

**Share innovation.
Shape tomorrow.**

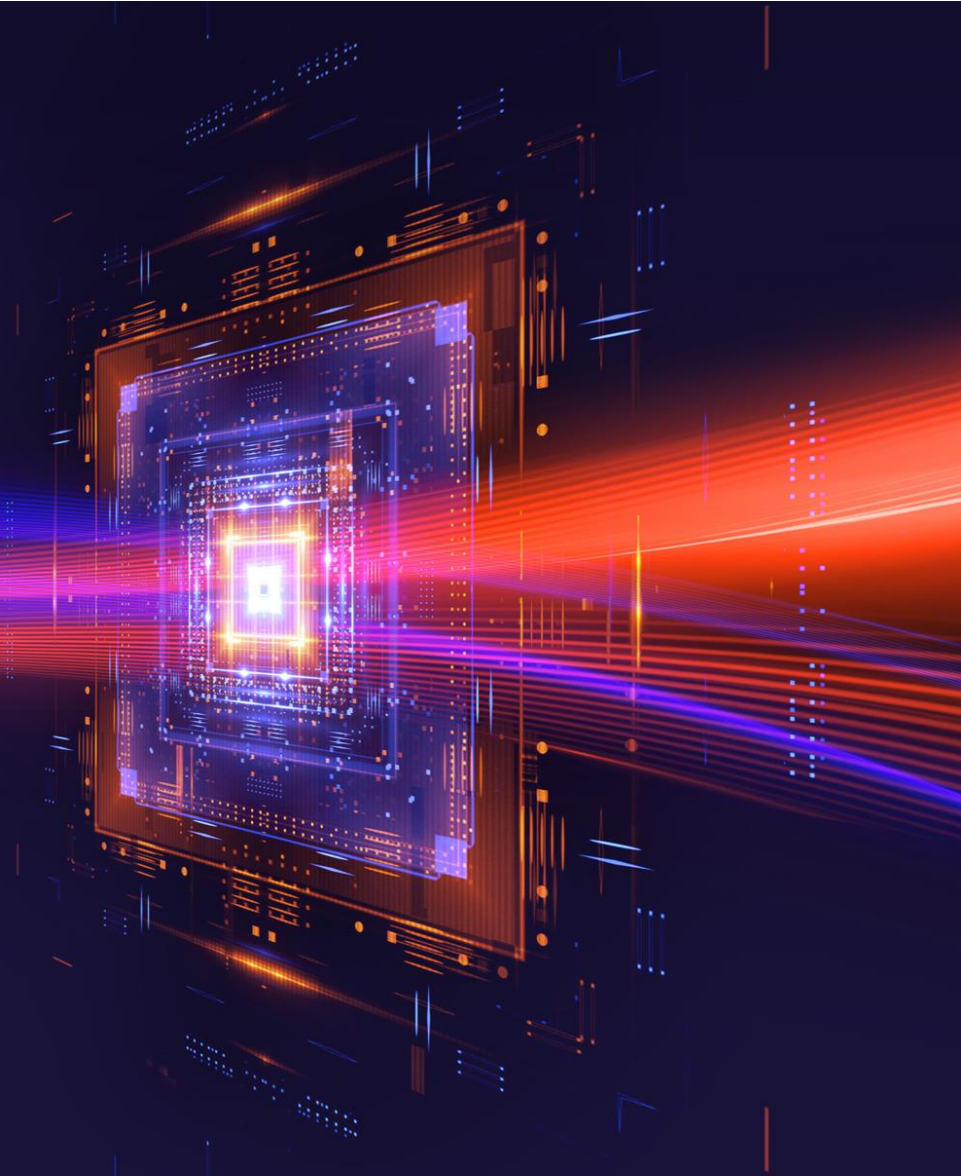
Meet-up SEMICON & Innovation Mission Taiwan

7 June 2023

June 7 2023

The Dutch National Network of Semiconductor companies

 Share innovation. Shape tomorrow.



Welcome to High Tech Campus 27

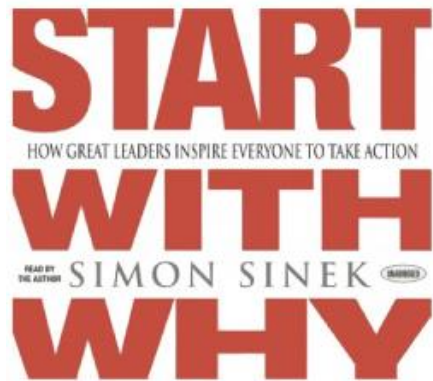
Today's agenda:

- Introduction
- 3 Speakers
- Q & A
- Lunch & Networking





WHY ?



The Golden Circle

WHAT

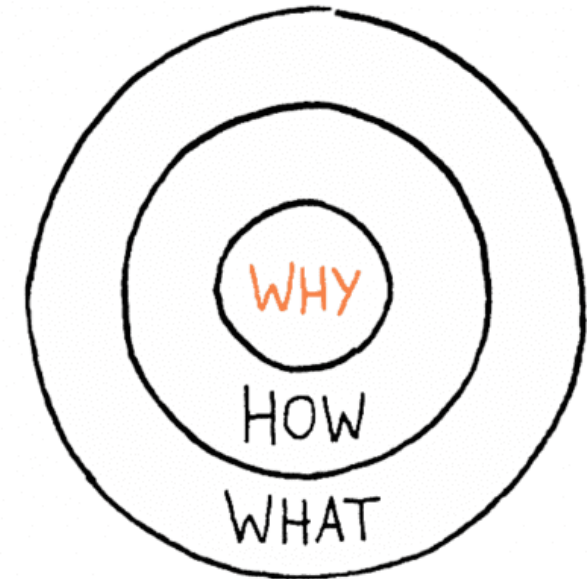
Every organization on the planet knows WHAT they do. These are products they sell or the services

HOW

Some organizations know HOW they do it. These are the things that make them special or set them apart from their competition.

WHY

Very few organizations know WHY they do what they do. WHY is not about making money. That's a result. WHY is a purpose, cause or belief. It's the very reason your organization exists.





Business between NL & Taiwan

- Both are a global top-25 economy player
- Export to Taiwan (2020 numbers)
Taiwan is #9 partner 6.4 Bln. Euro (of which 4.5 bln. equipment = 14% of semiconductor business value)
- Import from Taiwan
NL is #11 partner 4.7 Bln. Euro (of which 0.6 equipment)
- Source <https://www.rvo.nl/onderwerpen/landen-en-gebieden/taiwan/handel-nederland>

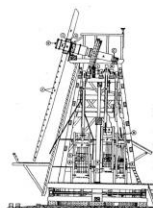


Netherlands high tech history

We have a long history of innovations...

Innovation	Year
Microscope	1590
Crankshaft	1594
First submarine	1620
First electric vehicle	1835
Electrocardiography (ECG)	1903
Artificial kidney	1943
Automatic transmission (CVT)	1958
Compact disc	1979
Wifi	1991
Bluetooth	1994
Tom Tom navigation	2004

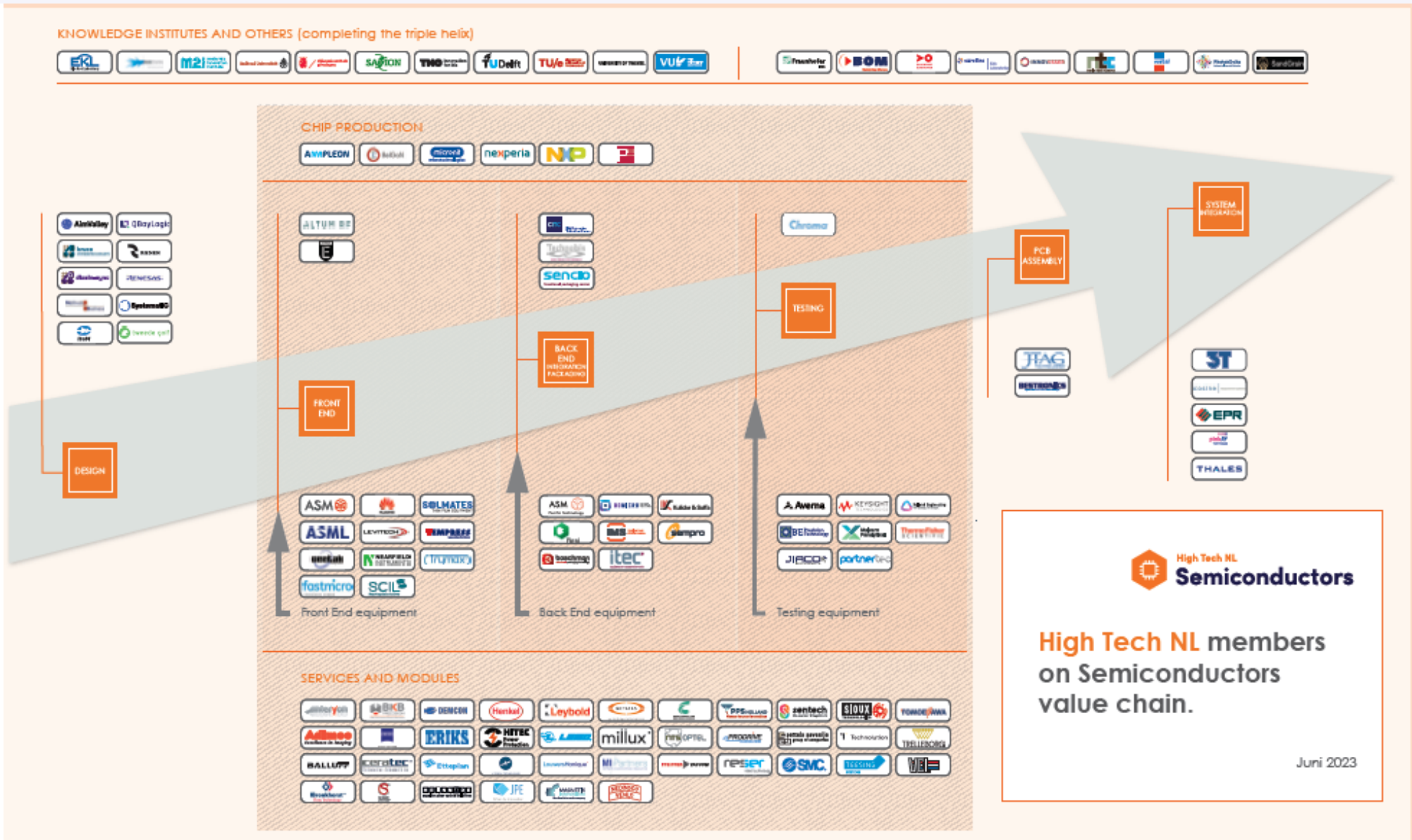
- Many global players and champions
- Semiconductor IC is almost 65 years old
- Even today: no single company masters all steps necessary to design, package, produce and test a complete device
- 1 chip? 60 countries & 800 process steps
- Cooperation is not a choice... it's a must!





Key figures Netherlands semiconductors

- +300 companies
- Within NL 50,000 employees
- Globally 85,000 employees (and families)
- 2021 sales value € 32+ billion (4.3 % of Gross National Product)
- We have many world leaders, mainly in equipment :
 - Front and back-end machines
 - RF and radar technology
 - Metrology
 - Test Technology & Engineering





Netherlands OEM equipment community

45+ companies

Leading in:

- (EUV) lithography
- Atomic Layer Deposition
- Advanced packaging
- Metrology: scanning Probe Microscopy

Active in sub-segments

- Lithography
- Atomic Layer Deposition
- Physical Vapor Deposition
- Molecular beam epitaxy
- Etching
- Photoresist
- Metrology
- Dicing
- Packaging

ASML

ASM
INTERNATIONAL

itec
equipment • automation tech

boschman
advanced packaging technology

TEMPRESS
innovating the future

fastmicro
cleanliness control

NEARFIELD
INSTRUMENTS

Besi

SOLMATES
THIN FILM EQUIPMENT

Trymax
PLASMA TECHNOLOGY SOLUTIONS



Netherlands equipment components

50+ companies

Largest segments:

- Positioning systems
- Mechatronics
- Metal components
- Environmental conditioning

Active in sub-segments

- Wafer stocking, positioning & stabilizing
- Mask stabilizing & cleaning
- Laser
- Optical components
- Power equipment
- Cooling systems
- Clean rooms
- Components
- Particle beam





Speakers

- Guy Wittich, RvO
Business opportunities Taiwan & the Netherlands
- Anouk van der Steen, NL Office Taipei
Semicon Taiwan show & Innovation Mission
- Erik Vermeulen, Fastmicro
Business in Taiwan & 2022 Semicon





Thanks for your time!

Tom van der Dussen

Cluster Manager
High Tech NL Semiconductors

+31 (0)6 3078 2234

Tom.van.der.dussen@hightechnl.nl

www.hightechnl.nl/semiconductors

Let's solve challenges together!



Samen maken we het verschil!

Bedankt voor jullie aandacht.



High Tech NL
Robotics



High Tech NL
Semiconductors



High Tech NL
Life Sciences



High Tech NL
Energy

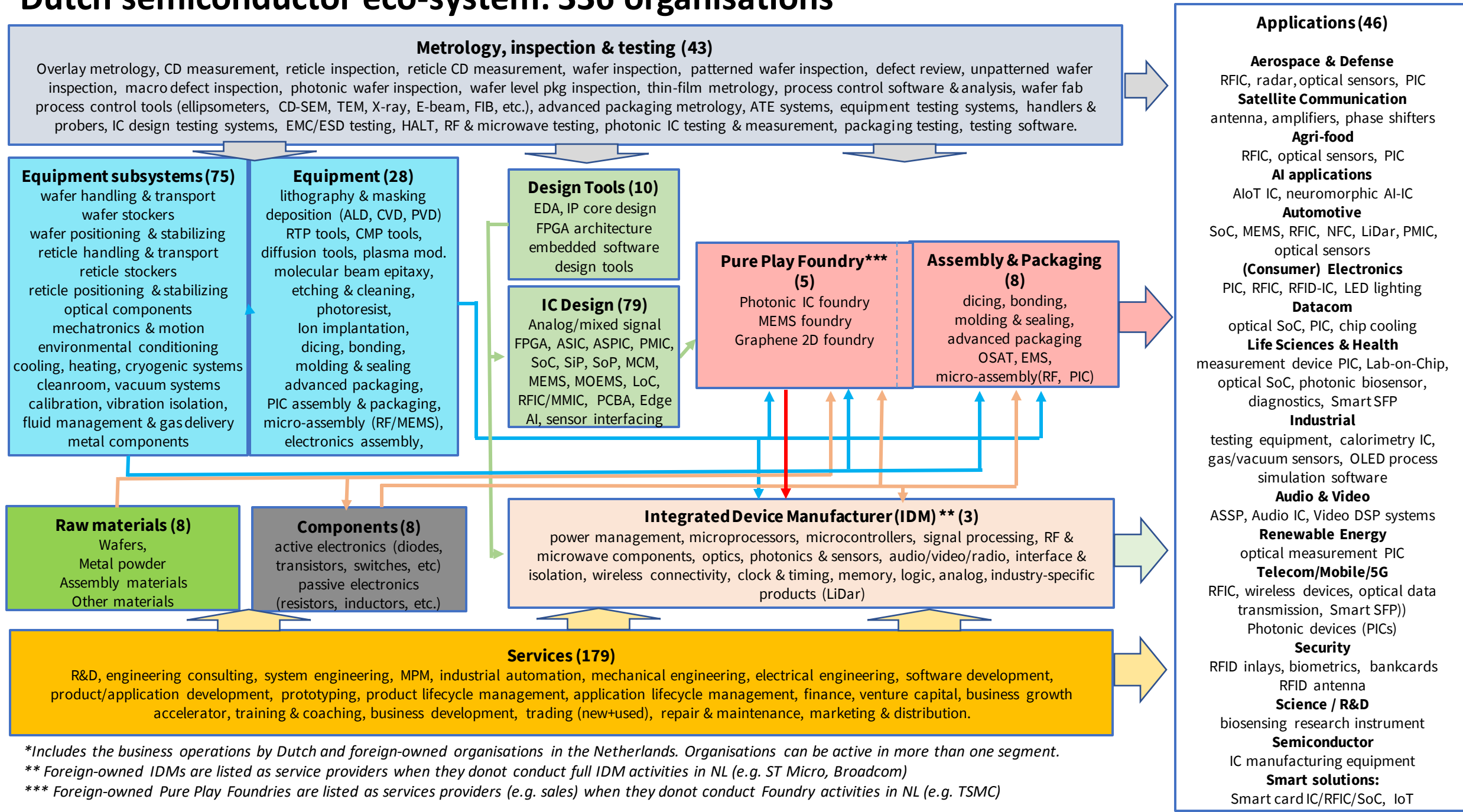
www.hightechnl.nl

Doing Business in Taiwan

SEMICON Taiwan September 2023



Dutch semiconductor eco-system: 336 organisations*



Ties that bind...



Close ties in IC innovation and manufacturing



Dutch companies active in Taiwan


ING 

ASM 

 **ASML**

 **DSM**

AIR FRANCE 


AkzoNobel
Tomorrow's Answers Today

NXP


NTS

 **HITEC**
Power Protection


Bronkhorst[®]
HIGH-TECH

DyeCoo[®]
CO₂ Dyeing Technology


Besi


FrieslandCampina 

DAF

VANMOOF | 

 **Boskalis** **Van Oord** 
Marine ingenuity


Heineken[®]

PHILIPS

OMA


mecanoo
architecten

MVRDV

 **RIDDER**
drive to innovate

 **signify**

Powerhouse in manufacturing know how....
.....but also in design, applications, global marketing...



Some advice...



- Build long-term partnerships based on *trust*
- Commit people on the ground
- Make use of NL sector consortia
- Make use of government resources

Thank you!

