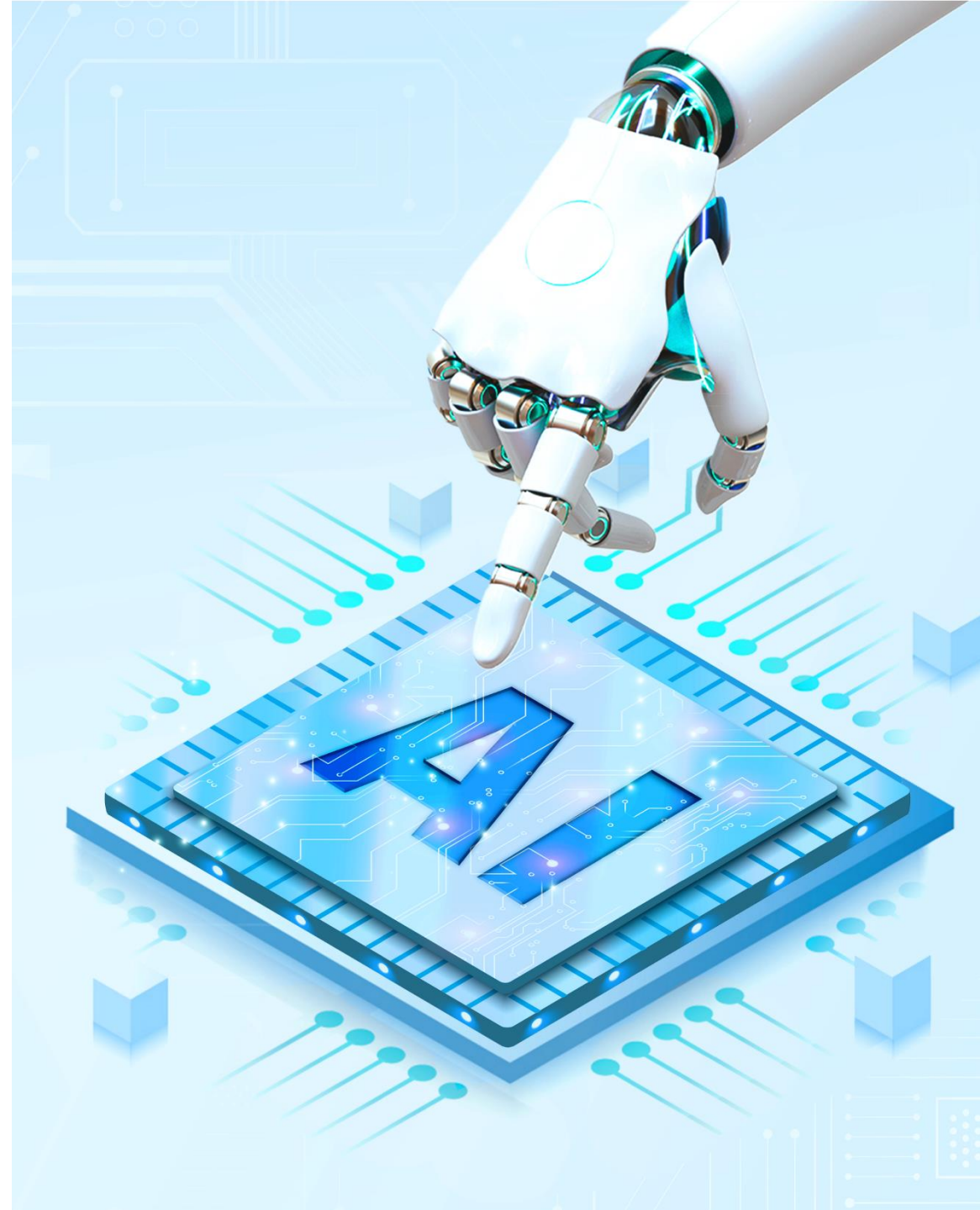
Unit in million

	2022	2023	2024	2025	2026	2027
IDC	212	183	192	205	211	216
Gartner	208	182	191	210	218	217
Omdia	201	174	186	205	212	222
Digitimes	187	165	169	181	185	188
IDC YoY	-18.9%	-13.3%	4.8%	6.8%	2.6%	2.5%
Gartner YoY	-18.9%	-12.7%	5.3%	10.1%	3.8%	-0.6%
Omdia YoY	-23.1%	-13.3%	6.8%	10.1%	3.3%	4.8%
Digitimes YoY	-24.2%	-11.8%	2.6%	6.7%	2.6%	1.2%

* Source: IDC, Gartner, Omdia, Digitimes



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**

Reduces the carbon footprint of data centers

ELAN AI×Touchpad 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%+

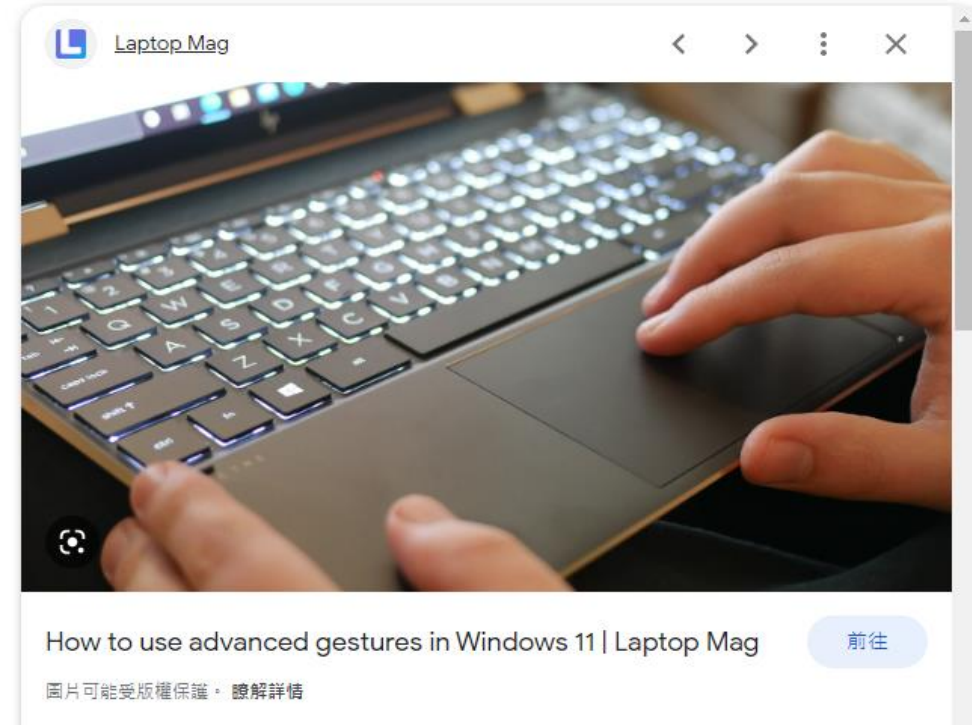
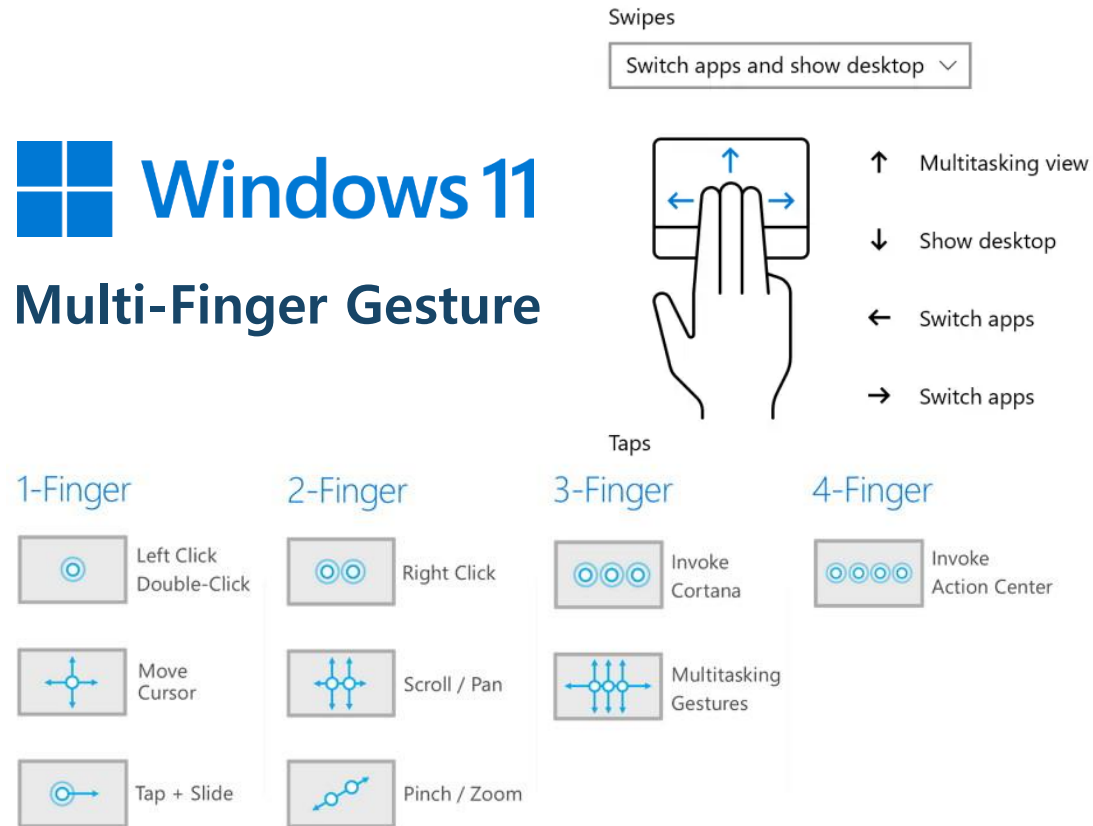
Market Share



Touchpad Size Trends

Windows Multi-Finger Gesture Drives Large Touchpad Becoming Mainstream

Windows 11 Multi-Finger Gesture



Source: Laptop Mag

New Challenge of Large Touchpad

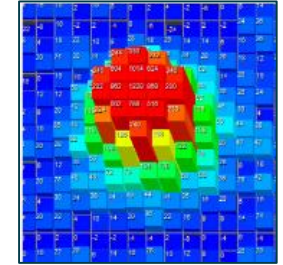
Palm Rejection Become Critical Issue



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

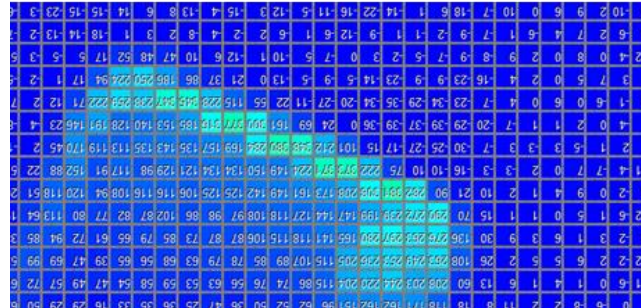
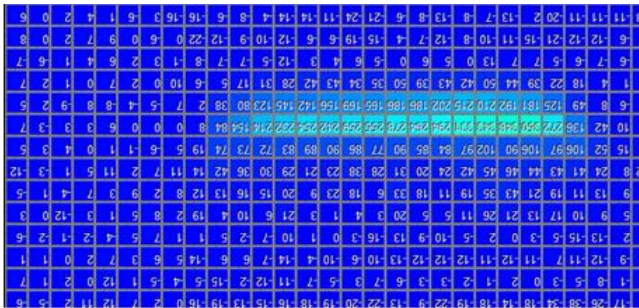


Low Accidental Touch Rate
as Normal Size Touchpad

ELAN AI×Touchpad AI Detection

Wireless Charger / Smart Card

Object Detection & Classification



Application



Open Earphone
Control App



Open Mouse
Control App



Open
Gaming App



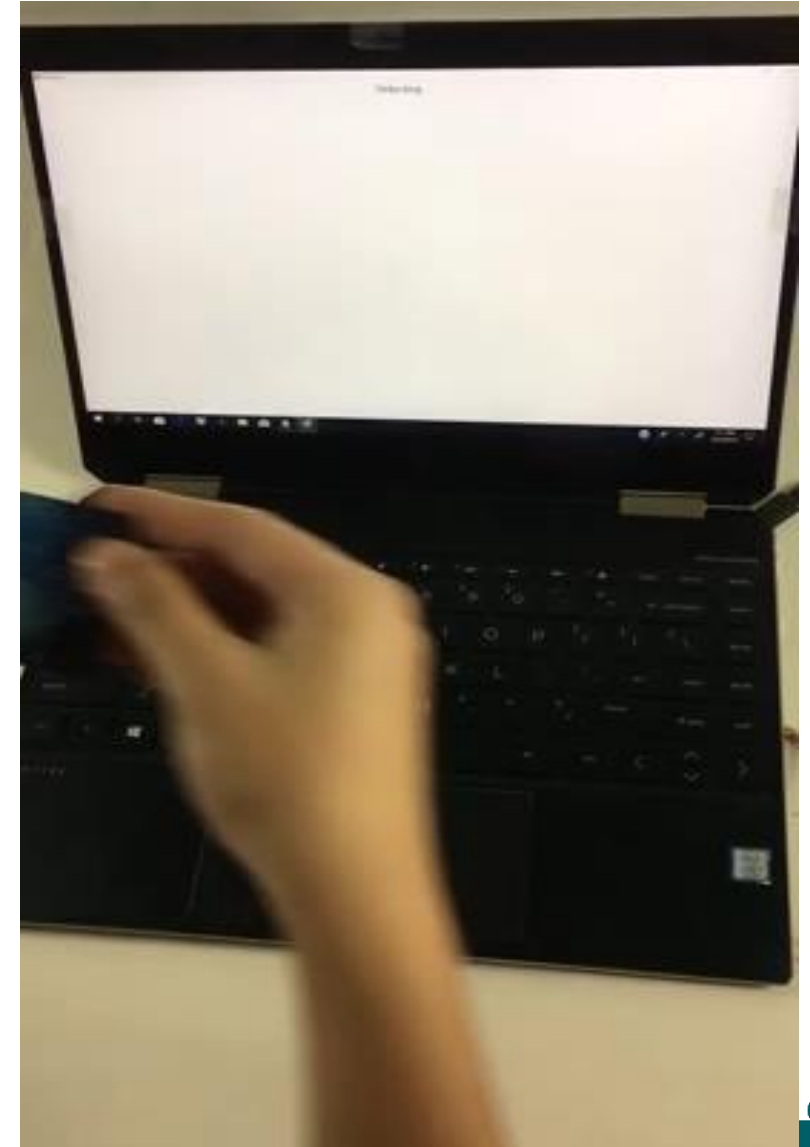
Open Note-Taking
App



Open Mobile
Transfer App

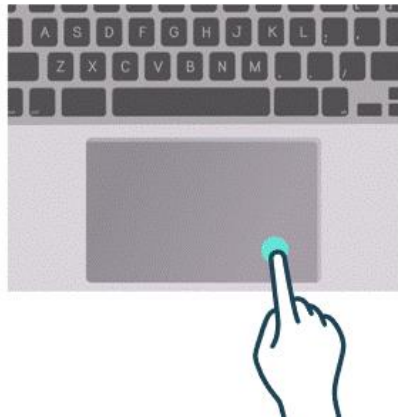
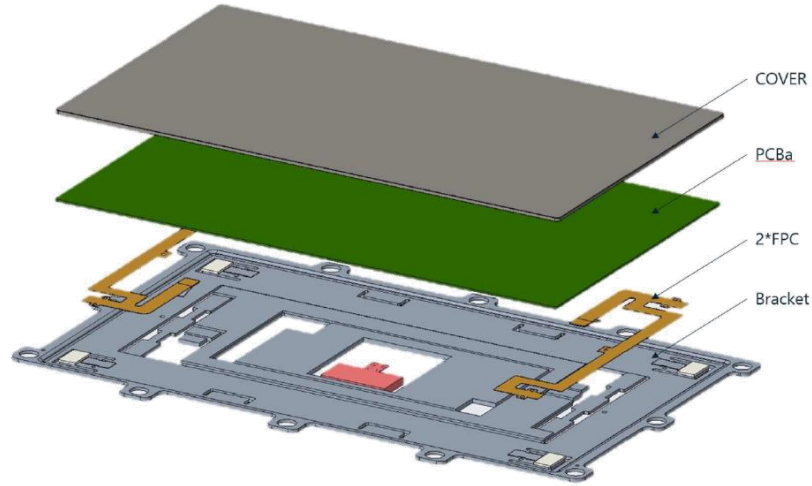


More Creative
Application



AI× Hapticpad Features and Advantages

Gen2 (Premium)

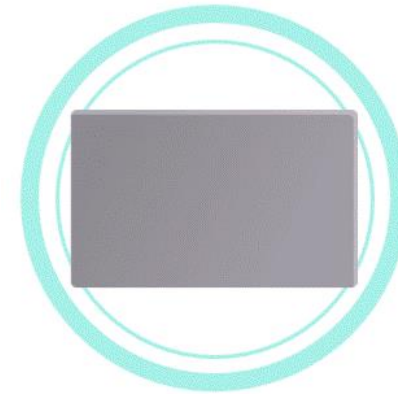
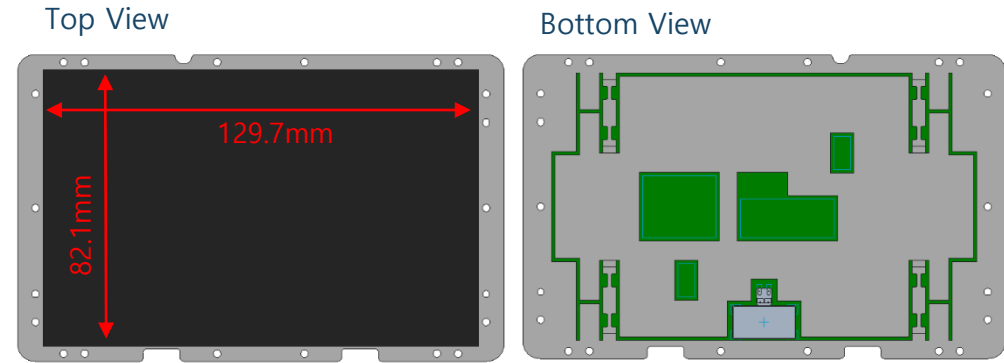


**All-Zone
Clickable**



**Silent
Click Sound**

Gen3 (Mainstream)



**Different
Haptic Performs**



**Gesture
Control**

AI× 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

8+ Projects
On-going

2023 - 2024

ELAN AI×Touchscreen Highlights

#1

Touch IC Market

CONTINUOUS
11 YR

Global Touch IC #1

Development with
Stylus Manufactures

MAXEYE

Wacom®

SUNWODA

Hanvon

Chicony

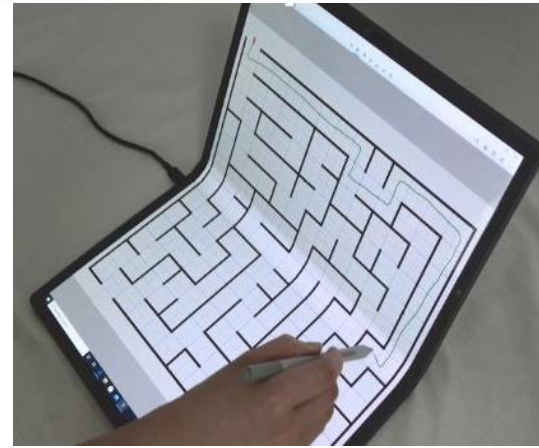
AI Enabled

Pen Track Prediction
Palm Rejection
Power Saving
Gesture Recognition
Moisture Proof

Touchscreen

50%+

Market Share



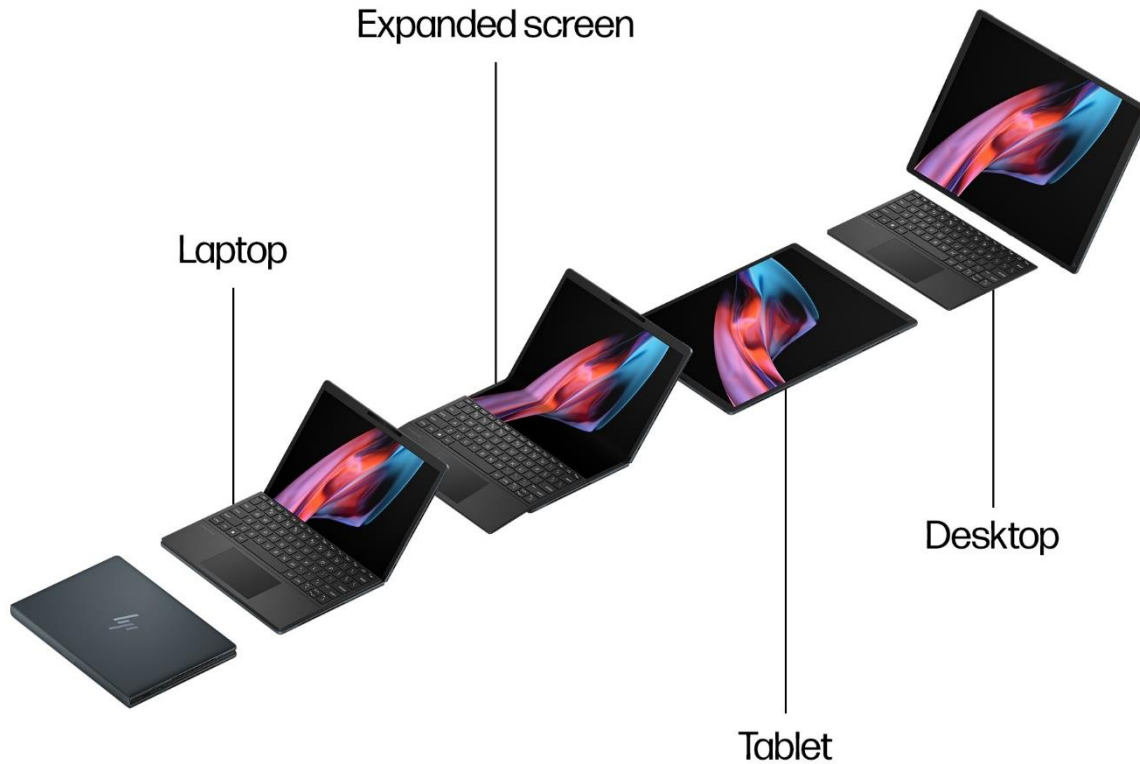
ELAN AI Enabled Pen Track Prediction



AI Prediction

ELAN AI×Touchscreen Solution for 17.3 Foldable Notebook

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



Spectre Foldable 17

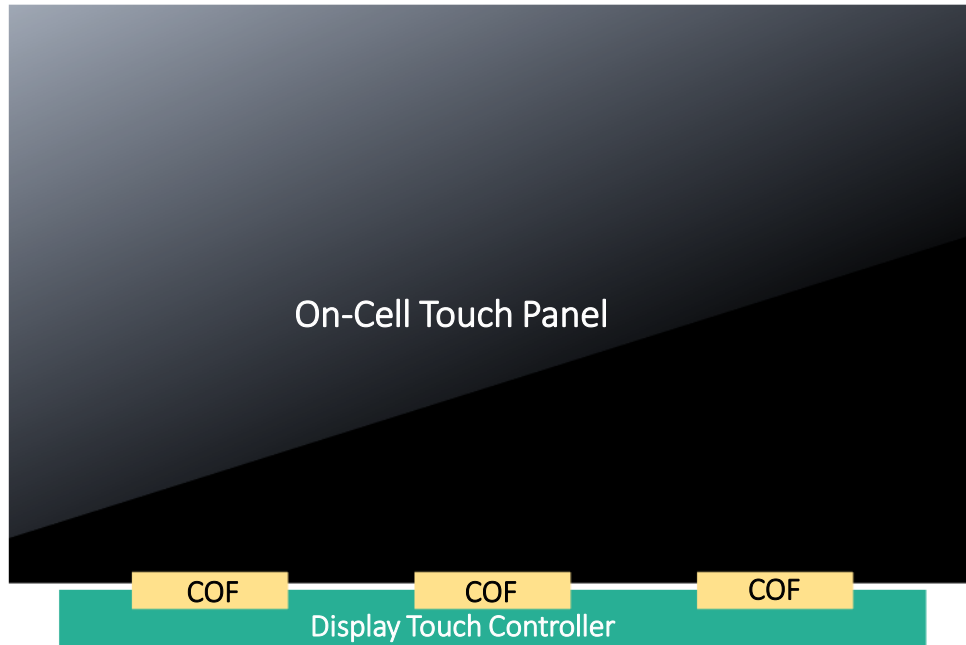


Gram Fold 17



ELAN Single Layer On Cell (SLOC) Touch

ELAN Solution for SLOC



ELAN Solution for SLOC

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



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

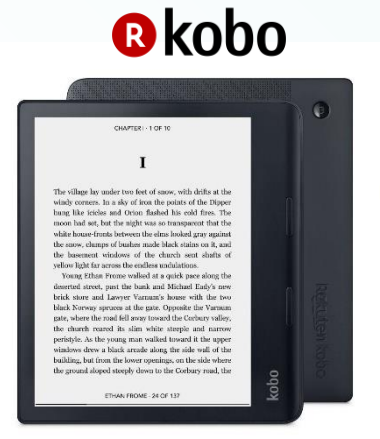
Shorter process cycle
time for Panel maker

ELAN Touchscreen IC Shipping Record for EPD

Black & White E-paper

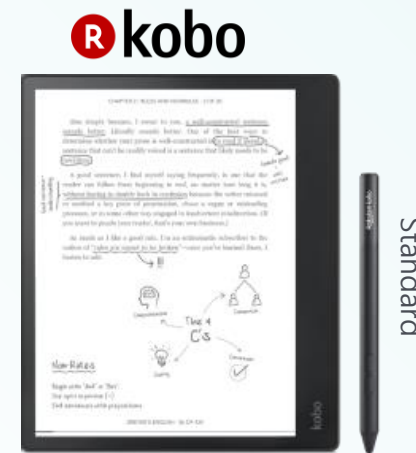


Libra 7"



Sage 8"
MPP2.0

Optional

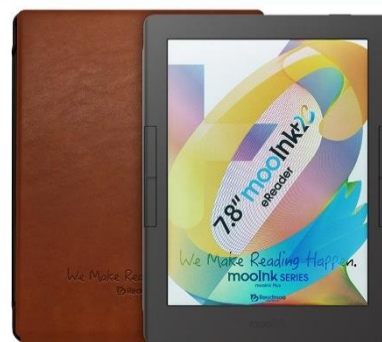


Standard

Elipsa 10.3"
MPP2.0

Color E-paper

moolnk



Plus 2C 7.8"

Bigme



Bigme 10.3"

ELAN AI×Fingerprint Highlights

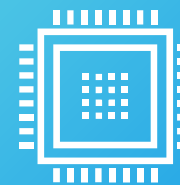
#2

Notebook Market

100%

In-House
Algorithm

Smallest MOC
Highly Brand-Compatible



AI Enabled

2.5D/3D
Anti-Spoof

Fingerprint

MOH&MOC

Single-Chip
Encryption





2023 Income Statement

YoY Comparison (Consolidated)

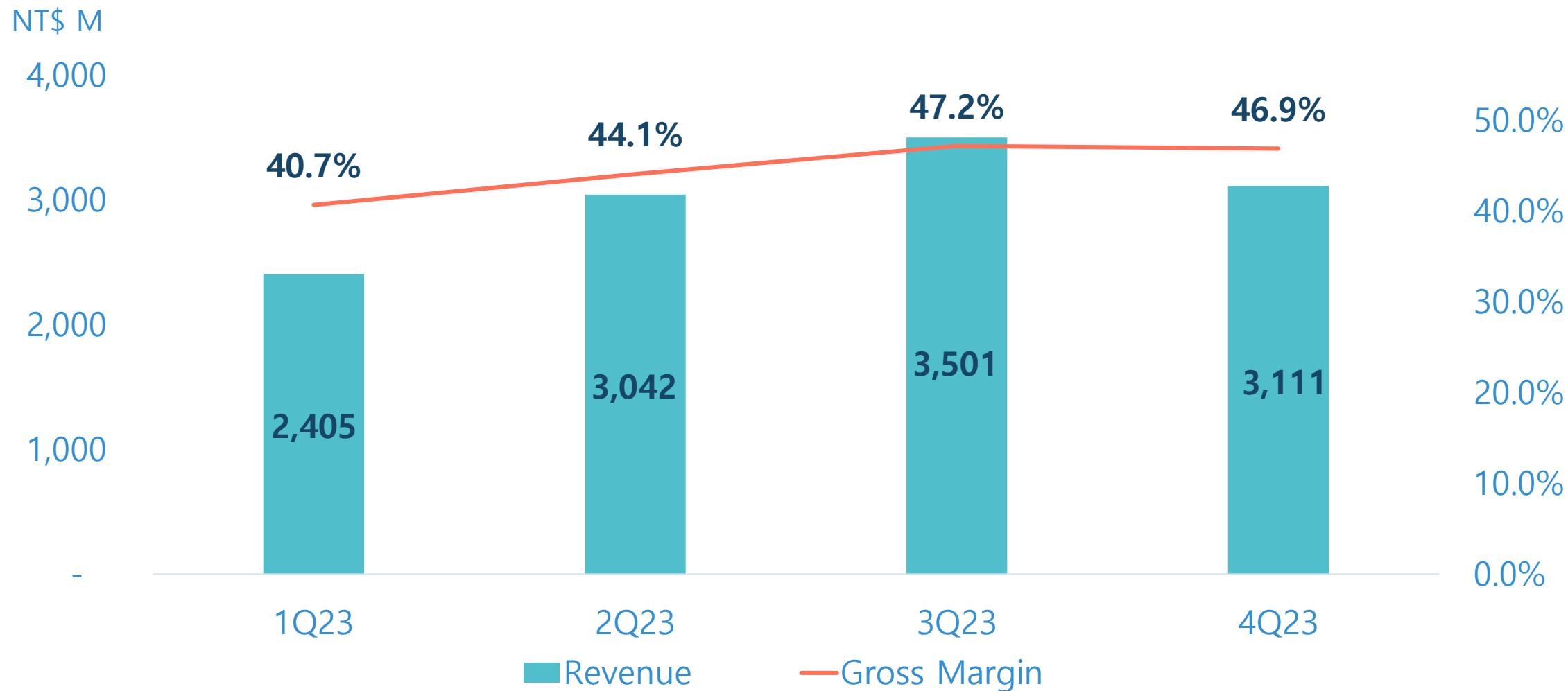
NT\$M

	2023	%	2022	%	YoY(%)
Sales	12,059	100.0	13,030	100.0	(7.5)
Gross profit	5,432	45.0	5,987	45.9	(9.3)
Sales expense	370	3.1	581	4.5	
G&A expense	479	3.9	457	3.4	
R&D expense	2,149	17.8	2,165	16.6	
OPEX	2,998	24.8	3,203	24.5	(6.4)
Operating profit	2,434	20.2	2,784	21.4	(12.6)
Non-operating income & exp.	38	0.3	(81)	(0.7)	
Profit before tax	2,472	20.5	2,703	20.7	(8.5)
Net profit	1,985	16.5	2,034	15.6	
Belong					
Parent company	2,143	17.8	2,152	16.5	(0.4)
Non-Controlling Interests	(158)		(118)		
* EPS (NT\$)	7.53		7.56		(0.4)

* 304 million shares issued; 284.6 million shares outstanding as of the end of reporting period.

* Consolidated Statement of Financial Position (Audited).

Performance Highlight



* There were nearly 50 AI PC models at 2024 CES, most of which adopted ELAN's solutions (Touchpad Module, Touchscreen, Controller & Fingerprint Sensor).

Conclusion

1. 2024~2026, AI PC growth trend is clear, expected to drive the replacement cycle
2. Benefit from AI PC as a key component in NB supply chain
3. ASP increasing driven by specification upgrade, module size enlargement and feature enhancement
4. Intel predicted nearly 50 AI PC models in 2024 CES and most of which adopted ELAN's solutions, including Touchpad Module, Touchscreen Controller, Fingerprint Sensor
5. Market share rebounds with new applications booming, includes E-book, ADAS, and so forth



Thank You



ELAN Microelectronics Corporation