

W

U

T

I

S



Equity Research Division

Infineon

Semiconductor Producer

Target Price: € 41.90

Current Price: € 36.30

Upside Potential: 15.4%

Recommendation: BUY

Investment Horizon: 1 Year

Vienna, 28.01.2022

Team Overview

Equity Research



**Krisztina
Jakubec**

Head of
Equity Research

- Task distribution
- Story guideline



▪ MSc. – 4th Sem.



**Philipp
Jungwirth**

Associate

- Industry Research
- Peers banchmarking



▪ BSc. – 7th Sem.



**Laurenz
Lukawinsky**

Analyst

- Business Model
- Strategy



▪ BSc. (WU) – 3rd Sem.



**Miloš
Milošević**

Analyst

- Financials
- Valuation



▪ BSc. (WU)



**Bence
Pataki**

Analyst

- Company Overview
- Risks

▪ BSc. (WU) – 3rd Sem.



**Raj
Rajeshwari**

Analyst

- Industry Research
- Valuation



▪ MSc. – 4th Sem.



**Rodrigo
Reyes**

Analyst

- Financials
- Valuation

INTERACTIVE PAPER

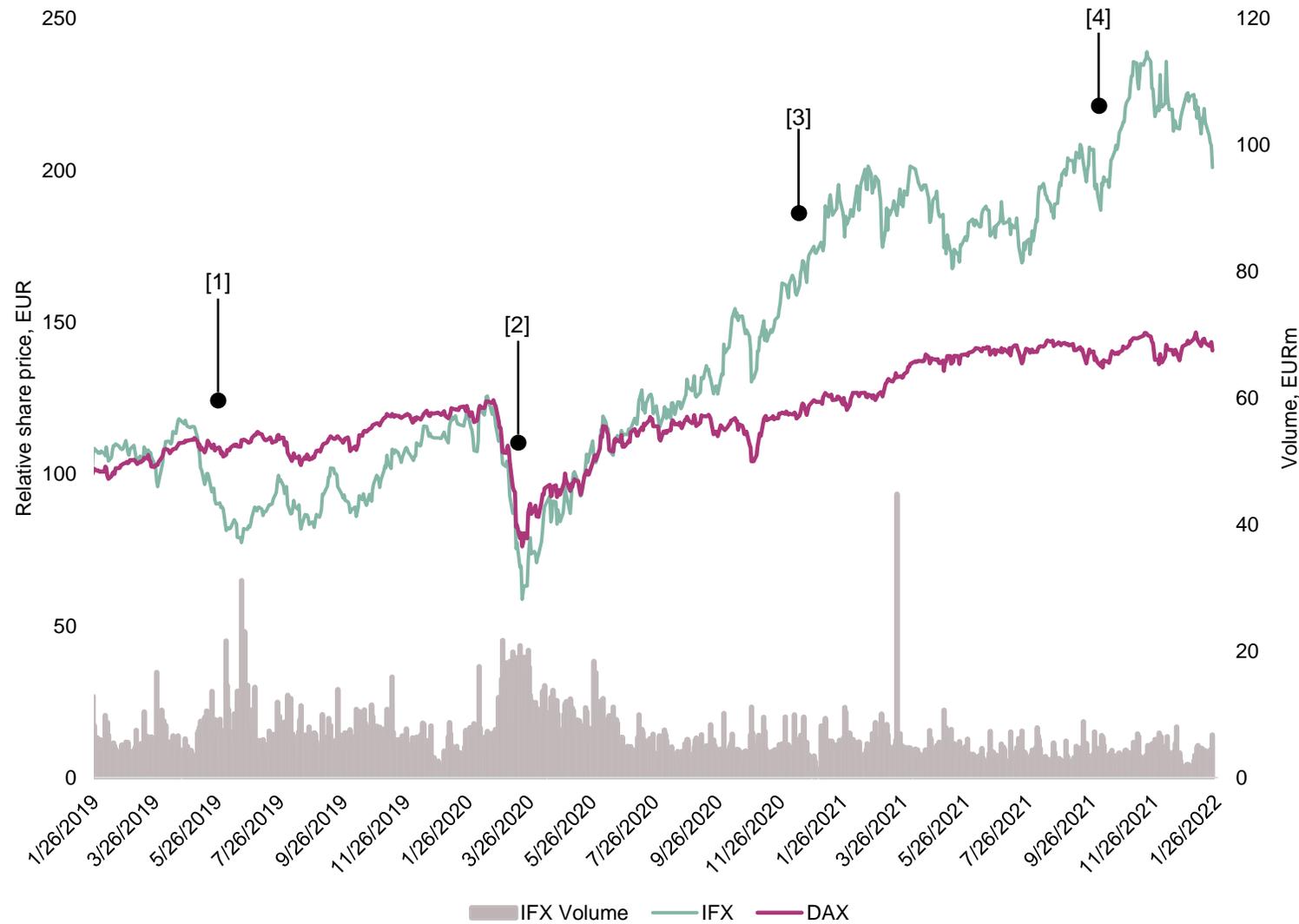


▪ MSc. – 4th Sem.

1	Executive Summary	3
2	Business Overview	5
3	Market Overview	12
4	Peers Benchmarking	17
5	Financial Analysis and Valuation	21
6	Risks and Catalysts	28
7	Appendix	31

Share Price Performance

Rapid recovery after COVID-19 caused by surge in demand for semiconductors



Share price – Major events

- [1] **June 2019 (-8.1%)** – Due to lower than anticipated demand for semiconductors, management had to revise the outlook downward. Additionally, Infineon announced Acquisition of Cypress.
- [2] **February 2020 (-14.2%)** – Rumours about the red light from Committee on Foreign Investment of the United States (CFIUS) on Cypress takeover and COVID-19 outbreak
- [3] **February 2021 (+3.8%)** – Demand for semiconductors is reaching new highs meanwhile Infineon announces a strong first quarter of their financial year
- [4] **October 2021 (+4.8%)** – Infineon reports a strong FY21 with a 29% increase in revenues combined with the investment into high-tech chip factory in Villach

Key stats

- **IPO** in 2000 at € 70,26
- **Close** 26.01.2022: € 35,90
- **Price Range** since IPO: €0.52 - €77.47
- **52 Week Price Range:** €29.79 - €43.85
- **Market Capitalization:** €47 539 million

Key Investment Highlights



- 1 Stable Market Outlook**
The market for semiconductors is expected to grow with a CAGR of 3.8% mainly driven by electrification and digitalization trends boosting Infineon revenue
- 2 Technological Advancement**
Leadership in the SiC segment backed by strong R&D capabilities provides sustainable competitive edge to Infineon over competitors
- 3 Market Leadership**
Infineon is well-positioned in the overall semiconductor market being included in the Top-10 players with the leading positions in the automotive and industrial subsegments
- 4 Solid Financial Performance**
Infineon was able to grow with 11.3% 5Y CAGR through organic and inorganic growth maintaining solid margins and keeping its capital structure within the target range
- 5 Fierce Competition**
Top-3 players are large multinational companies with dynamic M&A activity putting pressure on smaller players
- 6 Volatile Raw Material Prices**
Unexpected increase of raw material prices is passed through on customers with the time lag which can lead to the margin's reduction



Infineon

WUTIS – Equity Research

Business Overview

Company Overview

German semiconductor manufacturer with experienced management team

Business description

- Infineon Technologies is a developer, designer and manufacturer of semiconductors operating in **4 segments globally**

- Leading position in the major end markets:

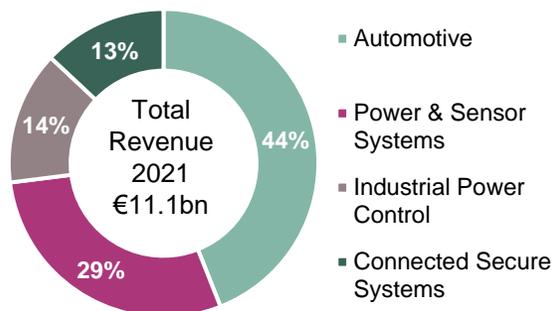
- Automotive
- Power
- Security ICs

Headquarters: Munich, Germany

Established: 1999

Employees: 50,288

Geography: more than 100 locations



Management team



Dr. Reinhard Ploss
CEO
(2012-2022)



Jochen Hanebeck
COO
(2016-2022)
CEO from April 2022

Succession planned

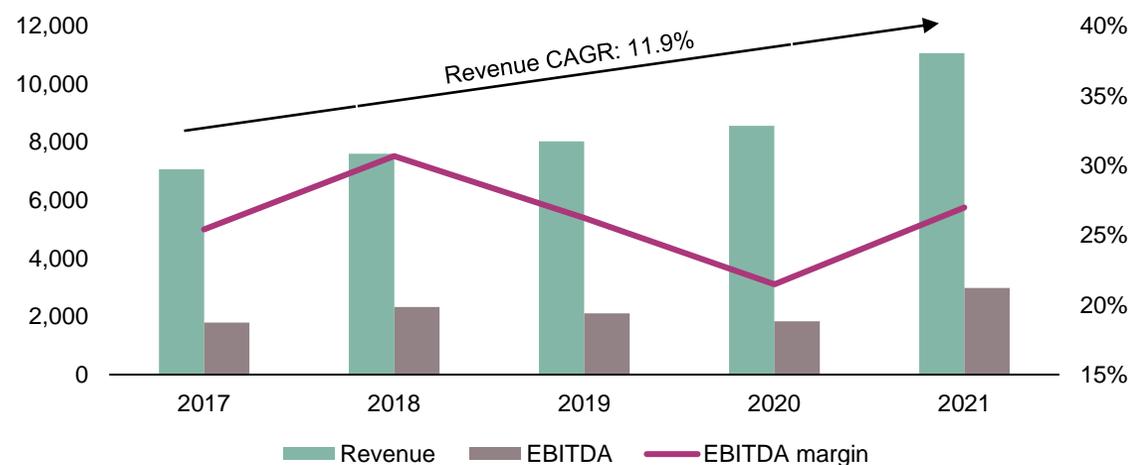


Dr. Sven Schneider
CFO
(2019 - 2027)

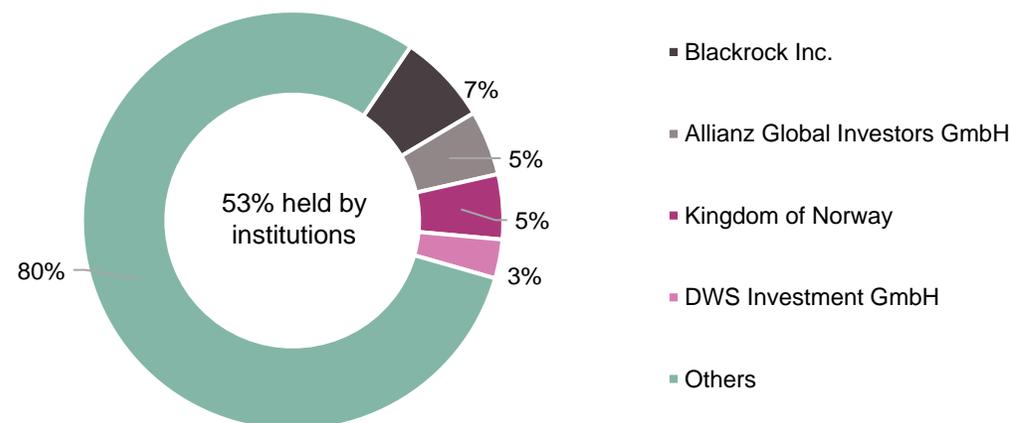


Constanze Hufenbecher
Chief Digital
Transformation Officer
(2021 - 2024)

Financials (EURm)

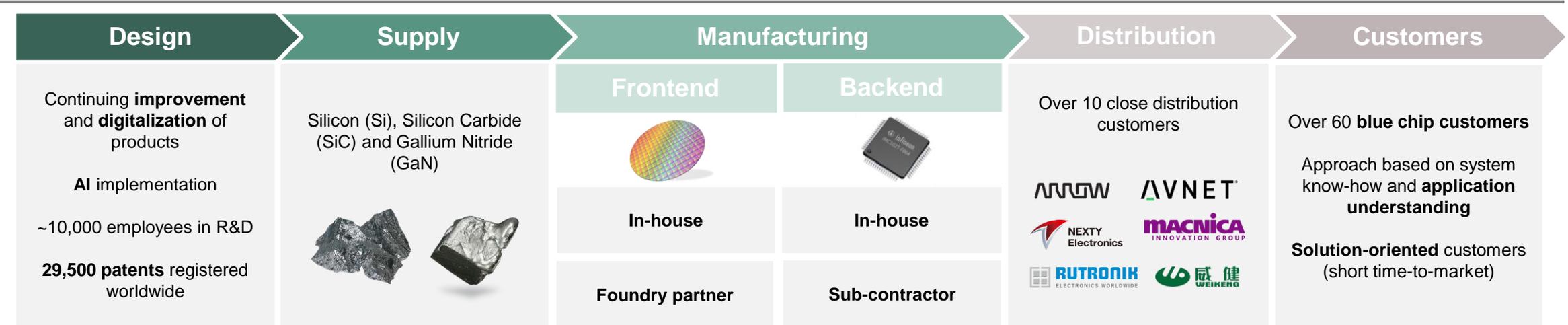


Shareholder structure



Back-to-end supply chain and application expertise drives company's success

Supply chain overview



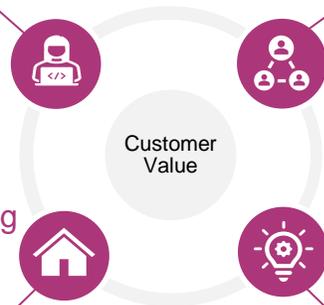
Value creation and „Product-to-System“ strategy overview

Solution expertise

- Early **realization** of **demand changes**
- Translating technological **feasibility** into marketable **products**

Differentiating in-house manufacturing

- **Global 300mm thin-wafer leader**
- Manufacturing **expertise**

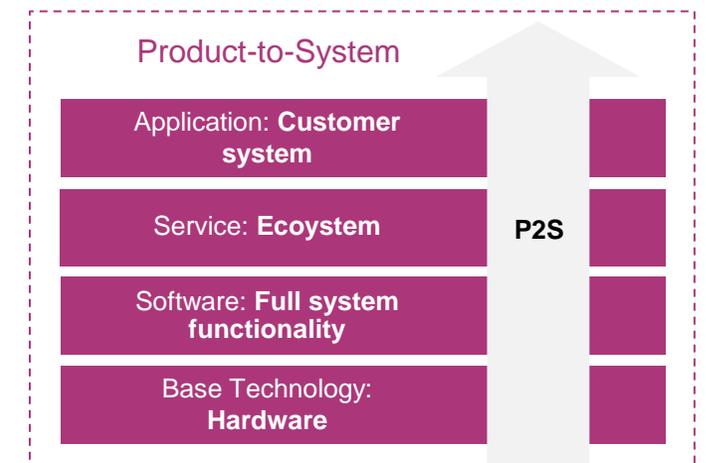


Customer relationship

- **Customer embeddedness** – deep system understanding
- **Stickiness** of customer relationships

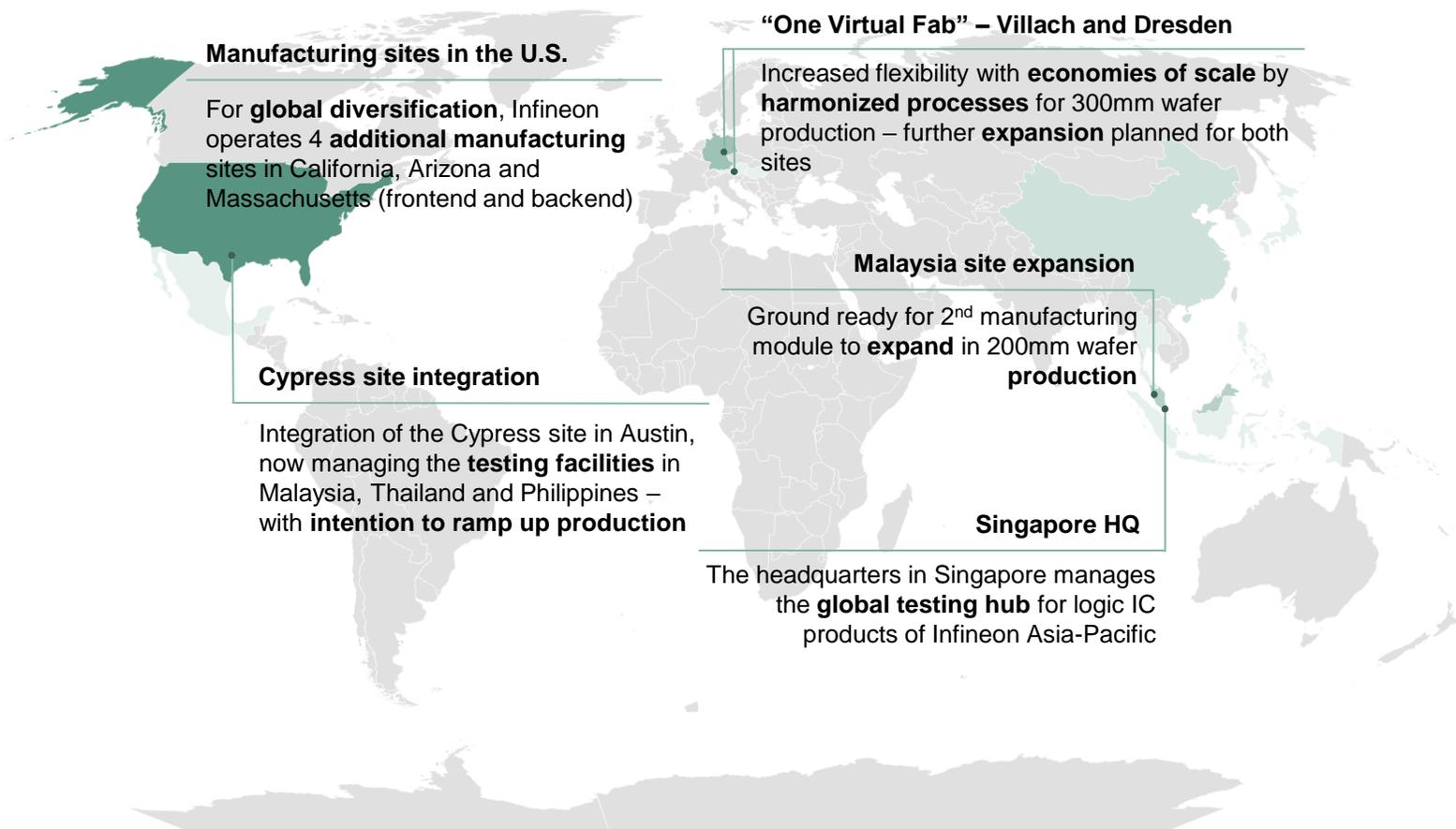
Product & Innovation leadership

- Broad and **deep product portfolio** with strict **quality control**
- Extended **innovations** track record



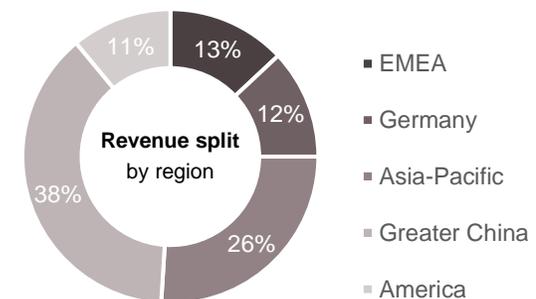
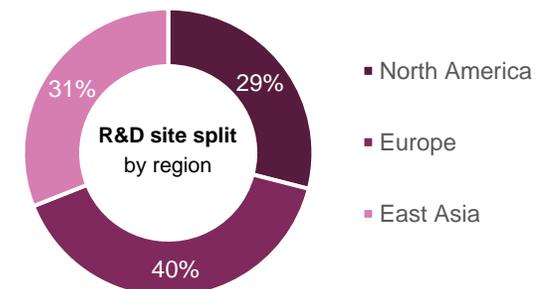
Key manufacturing sites

Villach site and internalization



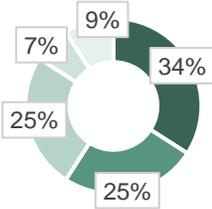
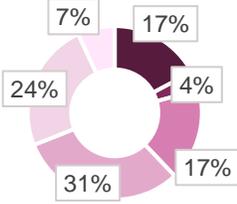
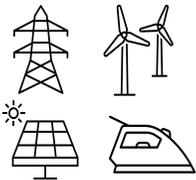
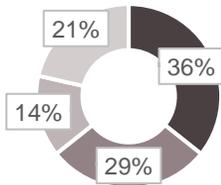
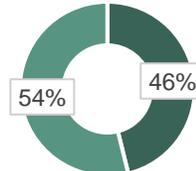
Villach Manufacturing Site:

- Automized high-tech** 300mm thin wafer factory
- Setting **supply security** for their customers
- Sustainable plant** with recycling solutions
- High emphasis on **technological development**



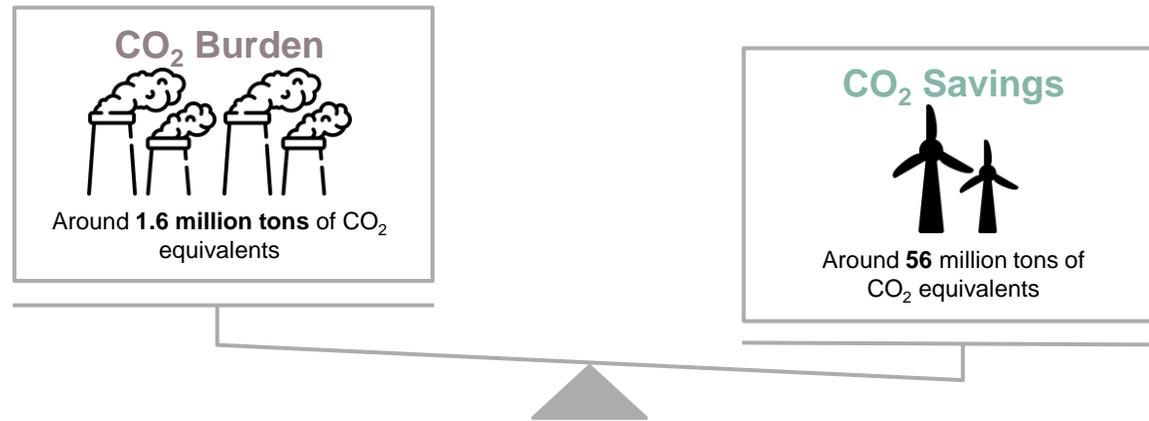
Segments Overview

Broad product portfolio with the Blue Chip customer base

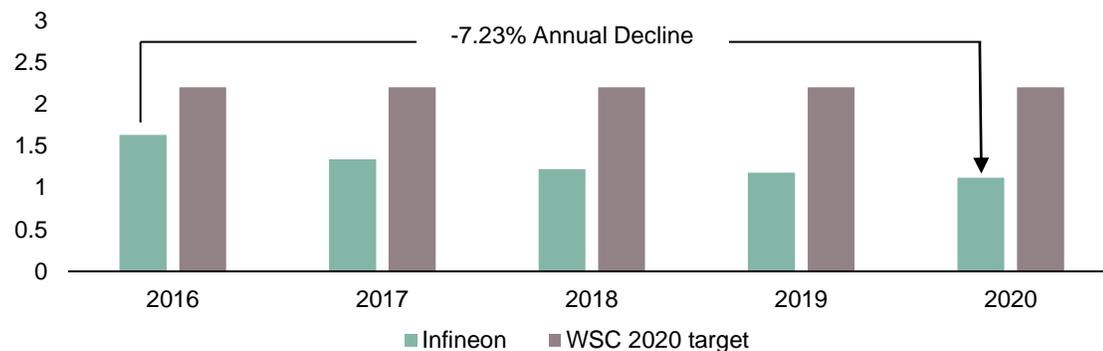
	Description	Application	Revenue split	Customers
	<ul style="list-style-type: none"> #1 in automotive semiconductors Products for communication within the vehicle, between other vehicles and with the cloud Complete radar- and camera-based system solutions Controllers for electric motors and battery management 		 <ul style="list-style-type: none"> Powertrain Safety Comfort Infotainment Other ATV 	
	<ul style="list-style-type: none"> Addressing efficiency and power density via SiC and GaN Semiconductors and supply applications in low & medium voltage range Sensor solutions giving IoT devices „human senses“ Increasing product portfolio for SiC and GaN switches 		 <ul style="list-style-type: none"> Computing Communications Smartphones Consumer Industrial Other PSS 	
	<ul style="list-style-type: none"> Products for efficient generation, transmission and storage of electric energy and reduction of losses on consumption Discrete IGBTs and IGBT modules and driver ICs „Easy module family“ for application optimization Functional integration of modules 		 <ul style="list-style-type: none"> Drives Renewables Home appliances Other IPC 	
	<ul style="list-style-type: none"> Integrating security, microcontrollers, connectivity and software into other three segments Differentiation by microcontrollers enhanced with security functions Implementation of Cypress software capabilities Embedded security applications portfolio SECORA™ 		 <ul style="list-style-type: none"> Payment, identification and ticketing Industrial and consumer IoT 	

Infinion minimizes direct CO₂ emissions in production cycle providing 54m tons of net savings

Net ecological benefit

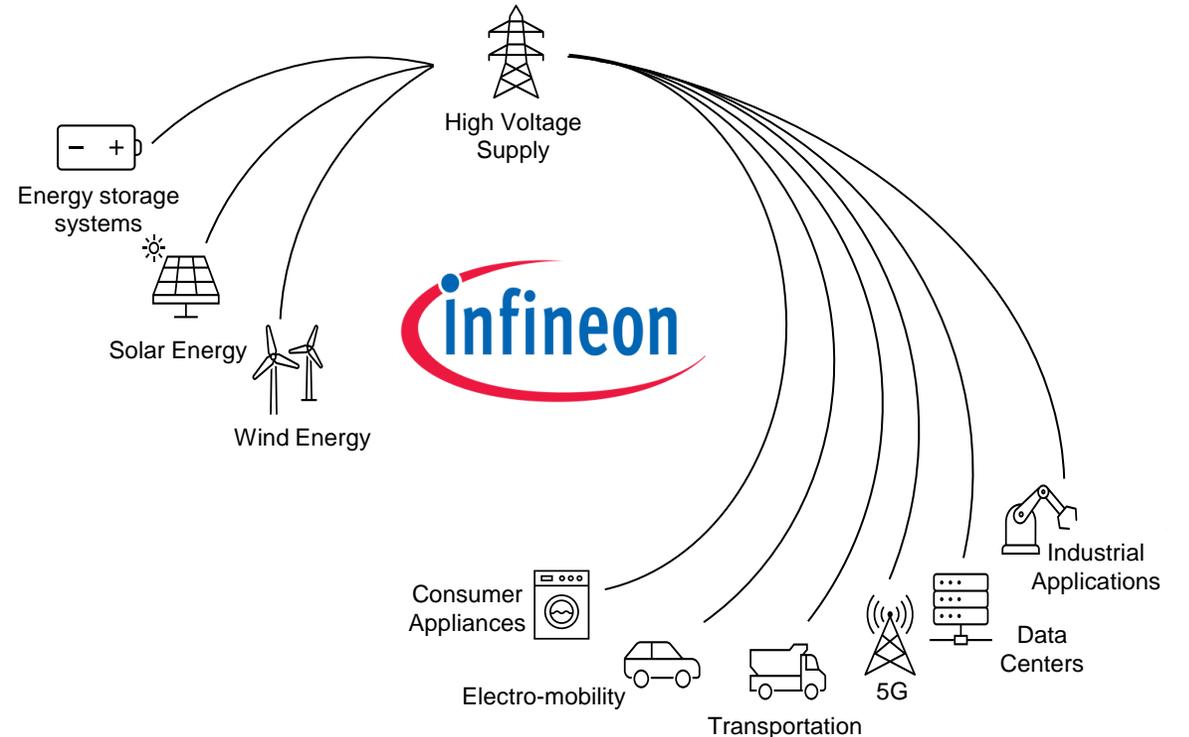


Normalized carbon emissions rate in tons of CO₂ equivalent per square meter wafer



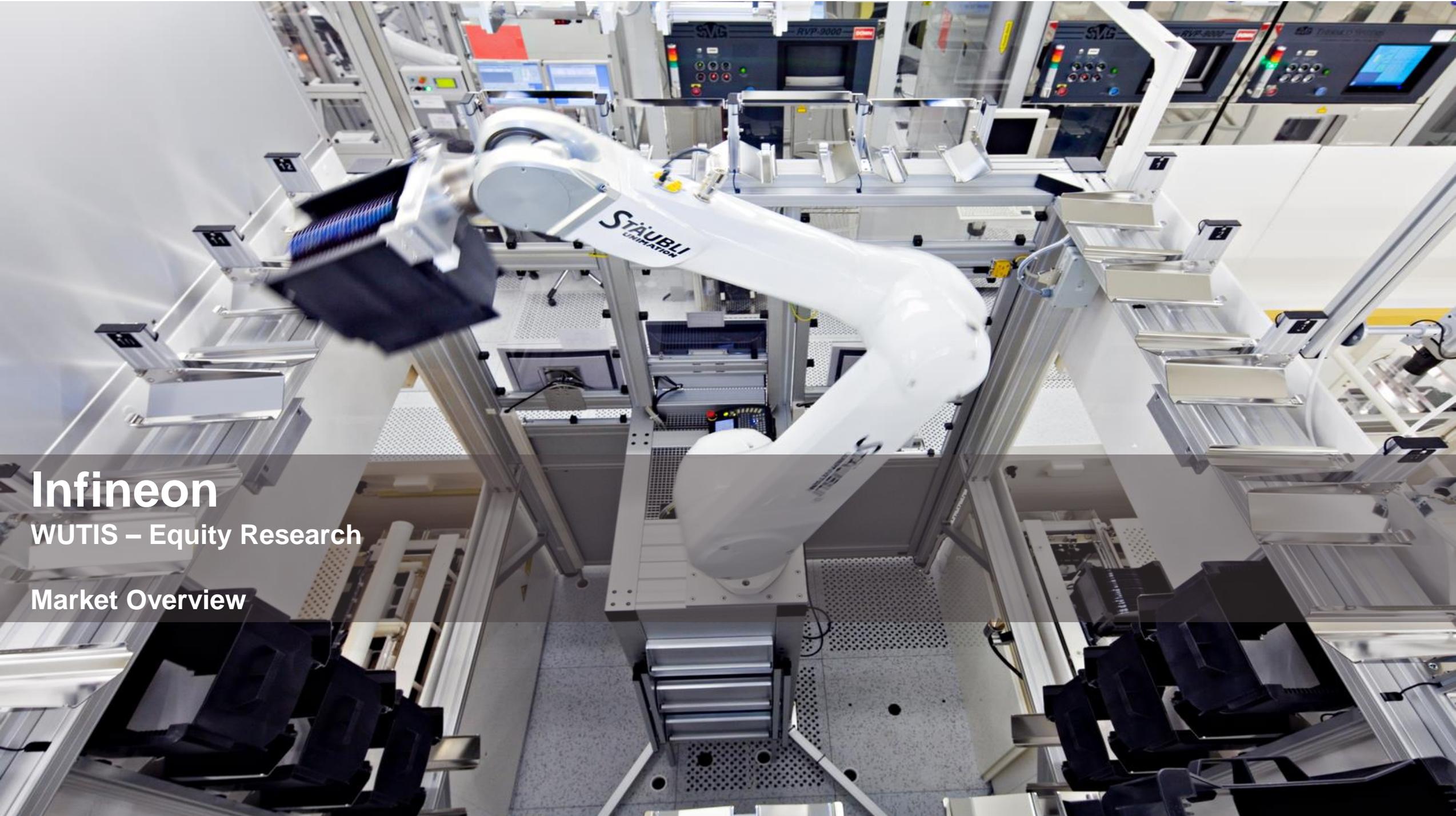
Historically Infineon's normalized emission rate has been below WSC's¹ target

Infinion driving sustainability across business segments



Infinion's products and innovation help in mitigating climate change

- Being enabler of renewable energies
- Increasing energy efficiency
- Contributing to CO₂ emission reduction
- Reducing electrical losses
- Becoming carbon neutral till 2030



Infineon

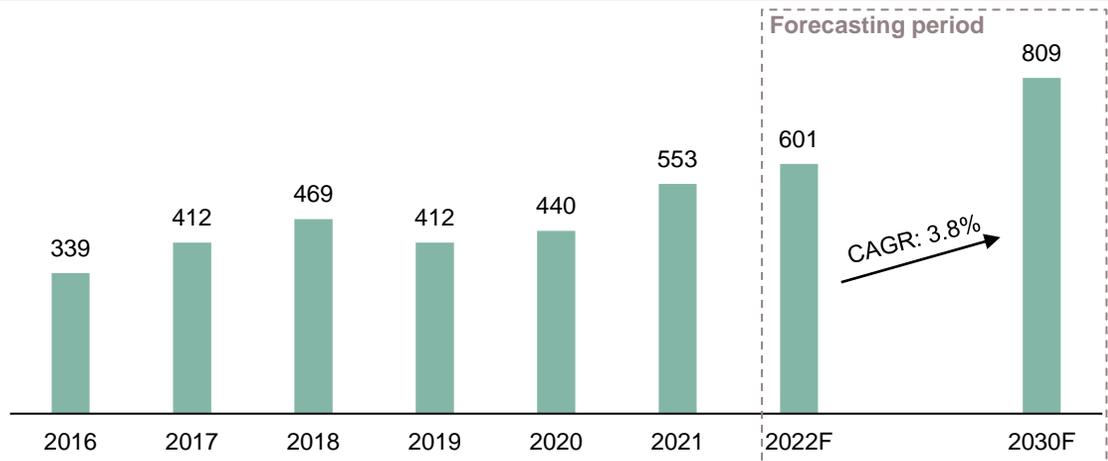
WUTIS – Equity Research

Market Overview

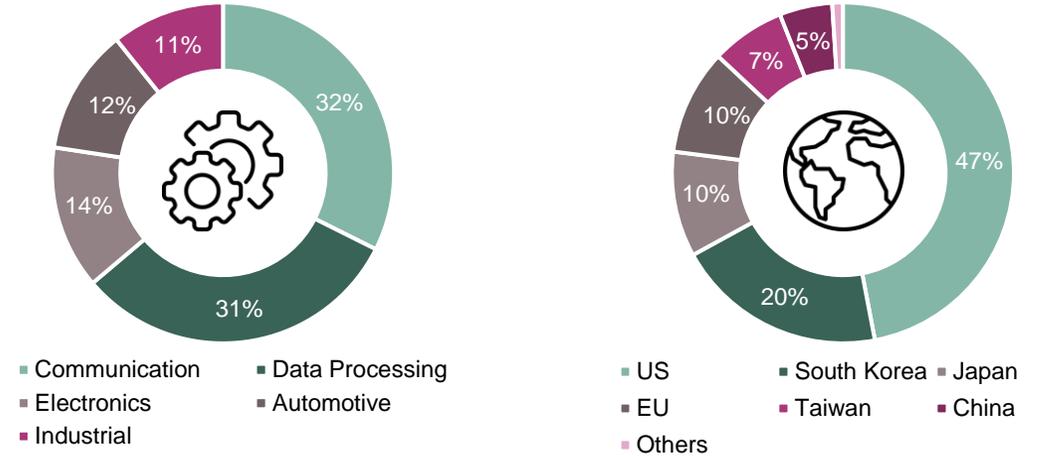
Semiconductor Market

The semiconductor industry has strong growth potential with a few large players

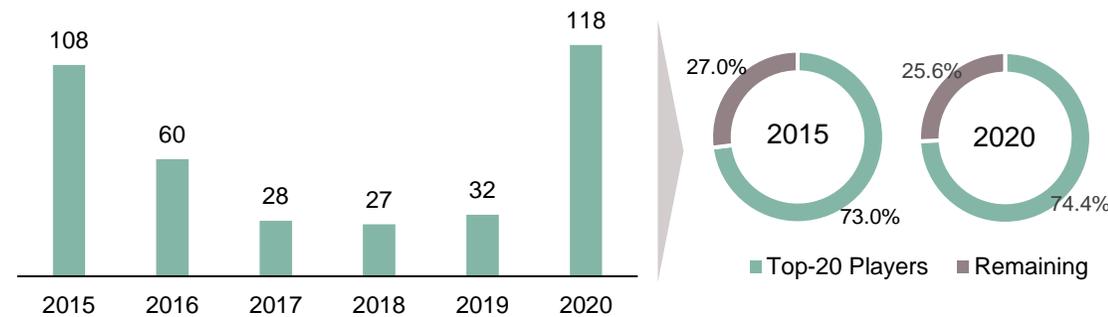
Global semiconductor market (USDbn)



Application and regional split in 2020

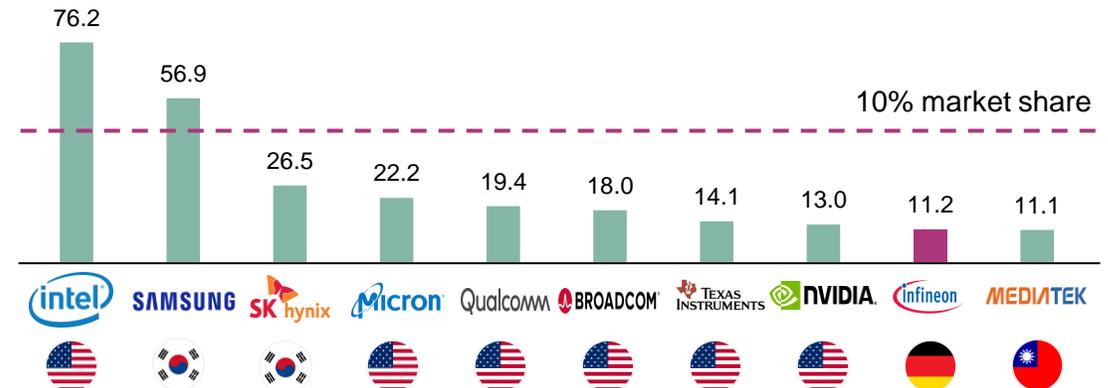


M&A deal value (USDbn) and ongoing consolidation trend



Industry is fragmented, where the rest 25.6% players are distributed between more than 1500 other companies. However, M&A as an integral part of strategy drives consolidation trend.

Market share and revenue of the top ten largest manufacturers (2021, USDbn)



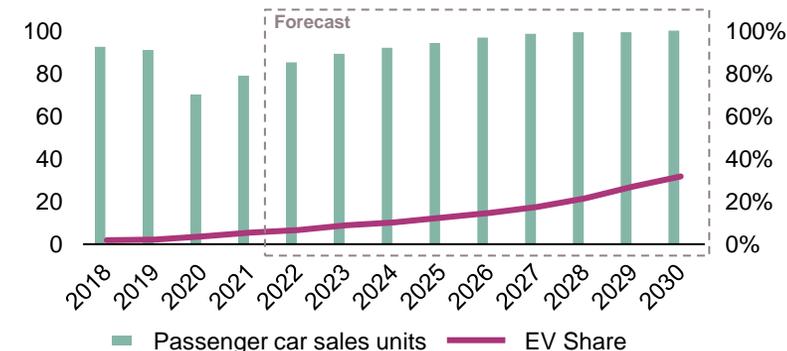
Trends and Growth drivers

Electrification and digitalization lead the growth trends for semiconductor industry

Current market trends driving industry growth

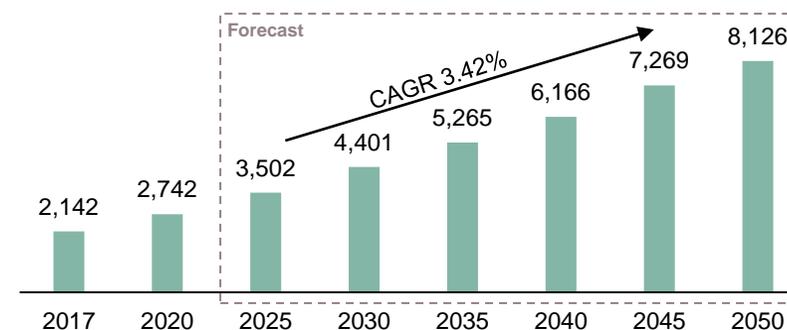
- Electromobility**
 Electric vehicles fleet to **grow by more than 3 million units** by 2030. EVs require on average 2,000 chips, double the number used in conventional cars
- ADAS/Automated Driving**
Vision Zero and enormous research by automotive companies push the trend towards the automated driving
- IOT (Consumer and Industrial)**
Consumer wearables and Industry 4.0 (trend of automation and data exchange in manufacturing techs) are driving the demand for semiconductors
- Power Infrastructure & Energy Storage**
Net Zero emissions 2050 boosts renewable energy generation requiring chips in set up, transmission, storage and conversion
- 5G**
 Increase in 5G adoption to 3.35bn in 2026 will propel the market of **radio frequency components**
- Contactless payment**
 Pandemic pushed **contactless payments** and **mobile wallets**, pilot the growth of chips for **security solution**

EV Share in global passenger car sales (mm units)



Average semiconductor content of a pure EV (US\$950) is **almost twice** than that of a combustion engine car (US\$490)

Installed renewable power generation capacity (GW)



Semiconductors are a **crucial element** of not only the renewable energy infrastructure but also its storage and transmission

Semiconductor Shortage

Chips scarcity started already before 2020 but ramped up massively during the pandemic

Main drivers causing the shortage

Demand drop & surge:

Change in production capacity at the start of the pandemic. When the economy picked up again manufacturers could not keep up with demand

Entry cost:

The entry barriers of becoming a semiconductor producer are high

Transportation delays:

With increased demand in transportation, a slowdown in shipping occurred during the pandemic

Shortage of materials:

Spikes in prices and the increased demand for silicon resulted in supply constraints

Global regulations:

Due to the US-China trade war companies lost access to suppliers as well as manufacturers

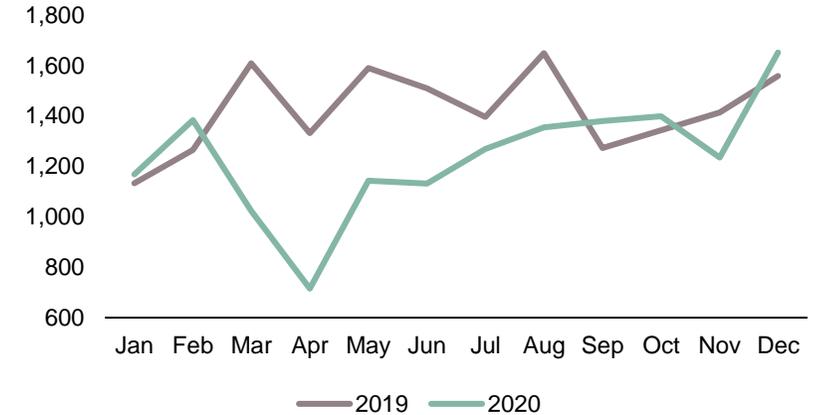
Natural disasters:

Extraordinary events, e.g. a blizzard in the United States and a fire in Japan shut down production lines and therefore further decreased the output capacity

COVID-19:

The medical pandemic as well as the labor shortage put extra pressure on manufacturers to fulfill demand

US vehicle sales (in K units)



Infinion's actions and consequences of the shortage

Inhouse production

Focus on automotive

Better customer relations

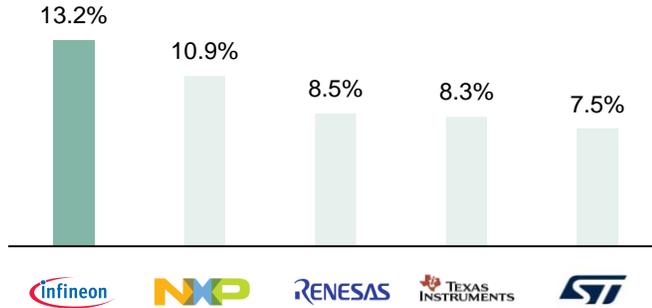
Increased market share in automotive

Increased prices in semiconductors

Sub-Segment Market Share

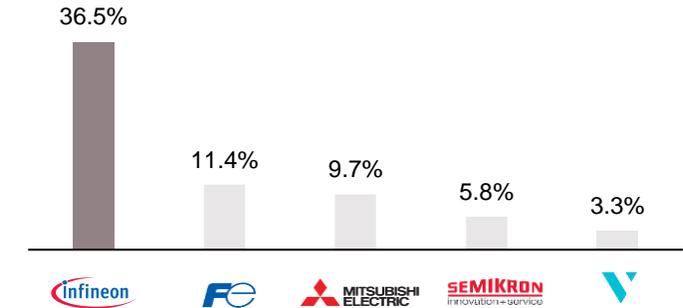
Strong grasp on market share backed by leading position in sub-segment products

Automotive



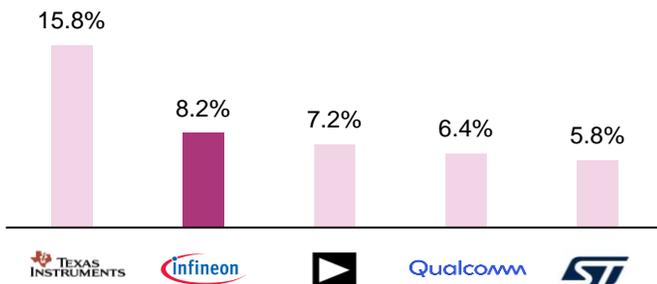
In 2020, Infineon remained the world's largest manufacturer of **automotive semiconductors** and slightly increased its lead over NXP

Industrial Power Control



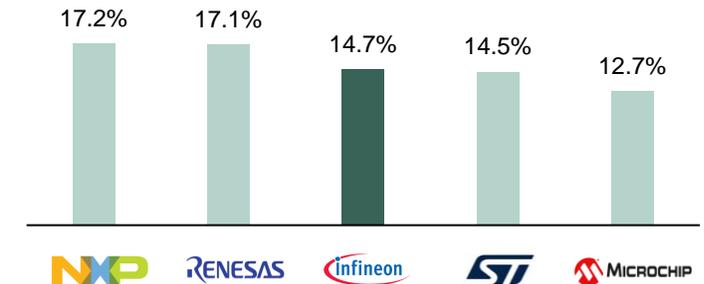
The world market for **discrete IGBT power semiconductors and modules** grew by 0.4 % in 2020. Infineon increased its market share by a slight 1.39%

Power and Sensor System



The world market for **power semiconductor ICs** increased by 0.6% in 2020. Infineon's market share witnessed a rise of 4%, maintaining the 2nd position

Connected Secure Systems



The world market for **microcontrollers** showcased a decline of 0.9%. Infineon also lost 6.4% of market share but remained strong on the 3rd position





Infineon

WUTIS – Equity Research

Peers Benchmarking



Comparable Benchmarking I

German manufacturer surrounded mainly by US peers

Peer group overview

Best Peers
Tier I
Tier II
Other important semiconductor producers (not included)

Best peers and Tier I

Name	HQ	Market Cap.	Revenue					Tier
Texas Instruments		EUR 155.9 bn	EUR 17.6 bn	✓		✓	✓	Best Peers
NXP Semiconductors		EUR 54.5 bn	EUR 9.1 bn		✓	✓	✓	
ON Semiconductor		EUR 26.8 bn	EUR 5.5 bn		✓	✓	✓	
Renesas Electronic		EUR 22.5 bn	EUR 6.7 bn	✓		✓	✓	
Broadcom ¹		EUR 242.5 bn	EUR 23.7 bn	✓		✓	✓	Tier 1
Qualcomm		EUR 184.7 bn	EUR 28.7 bn	✓	✓			
Micron Technology		EUR 94.8 bn	EUR 26.2 bn	✓	✓			
Analog Devices		EUR 82.4 bn	EUR 6.3 bn	✓	✓			
Microchip Technology		EUR 43.3 bn	EUR 5.2 bn	✓	✓			

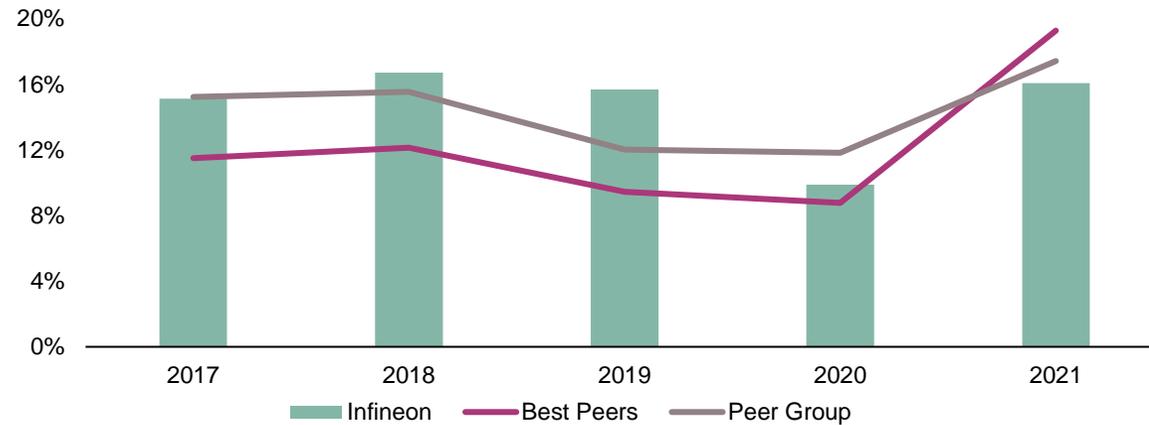
Peer group selection information

- Semiconductors**
 Only companies that are focusing on producing semiconductors are included in the best peer group. This constraint gets loosened in lower tier peer groups.
- Automotive, Industrial Power, Power & Sensors, Connected Secure System**
 Best Peers only include companies for which the main revenue streams are generated in those three end markets.
- Common theme**
 Companies similar in size are considered, further extreme outliers got excluded, in order to not distort multiple valuation.

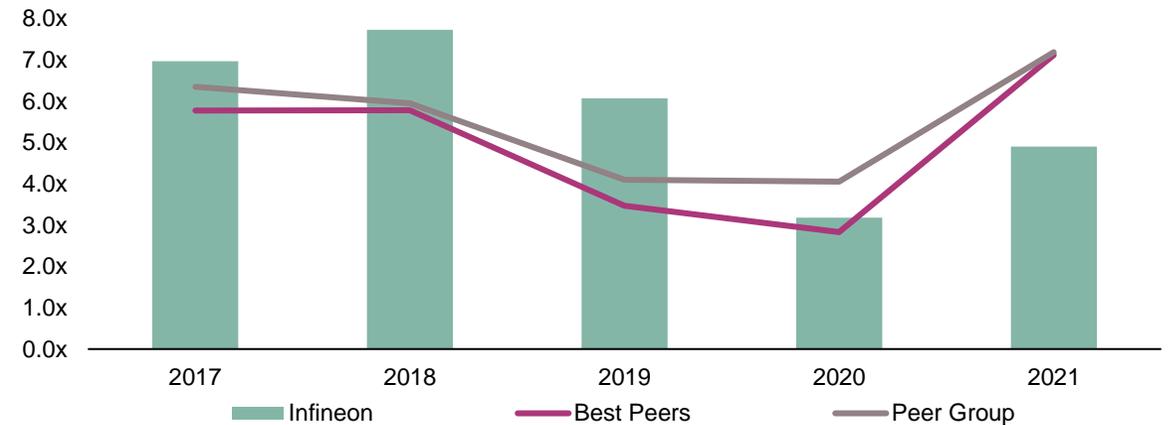
Comparable Benchmarking II

After the distortion in 2020 the Infineon is on the way to rebuild long-term profitability

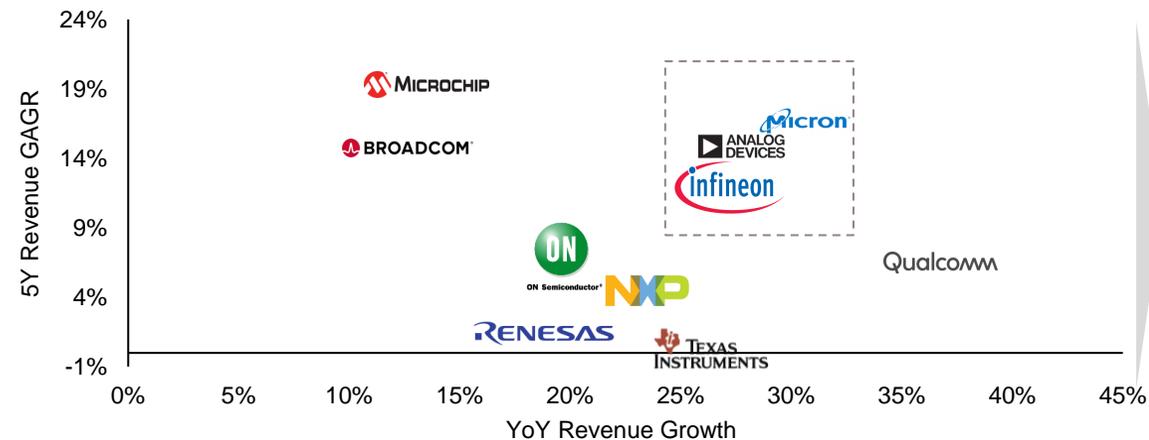
EBIT margin dropped below industry average after acquisition of Cypress



Asset turnover outperformed peer group in 2017-2019



Infineon experienced solid short-term and long-term revenue growth



EBIT margin
 Industry margins were on the decline, due to increasing prices in raw materials. In 2021 margins spiked as, prices of semiconductors were driven up by the shortage. Infineon's margin got hit especially hard, as their main market is automotive.

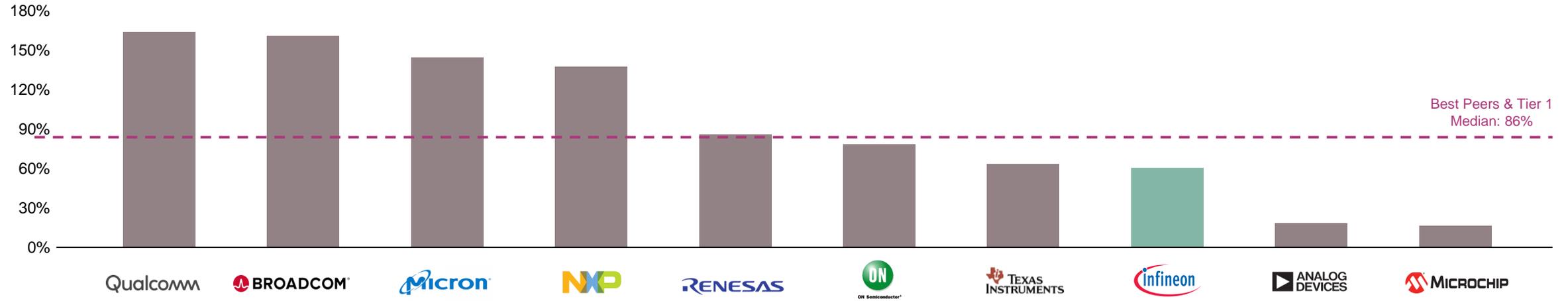
Asset turnover
 Historically Infineon was more effective in turning their assets over. With the investments in several new assets, namely the factory in Austria and the acquisition of Cypress the ratio got distorted. Asset turnover ratio is expected to increase again.

Revenue
 Infineon was able to grow their revenue by around 29% compared to the prior year. This was caused on the one hand by the acquisition as well as the price increase. However, compared to other peers, Infineon shows additionally good long-term growth.

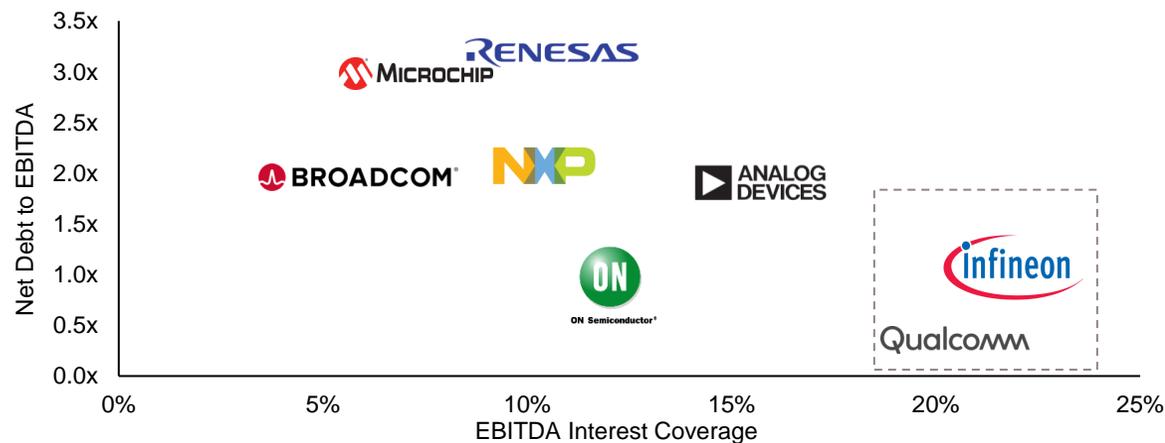
Comparable Benchmarking III

Low debt minimizes risks and interest costs for Infineon compared to its peers

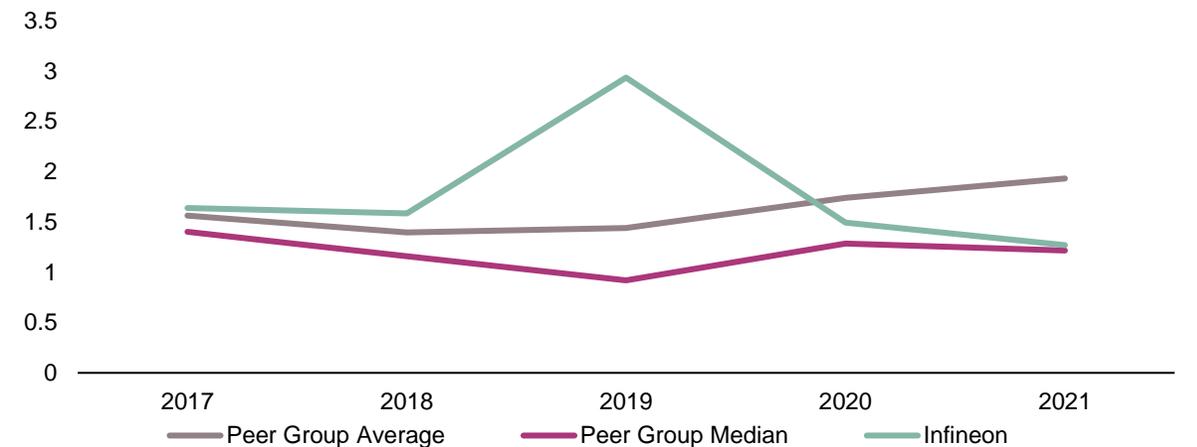
Infineon has one of the lowest debt-to-equity ratio within the peer group, which provides more flexibility



Infineon is able to serve the debt burden



Quick ratio surged before the acquisition of Cypress





Infineon

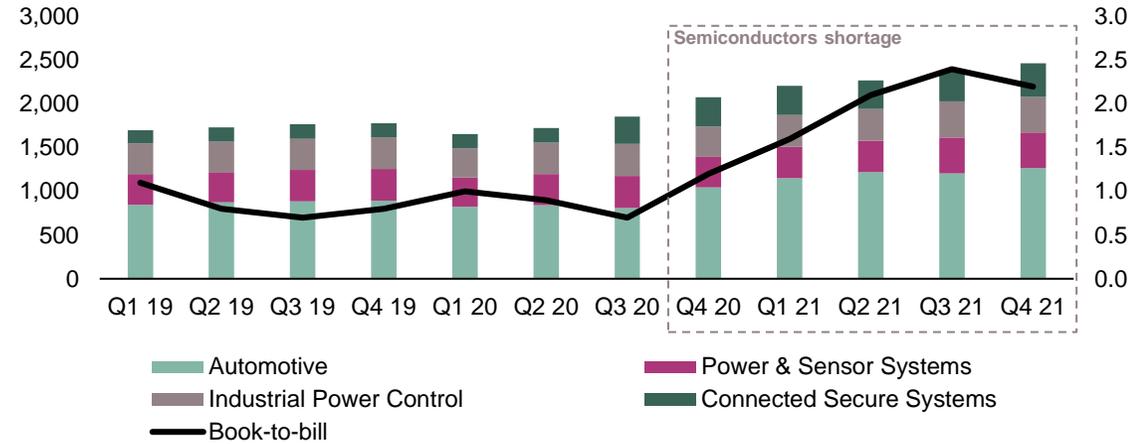
WUTIS – Equity Research

Financial Analysis

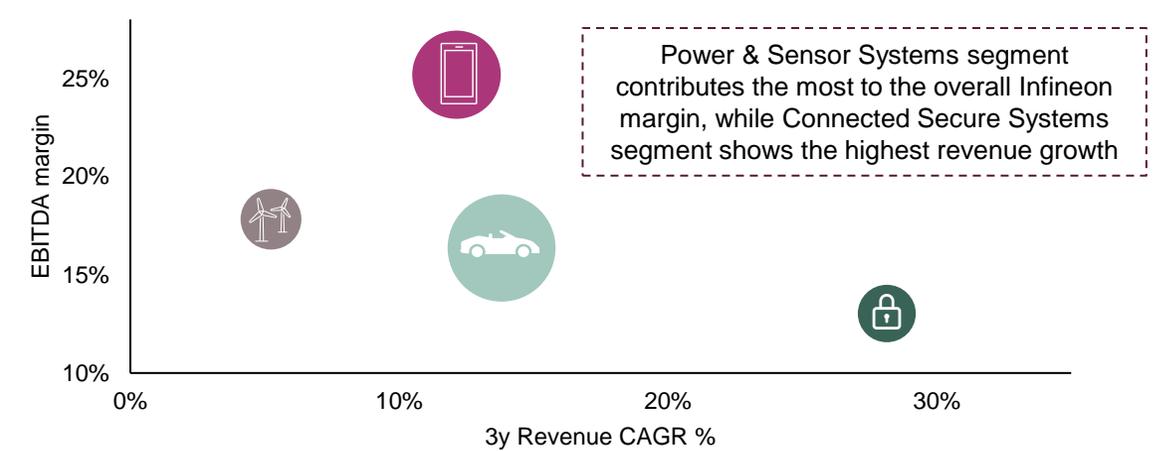
KPIs & Financial Analysis I

Infinion shows capability to generate enough cash and maintain healthy liquidity position

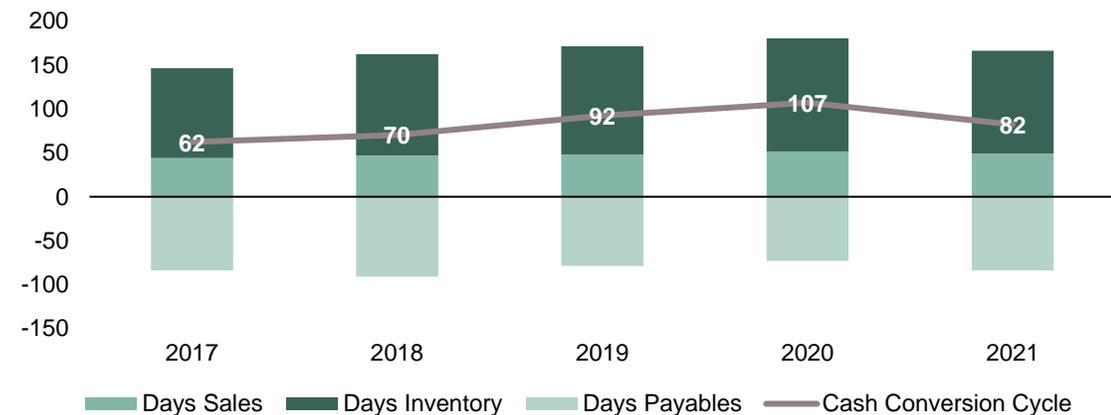
Chip squeeze in Q4 2020 lead to surge of book-to-bill ratio (EURm)



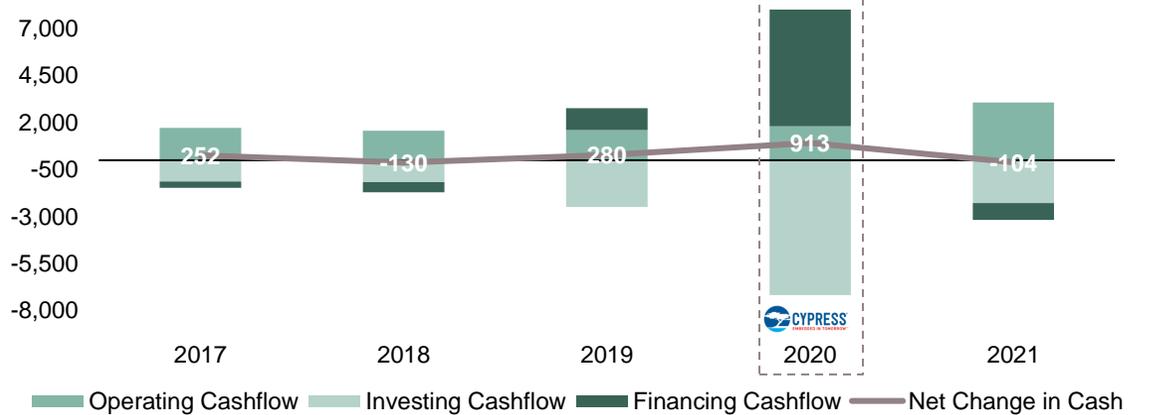
Balanced segment split ensuring solid top and bottom-line growth



Acquisition slightly increased cash conversion cycle (days)

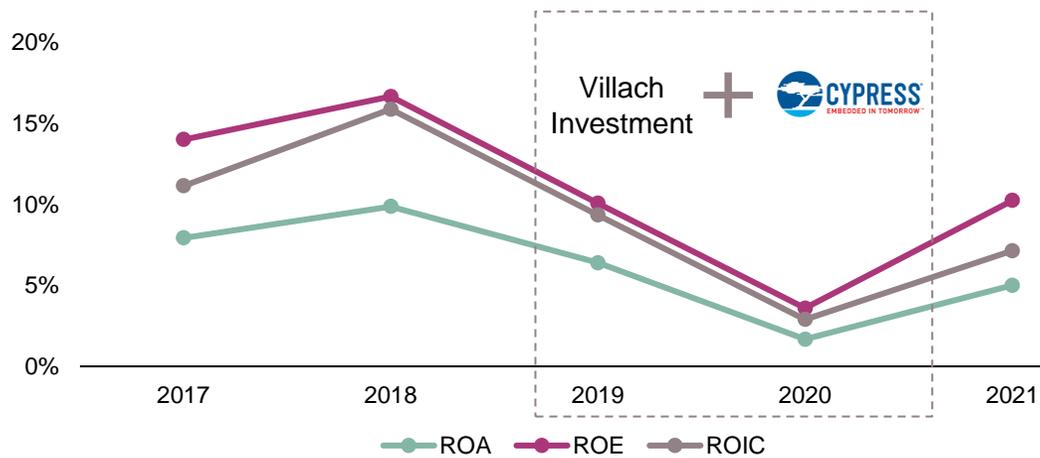


Historically operating cashflow is sufficient to maintain investment target (EURm)

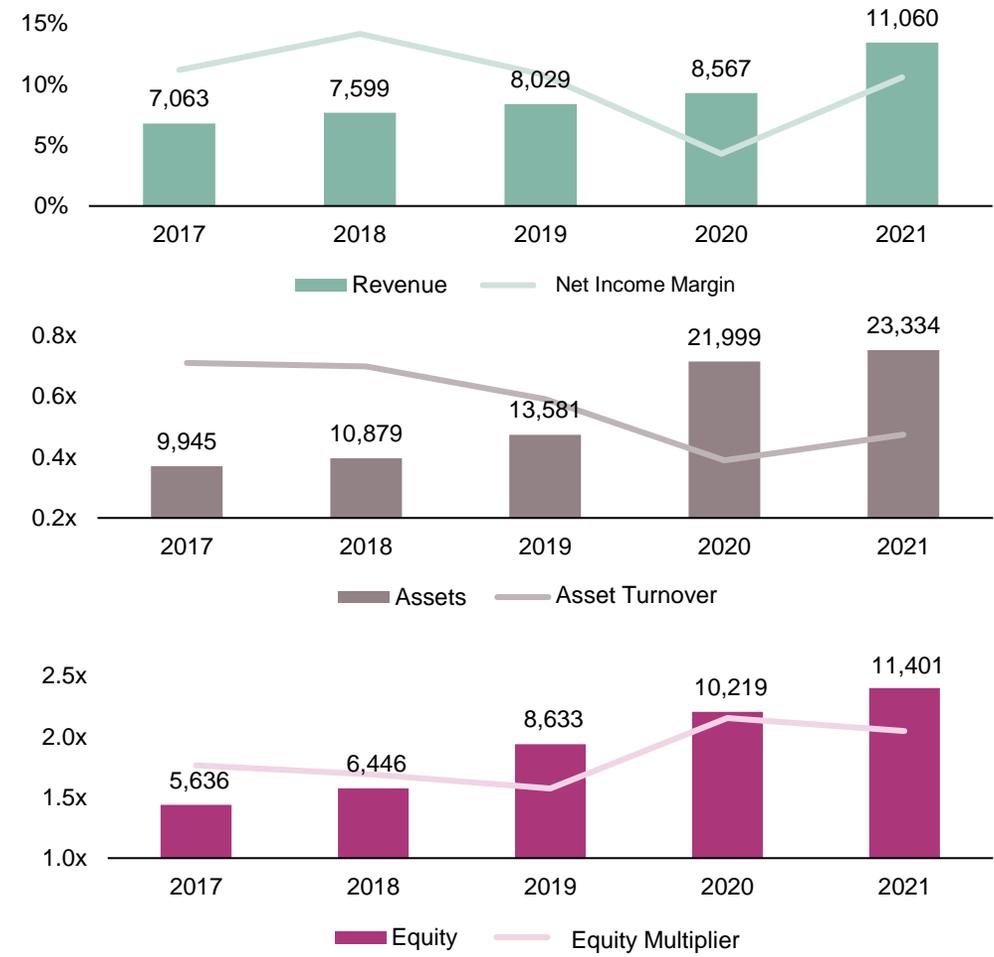


Acquisition worsened profitability in 2020 however significant improvement is seen already in 2021

Profitability improvements after intensive investment activity



Rapid jump in the total assets and lagged synergy realization (EURm)



Acquisition impacted financials massively in 2020

Revenue
2021 was the first year of the full realization of Cypress acquisition resulting in a 29% increase in the top-line compared to 2020

Total assets
In 2019 assets increased due to a large investment in the production sites in Villach, AUT. In addition, assets went up massively due to the Cypress acquisition in 2020

Capital Structure
30% of the acquisition was financed by the equity, the rest corresponds to the debt in the amount of 1.5bn. This increased the leverage level significantly



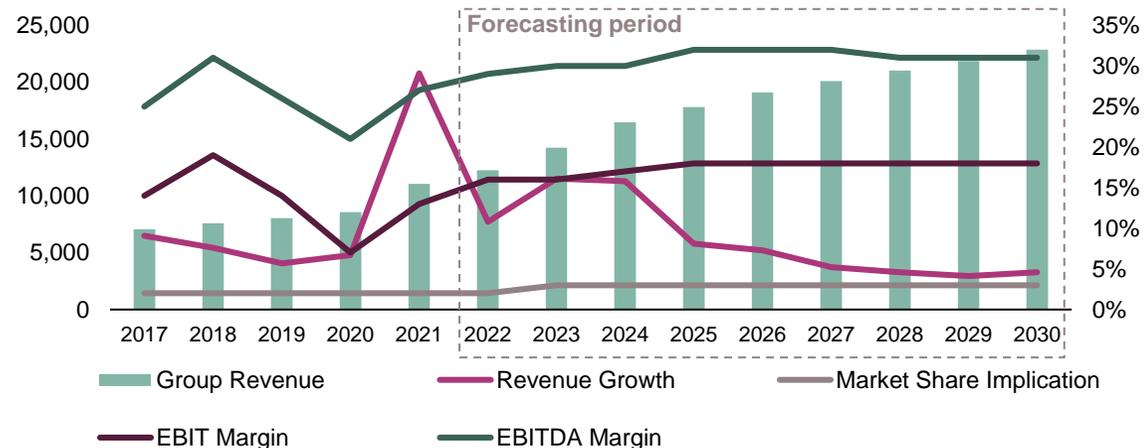
Infineon

WUTIS – Equity Research

Valuation

DCF under conservative assumptions and multiples methods confirm BUY recommendation

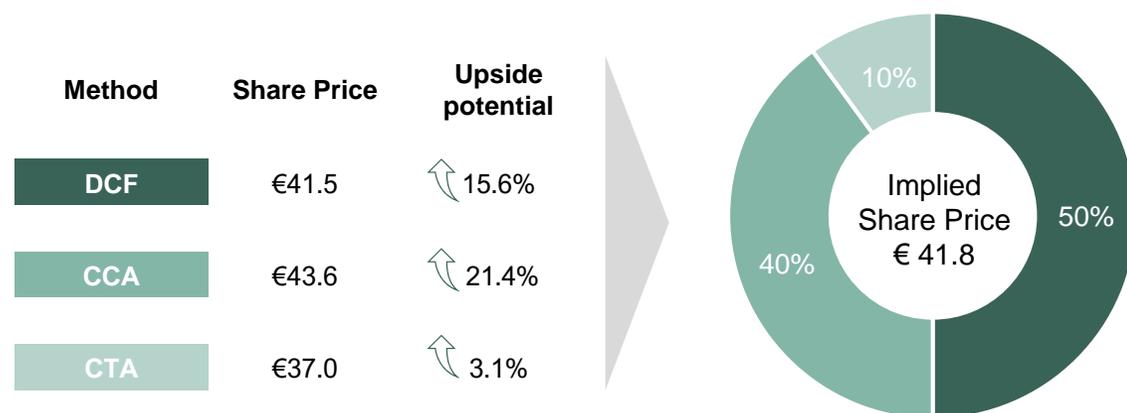
Revenue development in the forecasting period (EURm)



Key drivers of DCF valuation

- Revenue:** The market share of Infineon is forecasted to increase from 2.27% in 2021 to 3.33% ensuring 8.4% CAGR over the forecasting period
- EBIT Margin:** Operating margin is assumed to converge to industry average of 18% in 2030 due to the economy of scale and costs synergies from Cypress acquisition
- WACC and LT growth rate:** WACC of 6.5% is derived based on the recent 5-year beta of Infineon LT growth rate of 3.3% is LT GDP growth weighted by the revenue sources

Valuation summary



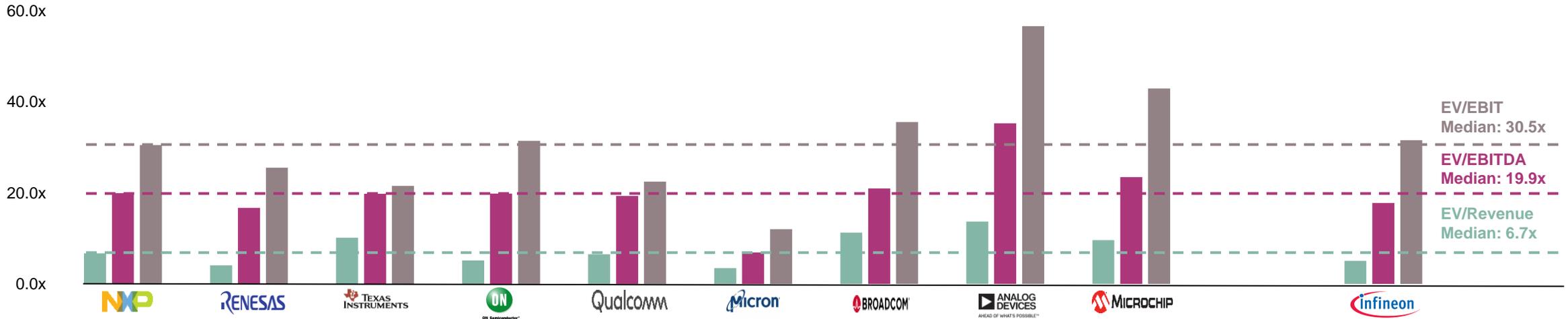
Sensitivity table

WACC	Growth Rate				
	2.94%	3.14%	3.34%	3.54%	3.74%
6.07%	42.75	45.33	48.27	51.69	55.68
6.27%	39.89	42.12	44.65	47.55	50.92
6.47%	37.35	39.30	41.49	43.99	46.85
6.67%	35.08	36.79	38.71	40.87	43.33
6.87%	33.05	34.56	36.25	38.14	40.27

Comparable Company Analysis

Trading multiples shows that Infineon is undervalued relative to the peers

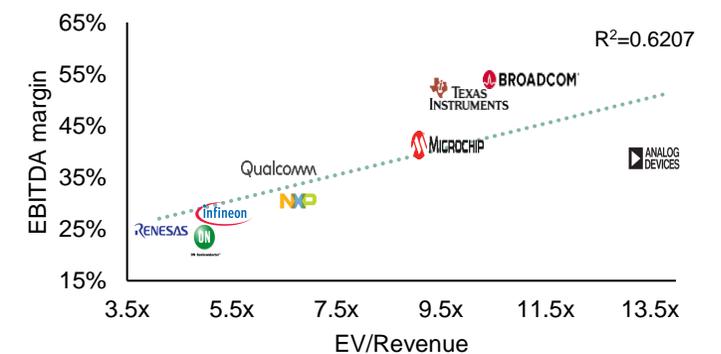
Multiples valuation summary



Comparable companies: overview (EUR)

Company Name	HQ	Market cap	Enterprise Value	EV/Revenue		EV/EBITDA		EV/EBIT	
				LTM	NTM	LTM	NTM	LTM	NTM
Infineon	Germany	53.2 bn	56.2 bn	5.1x	4.4x	17.8x	13.9x	31.6x	25.3x
NXP Semiconductors	Netherlands	54.5 bn	61.1 bn	6.7x	5.0x	20.0x	13.2x	30.5x	14.9x
Renesas Electronic	Japan	22.5 bn	27.7 bn	4.1x	4.1x	16.8x	16.8x	25.6x	25.6x
Texas Instruments	USA	155.9 bn	154.1 bn	10.2x	8.4x	19.8x	15.7x	21.6x	17.4x
ON Semiconductor	USA	26.8 bn	28.4 bn	5.2x	4.0x	19.9x	12.0x	31.5x	15.7x
QUALCOMM	USA	184.7 bn	188.1 bn	6.6x	4.8x	19.4x	12.2x	22.5x	12.9x
Micron Technology	USA	94.8 bn	91.6 bn	3.5x	2.7x	6.9x	4.7x	12.1x	7.3x
Broadcom	USA	242.5 bn	267.5 bn	11.3x	8.7x	21.0x	14.3x	35.6x	14.6x
Analog Device	USA	82.4 bn	86.9 bn	13.7x	8.1x	35.3x	15.5x	56.7x	18.5x
Microchip Technology	USA	43.3 bn	50.3 bn	9.7x	7.0x	23.5x	14.6x	43.0x	16.0x
Median				6.7x	6.0x	19.9x	13.8x	30.5x	15.3x

EV/Revenue Adjustments



After adjusting EV/revenue for the EBITDA margin Infineon is still undervalued

Best Peers Tier 1



Infineon

WUTIS – Equity Research

Risks

Company Specific Risks

Fierce competition and supplier dependency are key risks for Infineon

- M1

Geopolitical tensions between US and China as well as Covid induced economic uncertainty which can impact the revenue and earnings
- M2

Accelerating M&A activity within the industry can result in even tougher competition, putting pressure on Infineon
- M3

The **cyclical market** causes the forecasts of future business developments to be uncertain
- O1

Dependence on individual suppliers can decelerate revenue stream and put pressure on margins
- O2

Dynamic change in consumer preferences causes fluctuations in order volumes, resulting in rising costs for Infineon
- O3

A **lack of qualified staff** can restrict future growth and hence adversely impact Infineon's liquidity and earnings
- L1

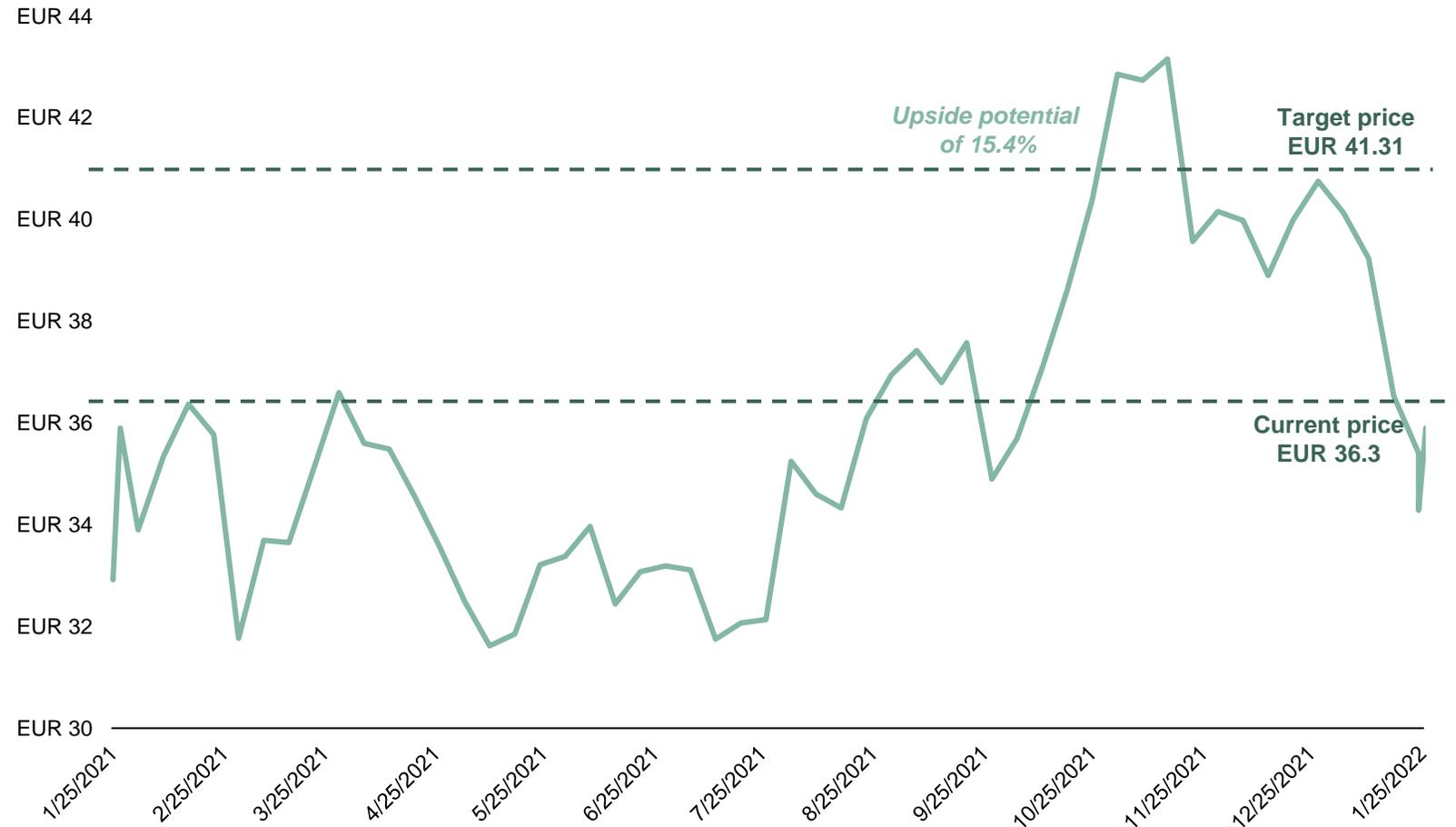
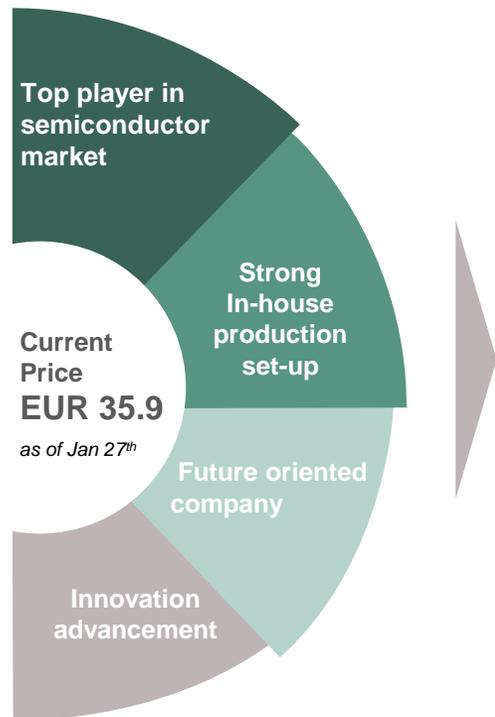
Country-specific legislation and regulations can adversely influence investment activities and the ability to trade freely



Market (M) – Operations (O) – Legislation (L)

Conclusion

Infinion is ready to power the future





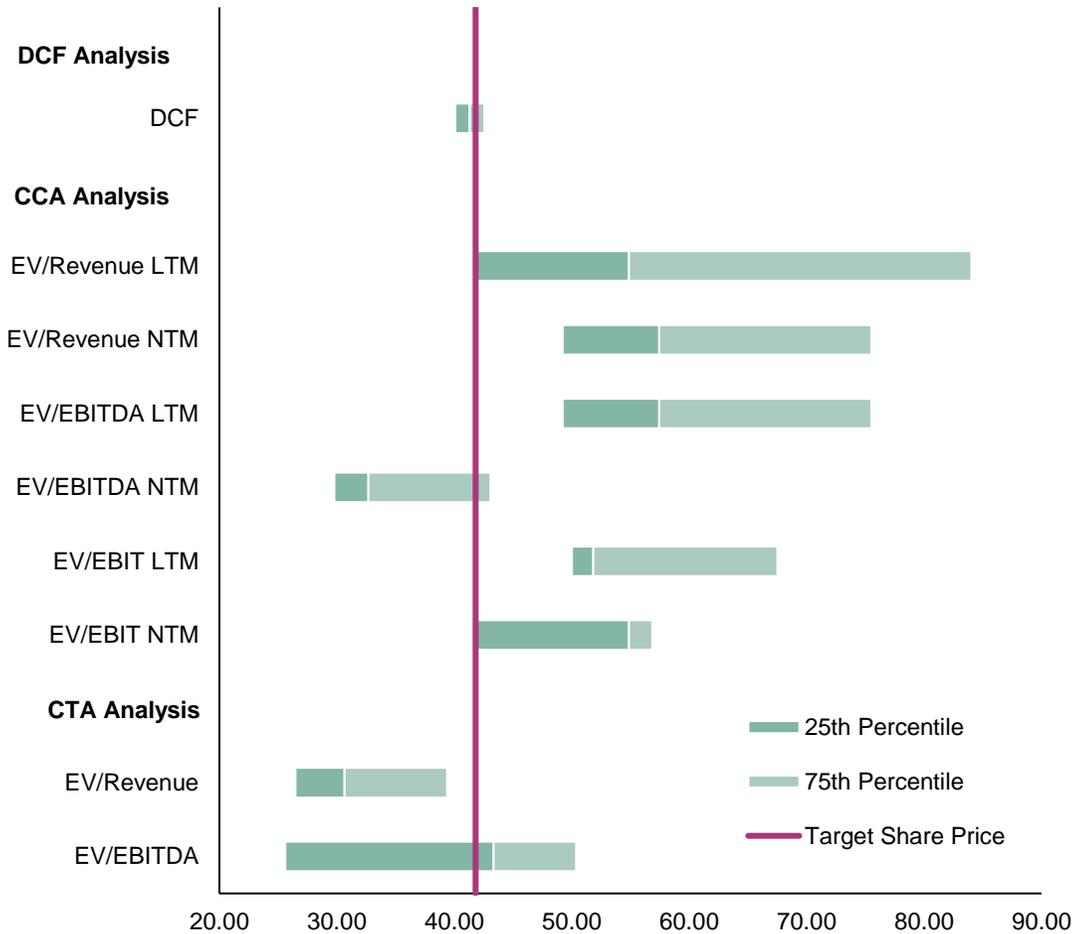
Infineon

WUTIS – Equity Research

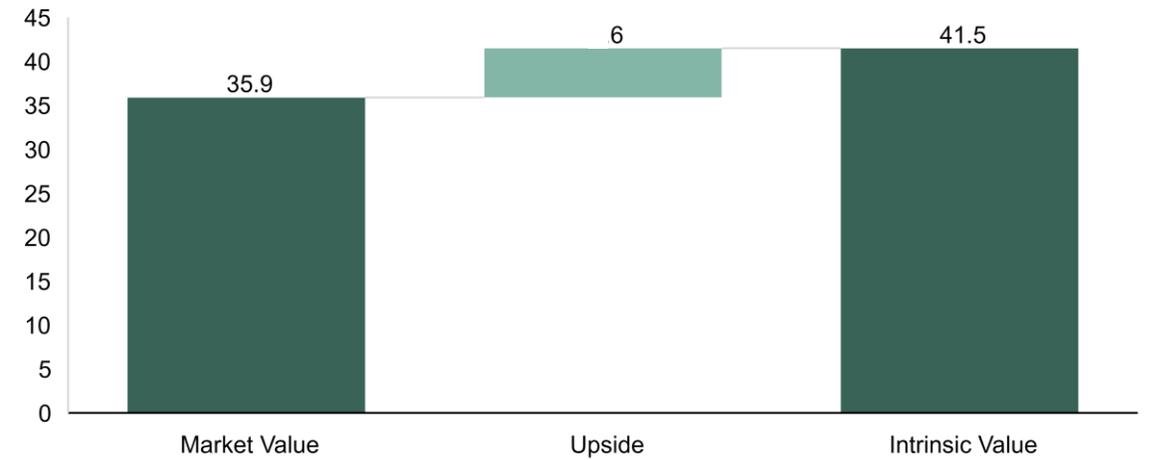
Appendix

Valuation Summary

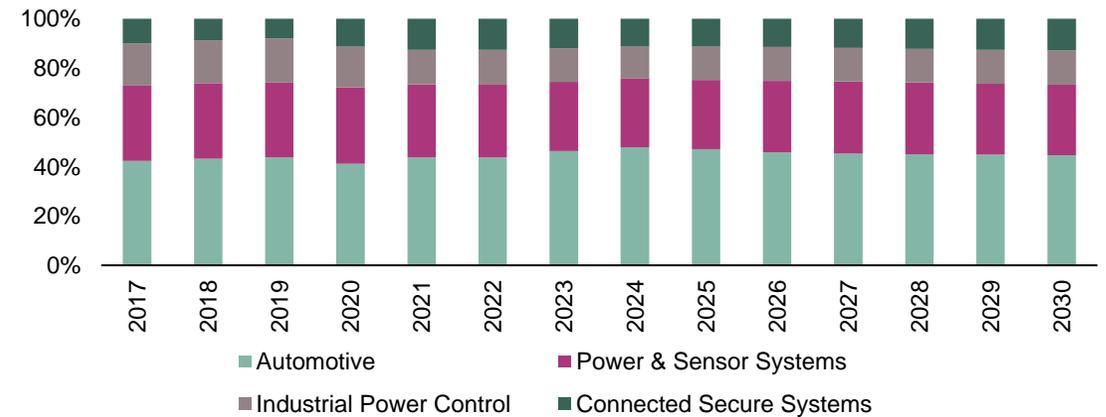
Football field valuation summary



Comparison of market value and intrinsic value for DCF

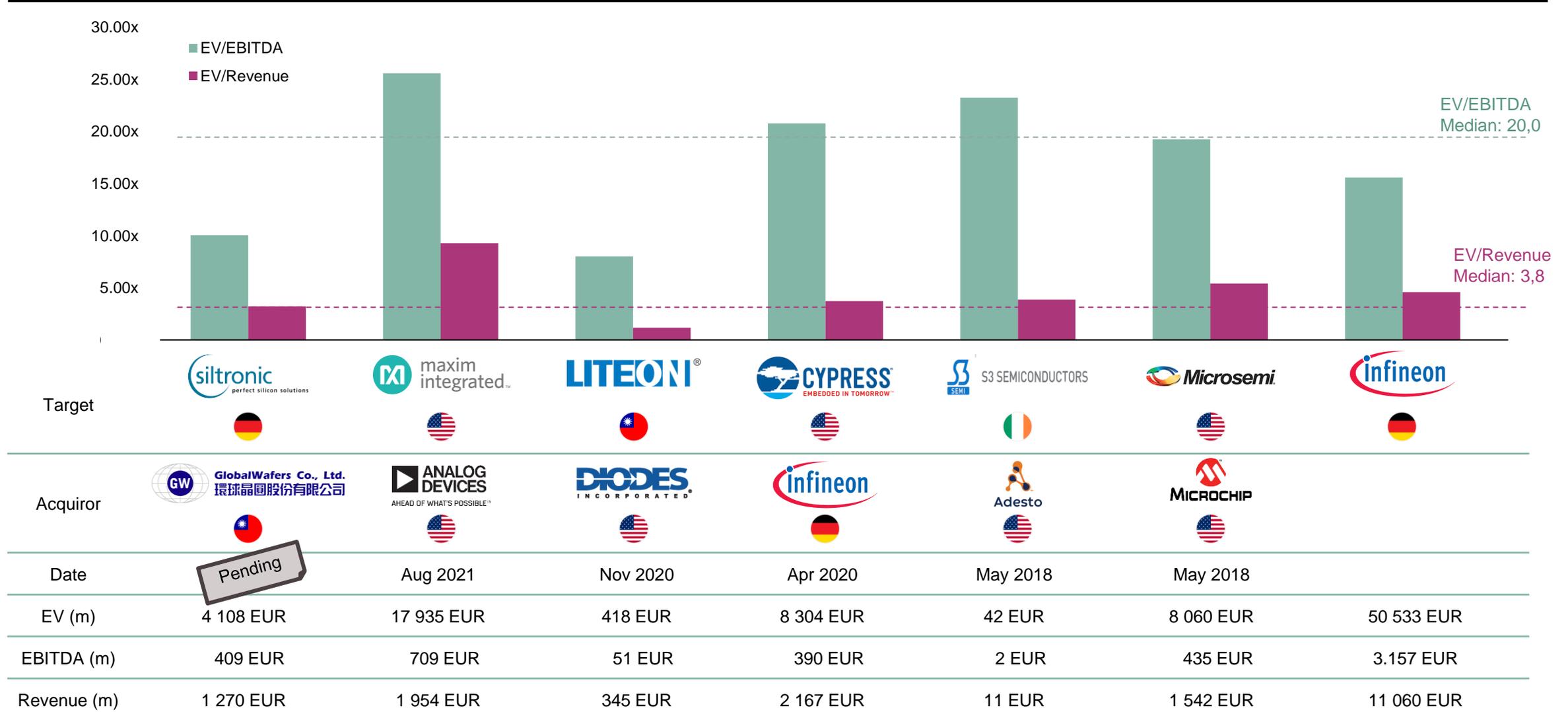


Segment split



Comparable Transaction Analysis

CTA shows that Infineon is undervalued



SWOT Analysis

Strengths and opportunities trump weaknesses and threats

STRENGTHS

- Outstanding **product quality** – also compared to the largest semiconductor manufacturers
- **Market leadership** position and **brand recognition**
- Strong **client relationship** (especially in Automotive)
- Strong **focus on R&D** allows developing innovative products
- **Global manufacturing** sites ensuring supply confidence
- **Green growth** with sustainable solutions for production sites (e.g. recycling heat)

OPPORTUNITIES

- **Robust outlook** for semiconductor demand (accelerated by semiconductor shortage)
- **High-growth industry** with long-term drivers strongly related to sustainability
- Trend of customers migrating to **higher-end products** (Infineon as a premium service supplier)



- High **personnel replacement costs** (development experts)
- Dependence on **few individual suppliers**
- Covid-19 and natural disasters led to **production outages**

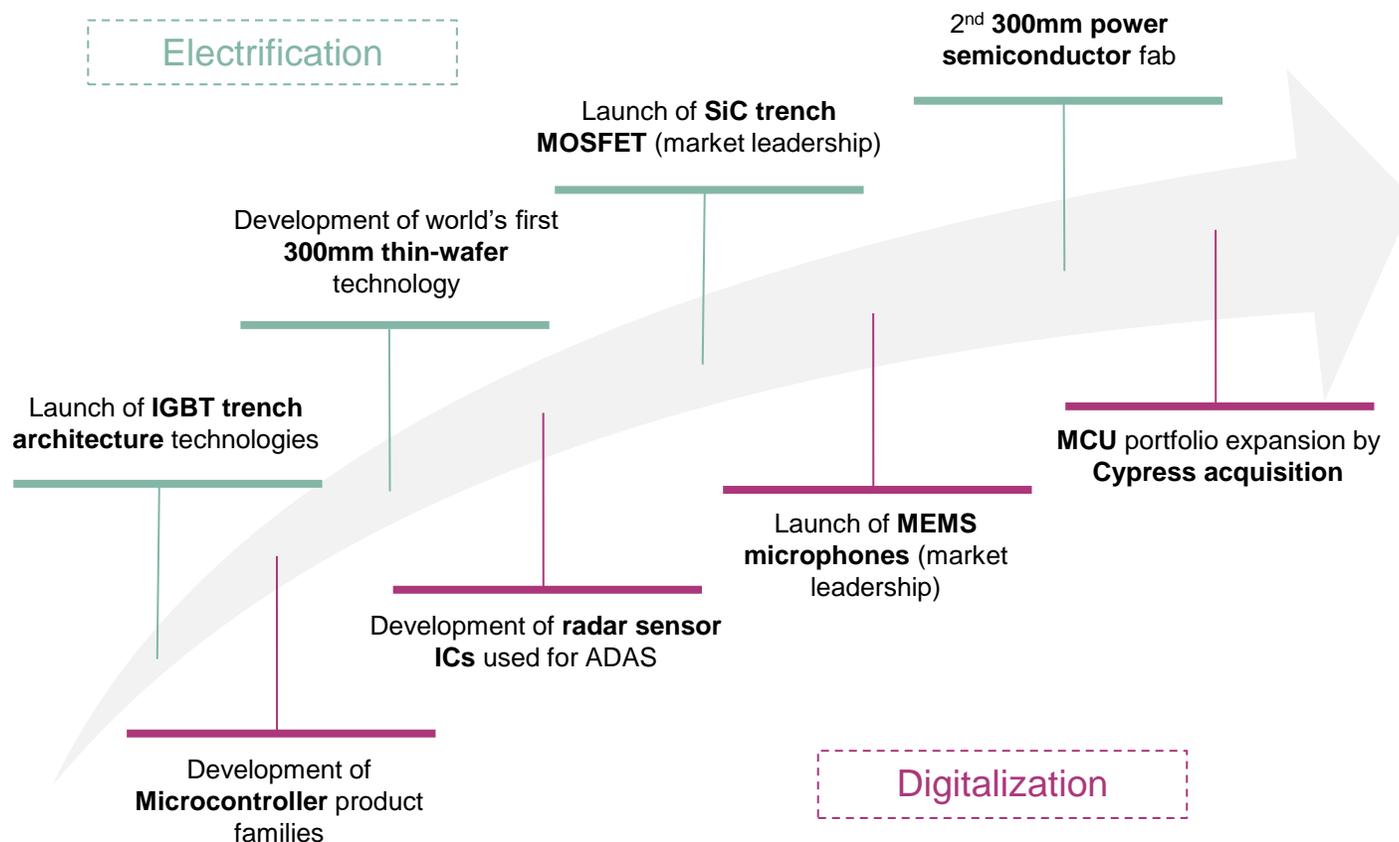
WEAKNESSES

- **Heated political environment** (e.g. trade wars) could impede Infineon's global operations
- Shortage of **skilled labor**
- Increasingly **complex and dynamic industry** making it more difficult to keep pace

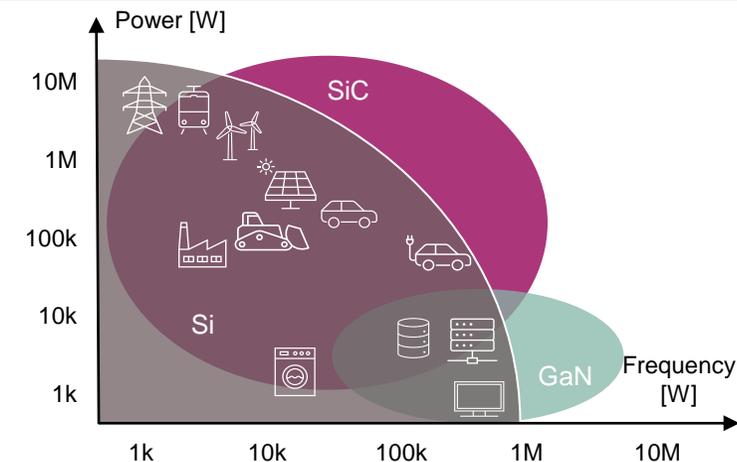
THREATS

Shift towards advanced materials ensures solid top-line growth

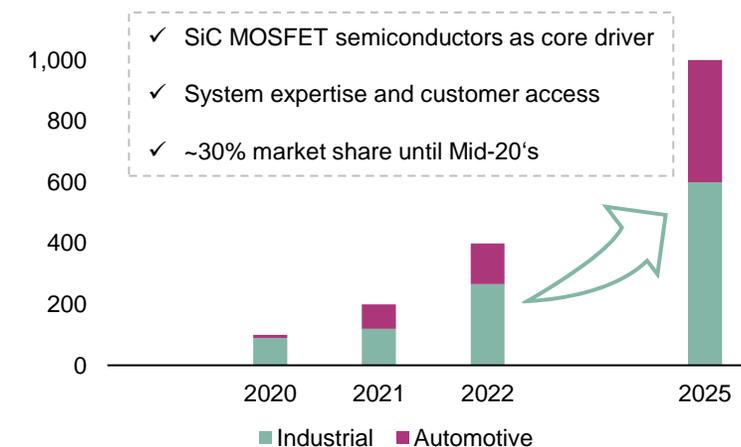
Milestones of Infineon's technological advancement



Material efficiency comparison



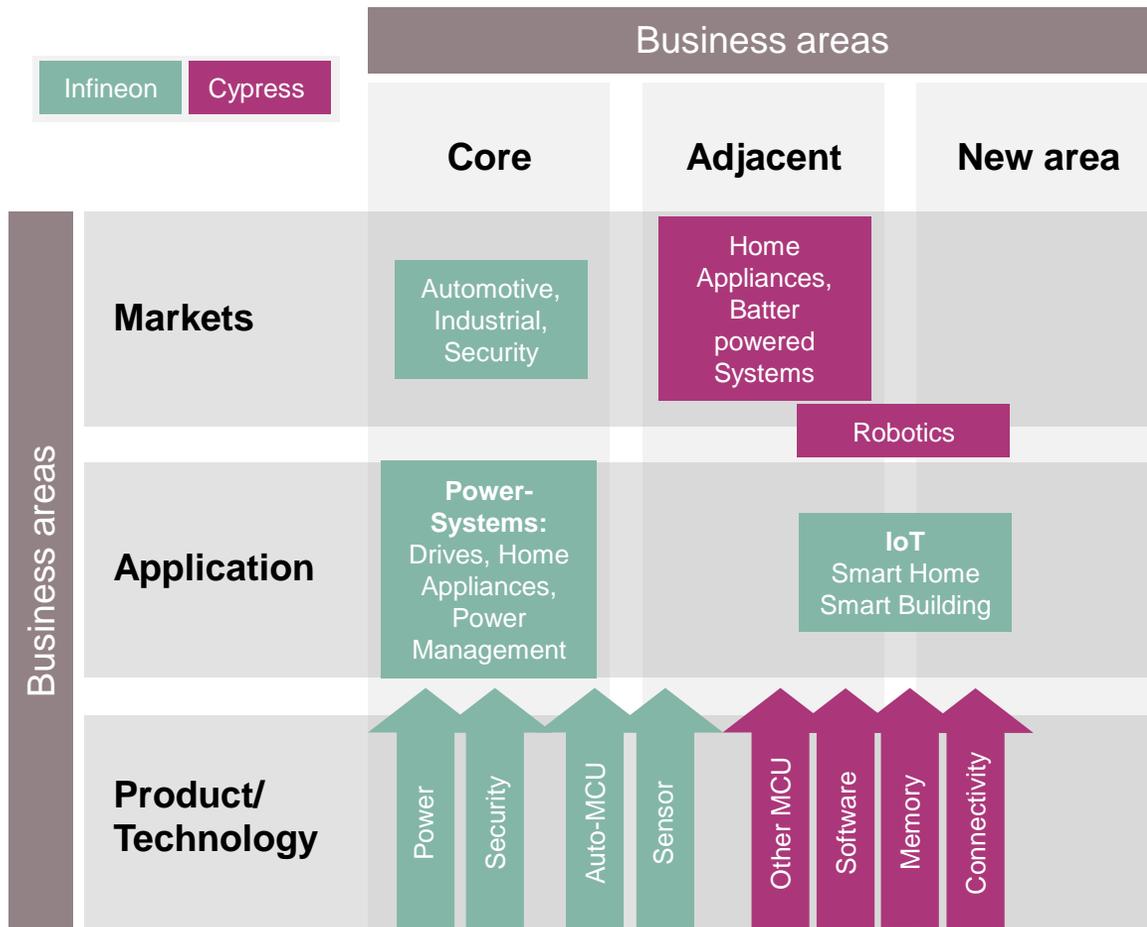
SiC revenue development (in EURm)



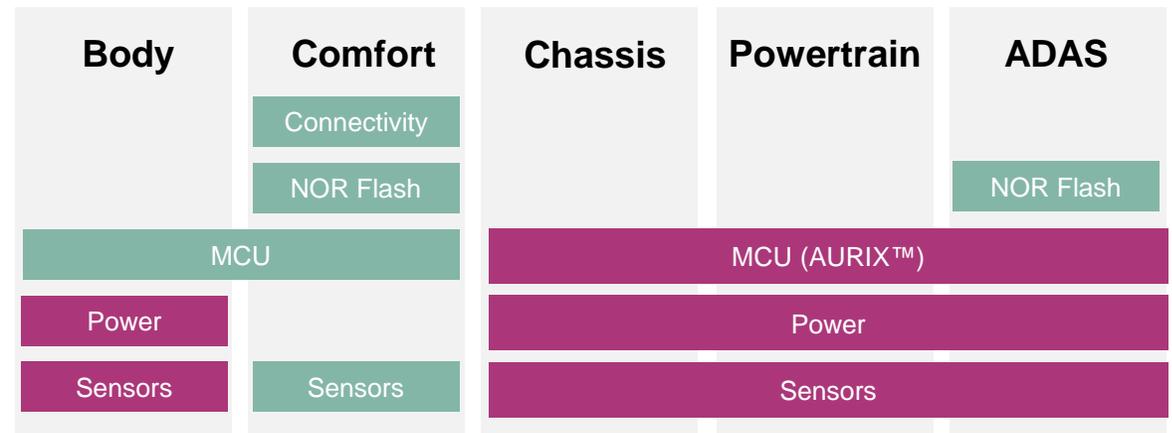
Cypress Acquisition

Accelerating success by combined capabilities and applications

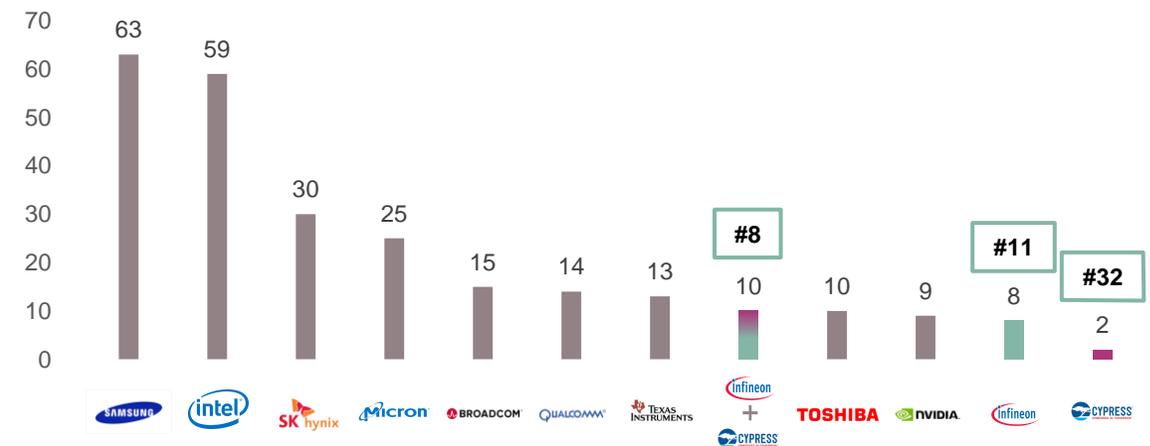
Cypress segment extension



Automotive application coverage



Market share synergy



Porter's Five Forces

Semiconductor industry is highly competitive, but has high entry barriers



Materials used for Semiconductors

Noble earths required for semiconductor production

Elements and Compounds Used in the Manufacturing Process



Silicon Dioxide



Silicon



Boron



Silicon Carbide



Phosphate Rock



Cobalt

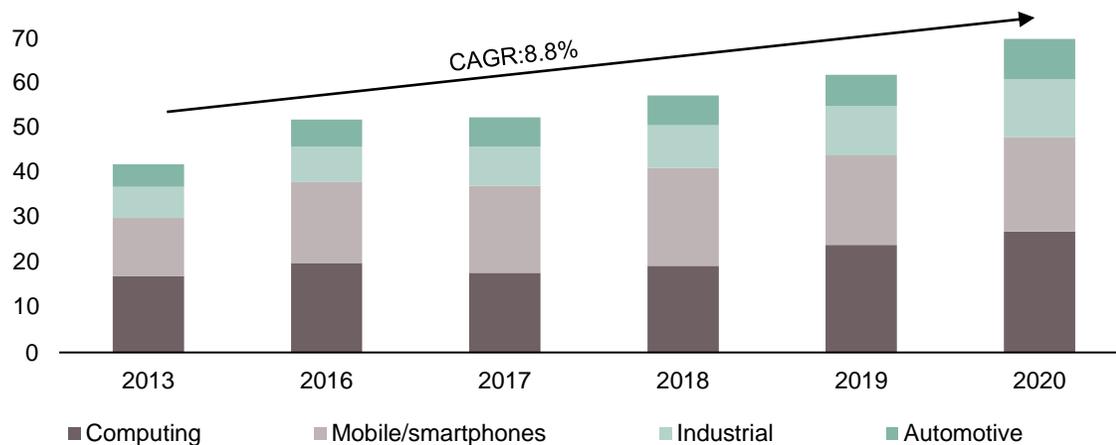


Carbon



Gallium Nitride

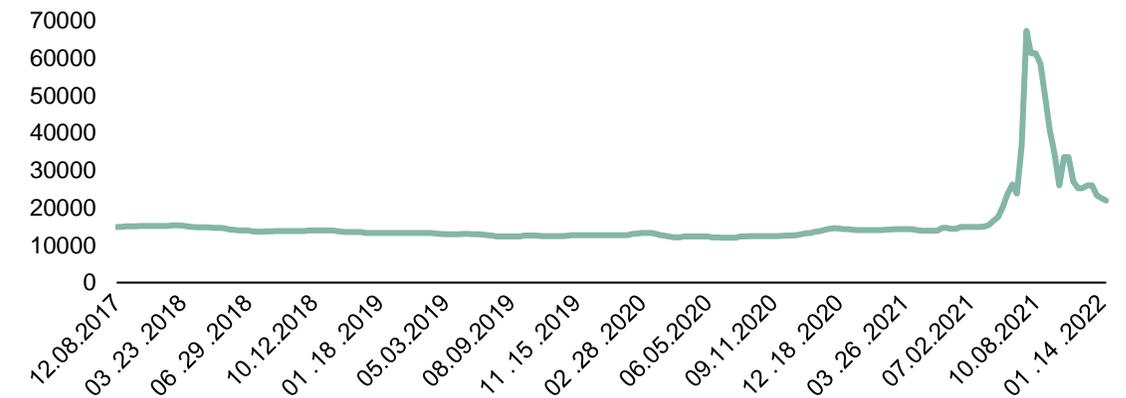
Silicon Waver Demand (in bn square cm)



Responsible supply chain management

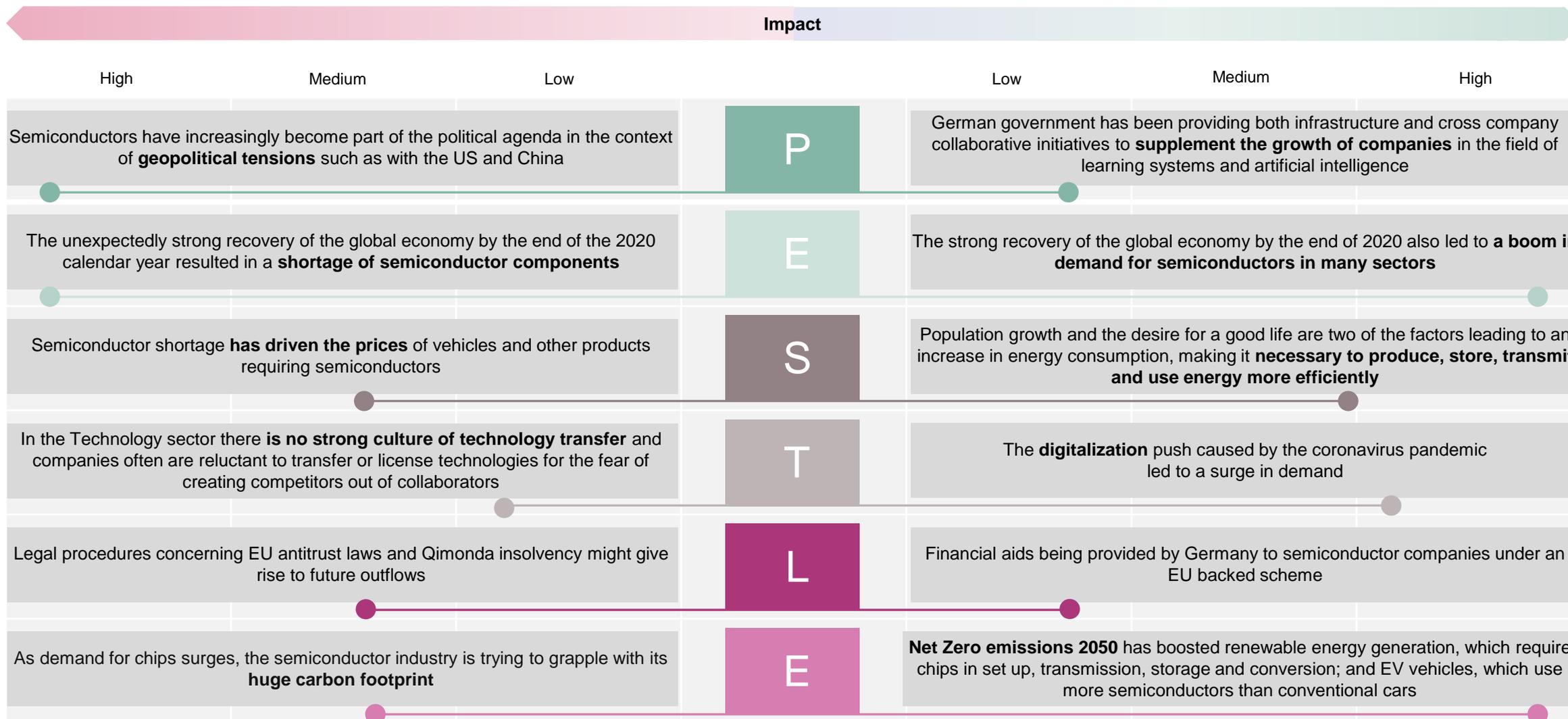
- Infineon's objective is to **maintain a conflict-free supply chain**
- In accordance with **OECD Due Diligence Guidance for Responsible Mineral Supply Chains from Conflict-Affected and High-Risk Areas ("OECD Guidance")**
- **Responsible Minerals Assurance Process (RMAP)**
- Infineon requires suppliers to use the standardized **Conflicts Minerals Reporting Template (CMRT)** issued by the **Responsible Minerals Initiative (RMI)**

China Shanghai Changjiang Silicon Metal Spot Price (in Yen)



PESTLE Analysis

Infineon is subjected to several risks and opportunities generated by the macro environmental factors



Chip squeeze can have further negative impact on sales, whereas design-in contracts have opposite impact

Catalyst	Type	Influenced factor	Estimated impact on share price
Semiconductor Chip Shortage	Hard	Revenue	<ul style="list-style-type: none"> Medium – Company misses on opportunity to cash in Revenue from orders received as the capacity is unable to meet current excess demand in the semiconductor market. 
New governmental guidelines and regulations	Soft	Revenues COGS	<ul style="list-style-type: none"> Medium – Revenue concentration of 38% of total revenue in Chinese market. Trade and import tariff wars between the US and Chinese market. 
Coronavirus pandemic	Soft	Operations Earnings	<ul style="list-style-type: none"> Medium – Deterioration in global economic conditions beginning of 2020, economy unexpectedly recovered Q2 2020 leading to a massive increase in demand for semiconductors while COVID affected multiple supply chains. 
New acquisitions or joint ventures partnerships	Hard	Revenue Reputation	<ul style="list-style-type: none"> Medium – New acquisitions as well as the establishment of new partnerships will strongly impact future performance by diversifying the company's portfolio as well as increasing market share leadership in segments. 
Design-In Contracts	Hard	Revenue Projects	<ul style="list-style-type: none"> Strong – Securing partnerships and design-in contracts with major customers in the ATV and industrial segments would represent a major boost to Revenue. 

Main Drivers Causing the Shortage

Demand Drop & Surge:

In Spring 2020 many companies canceled their orders, chip manufacturers reacted by reducing production capacity. When the economy picked up again mid-year, producers could not keep up.

Entry Cost:

The entry barriers to becoming a semiconductor producer are high. Experts claim that companies need at least three years to become production ready. Further the initial investment exceeds \$10 billion.

Transportation Delays:

With increased demand in transportation, a slowdown in shipping occurred during the pandemic. This delayed the arrival of important material and increased the cost of transportation for manufacturers.

Shortage of materials:

One of the main bottlenecks is the shortage of materials. Mainly the supply constraints of silicon. This metal is crucial for the silicon wafers.

Global Regulations:

US as well as China set harsh regulations on the semiconductor industry as part of their trade war. As a result, companies lost access to suppliers as well as manufacturers.

Natural Disasters:

Extraordinary events, like a blizzard in the United States and a fire in Japan shut down production lines and therefore further decreased the output capacity.

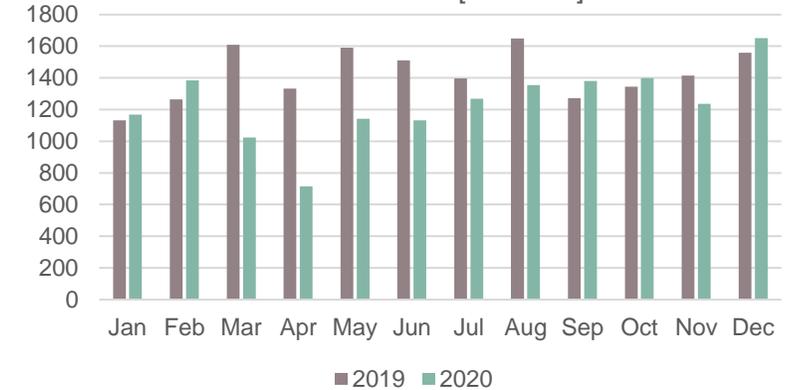
COVID-19:

Many manufacturers have troubles keeping their production sites running, as workers need to quarantine, when being infected.

Further with the pandemic multiple macro-economic events (e.g. labor shortage) added pressure on the industry

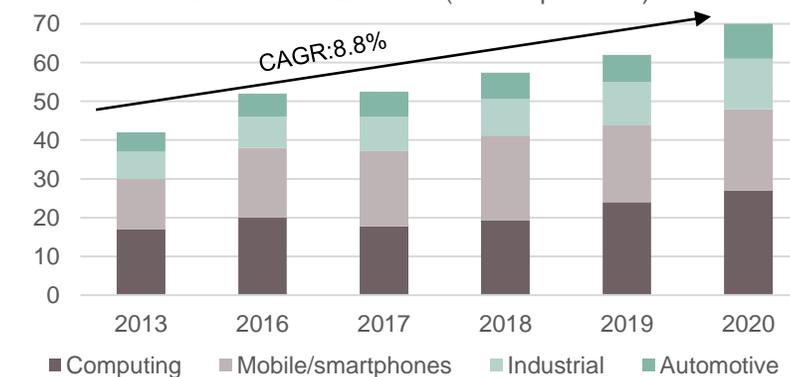
Demand during the Pandemic

US vehicle sales [in k units]



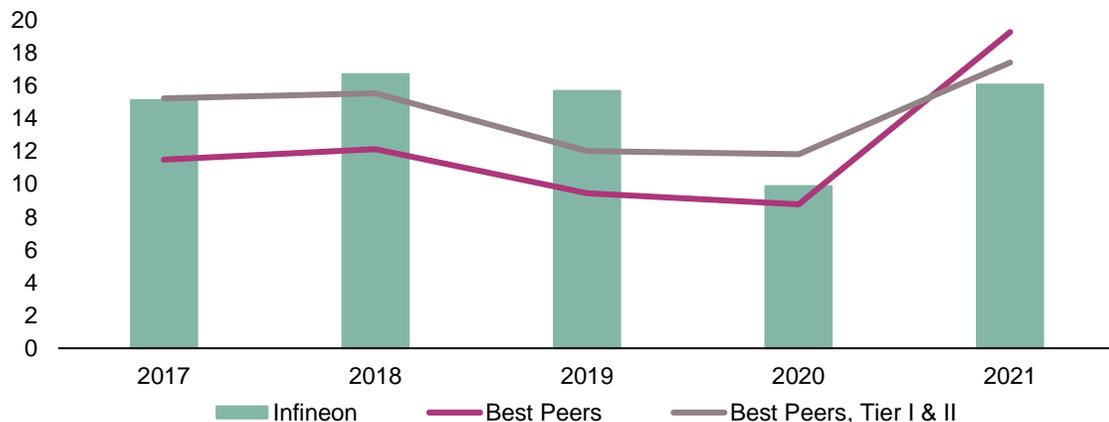
Demand for Key Material

Silicon Wafer Demand (in bn square cm)

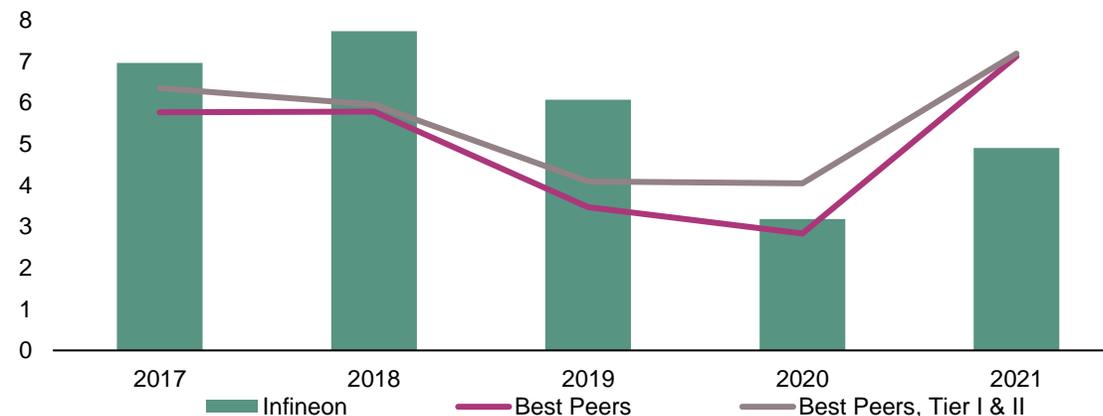


Due to the Cypress takeover KPIs went down in 2020 yet increased again in 2021.

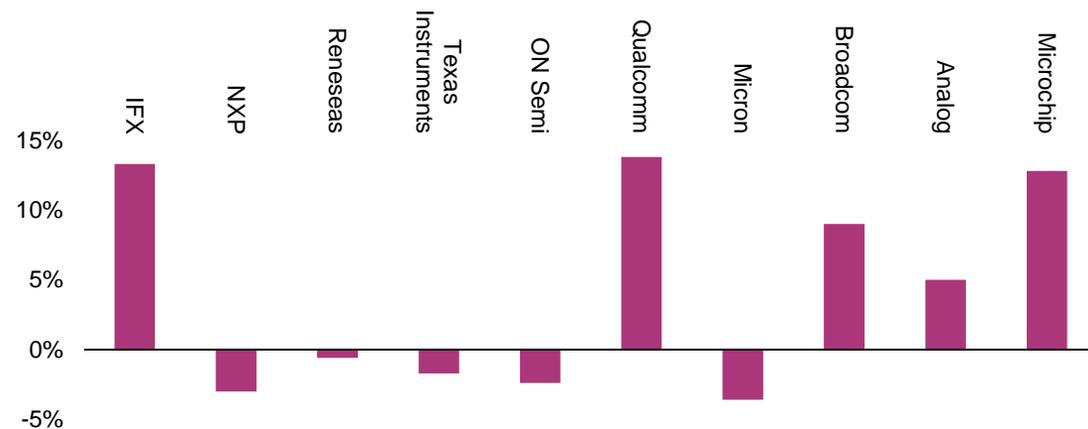
EBIT Margin



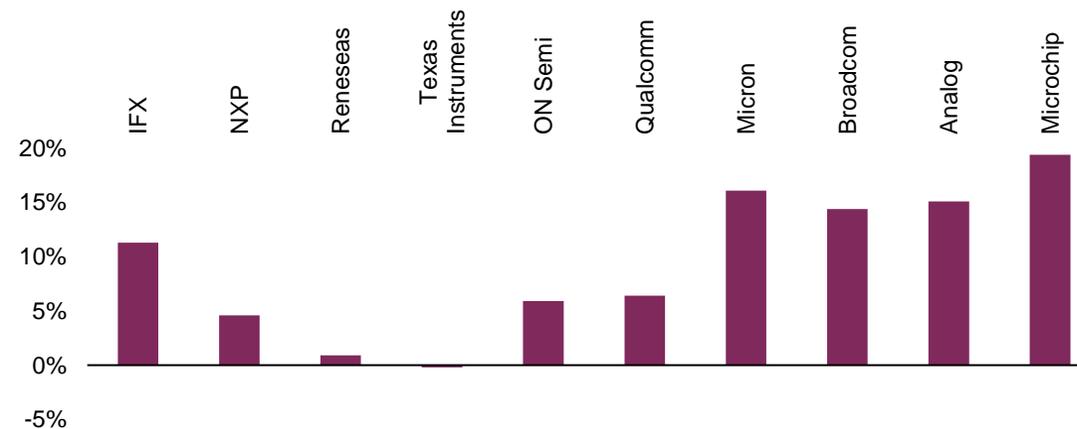
Asset Turnover



3Y Revenue CAGR

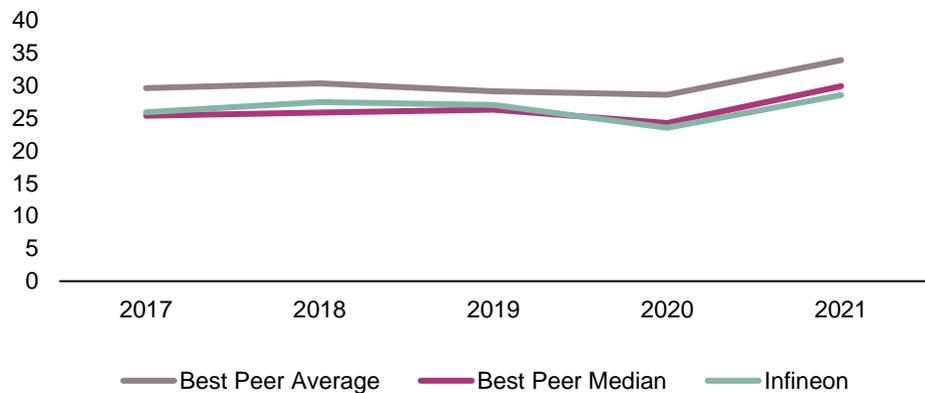


5Y Revenue CAGR

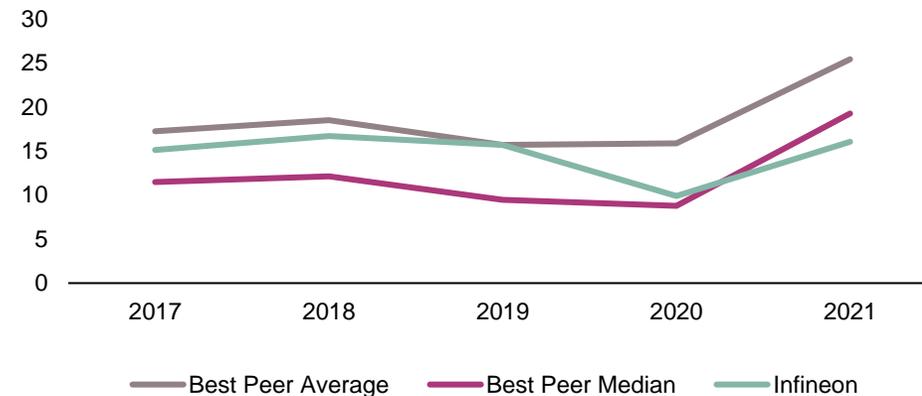


Infineon showing higher profitability ratios than peers before takeover in 2020.

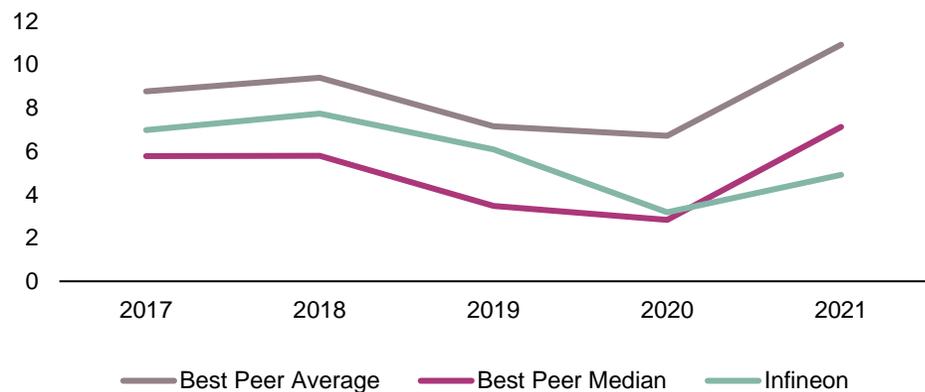
EBITDA Margin



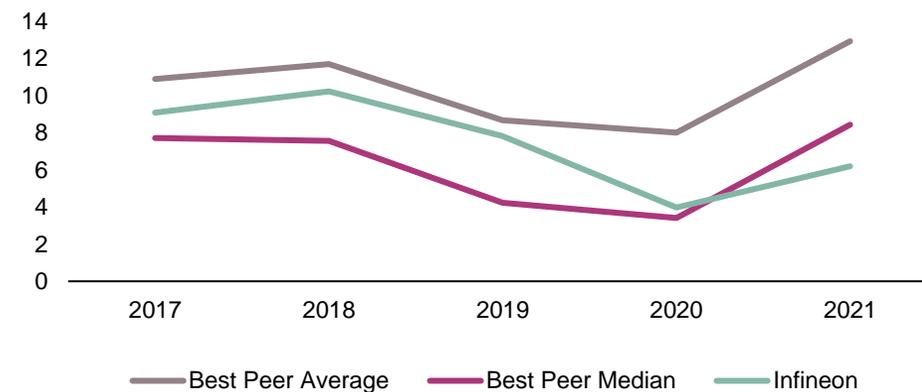
EBIT Margin



Return on Assets



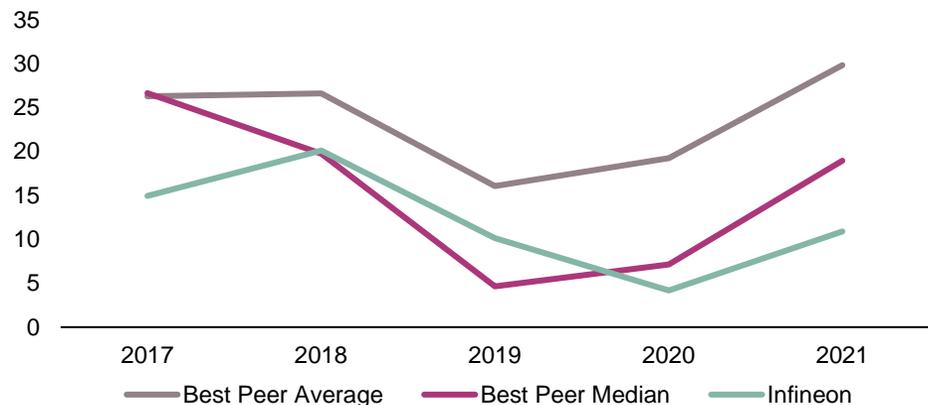
Return on Capital



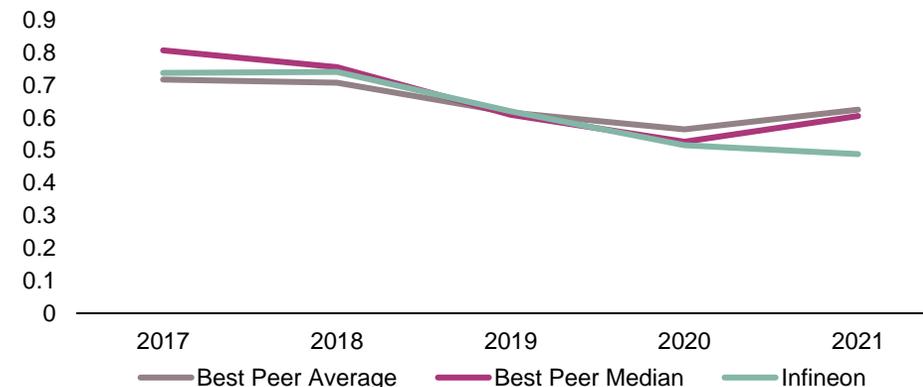
Peers III

Infinion compared to peer group for specific ratios.

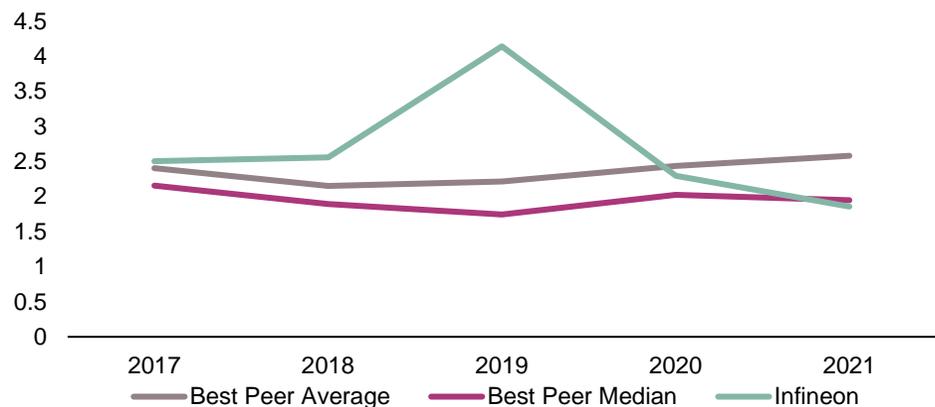
Return on Equity



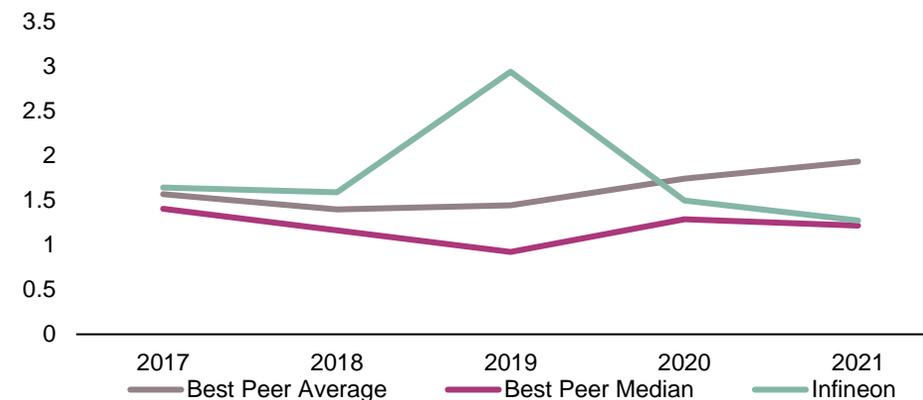
Asset Turnover Ratio



Current Ratio

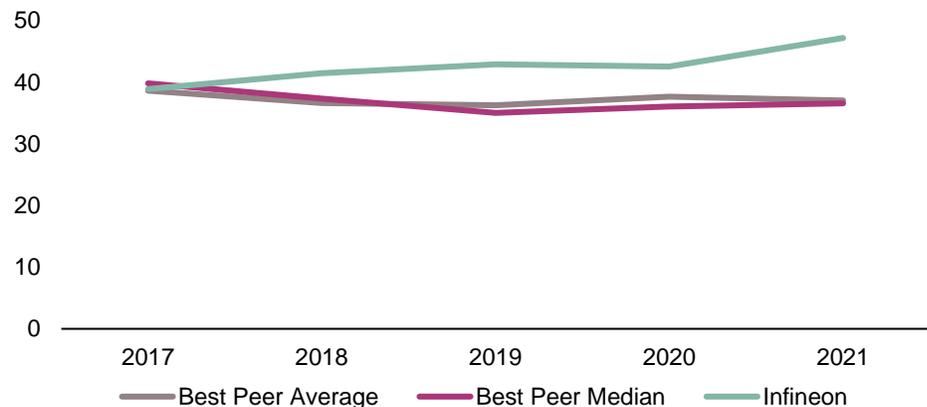


Quick Ratio

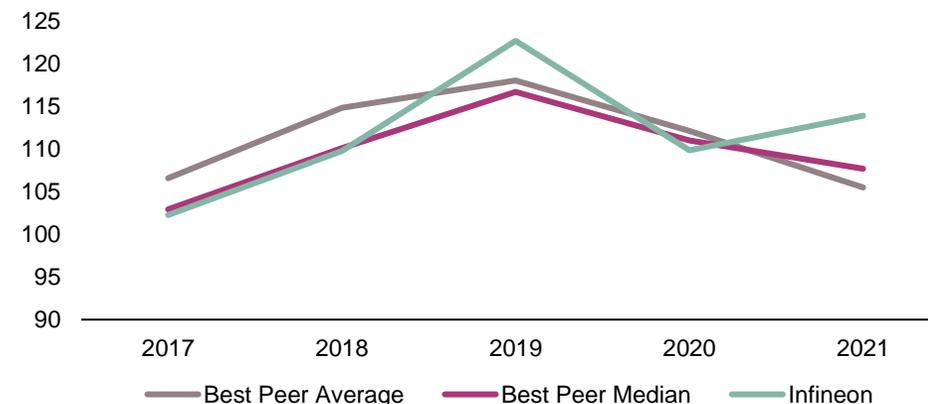


Infineon in comparison with peers regarding efficiency ratios.

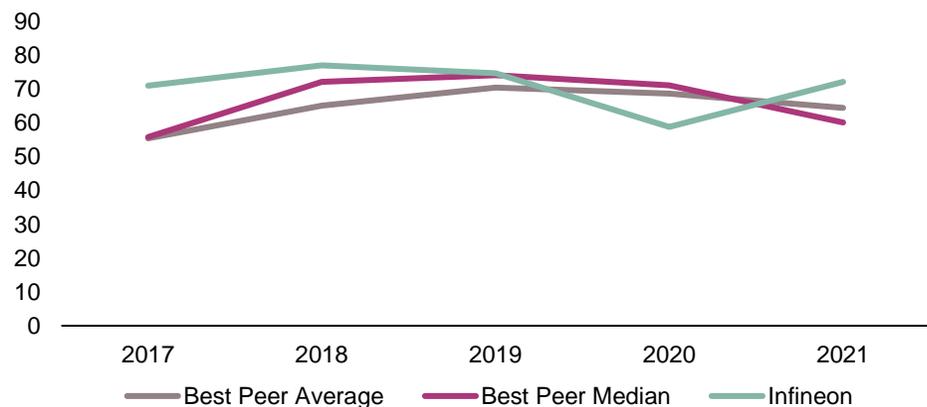
Days Sales Outstanding



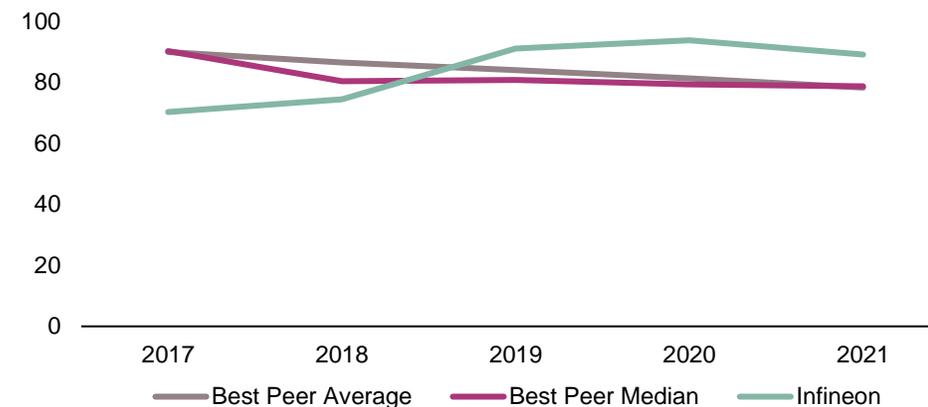
Days Inventory Outstanding



Days Payable Outstanding

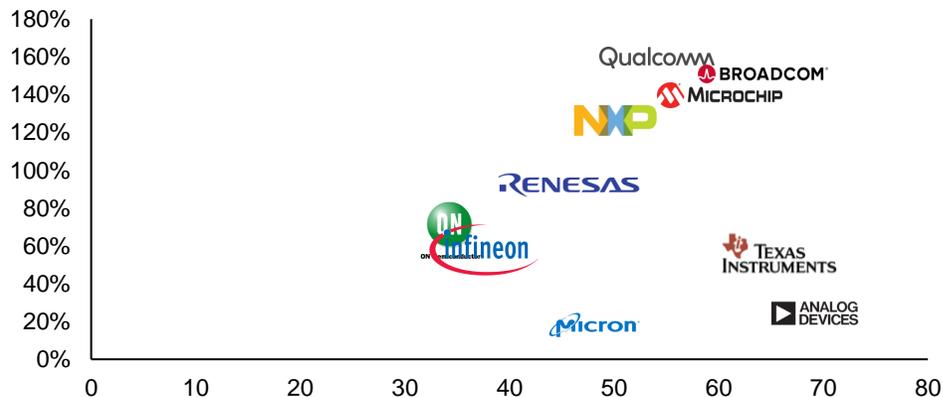


Cash Conversion Cycle

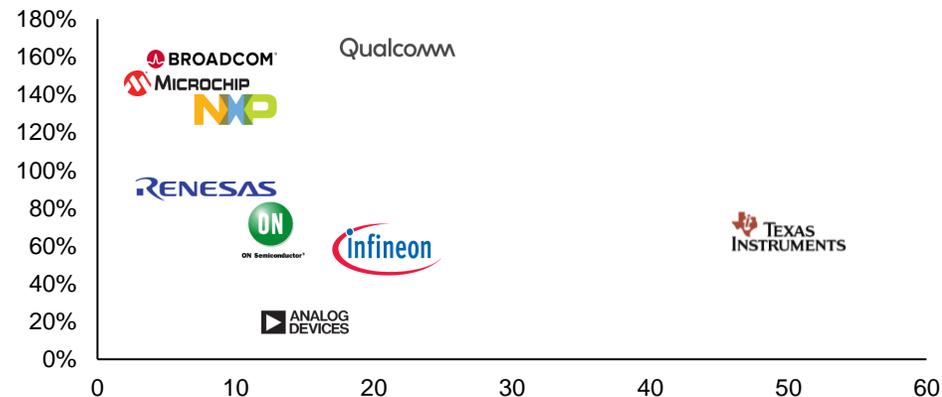


Infineon finding itself in the middle between its peers regarding following ratios.

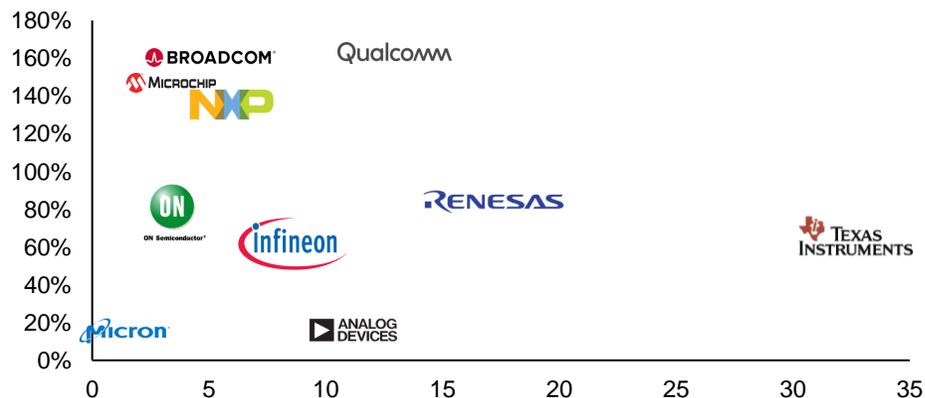
Debt to Equity/ROE



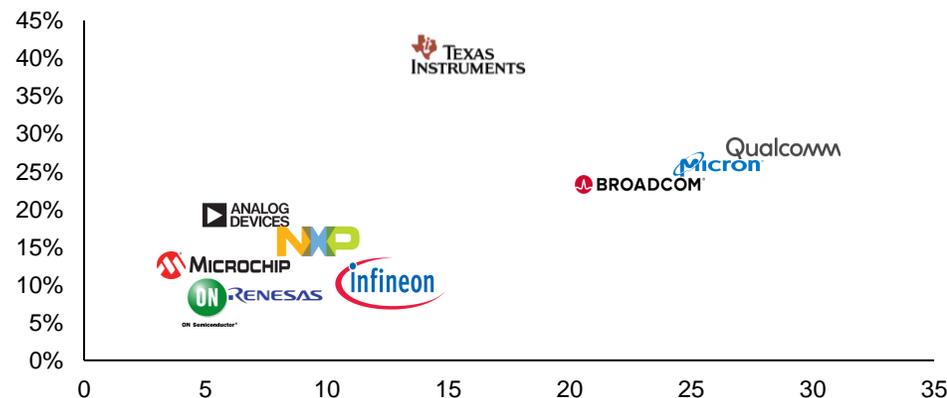
Debt to Equity/EBITDA_INT



Debt to Equity/EBITDA_CAPEX_INT



Net Income Margin/Revenue [in bn]



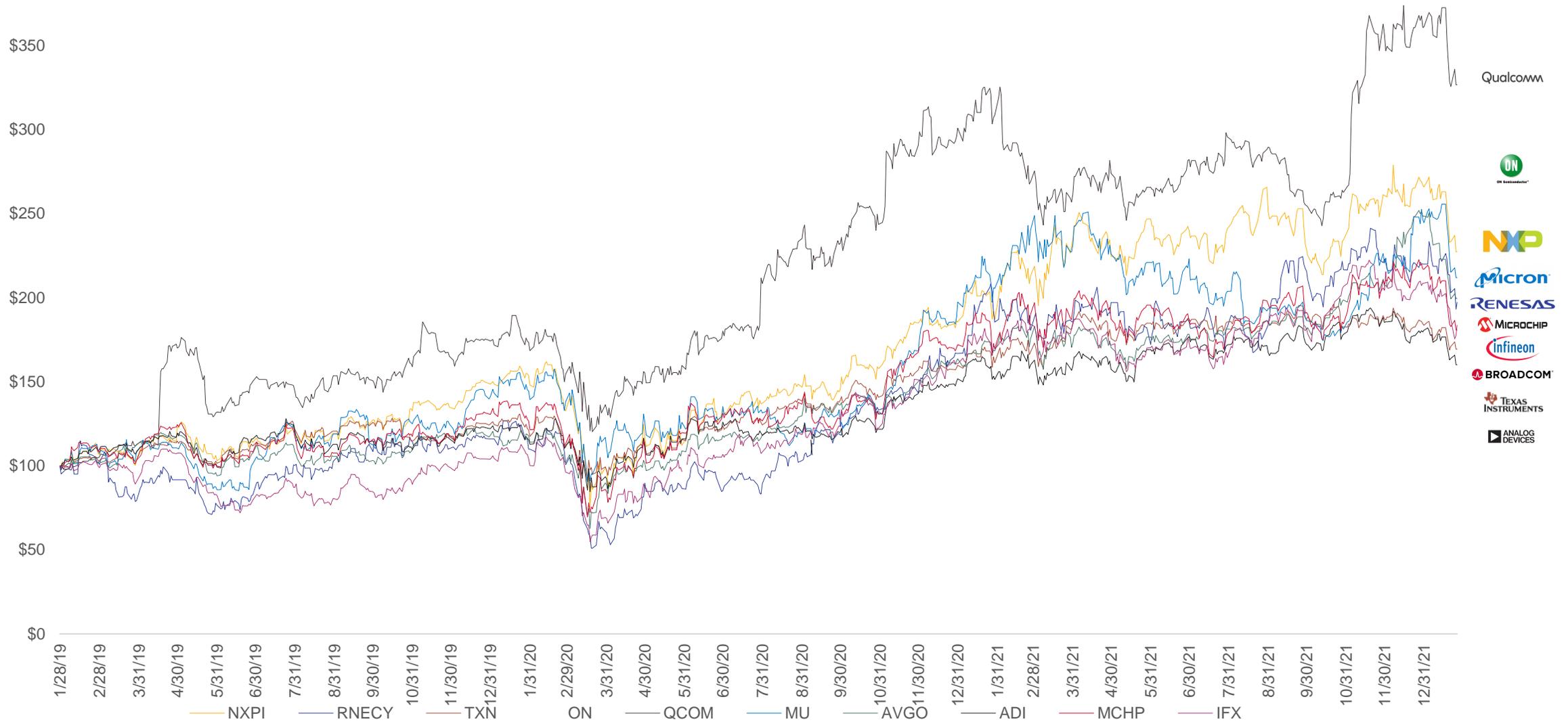
Best Peer Share Price Performance

Comparison of Infineon and Best Peers



Peer Group Share Price Performance

Comparison of Infineon and Best Peers + Tier 1



Income Statement

Infineon Financials		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Income Statement															
Revenues by segment															
Automotive		2,989	3,284	3,503	3,521	4,841	5,363	6,584	7,876	8,380	8,751	9,100	9,461	9,837	10,228
	% of Revenue	42.3%	43.2%	43.6%	41.1%	43.8%	43.8%	46.3%	47.8%	47.1%	45.8%	45.3%	45.0%	45.0%	44.7%
Industrial Power Control		1,206	1,323	1,418	1,406	1,542	1,734	1,938	2,153	2,384	2,621	2,749	2,884	3,027	3,177
	% of Revenue	17.1%	17.4%	17.7%	16.4%	13.9%	14.2%	13.6%	13.1%	13.4%	13.7%	13.7%	13.7%	13.8%	13.9%
Power & Sensor Systems		2,148	2,318	2,445	2,650	3,268	3,607	3,999	4,571	5,004	5,523	5,854	6,105	6,248	6,514
	% of Revenue	30.4%	30.5%	30.5%	30.9%	29.5%	29.4%	28.1%	27.8%	28.1%	28.9%	29.1%	29.1%	28.6%	28.5%
Connected Secure Systems		708	664	642	974	1,397	1,547	1,701	1,863	2,030	2,203	2,381	2,565	2,756	2,952
	% of Revenue	10.0%	8.7%	8.0%	11.4%	12.6%	12.6%	12.0%	11.3%	11.4%	11.5%	11.9%	12.2%	12.6%	12.9%
Other Operating Segments		9	10	21	16	12	-	-	-	-	-	-	-	-	-
	% of Revenue	0.1%	0.1%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Corporate and Eliminations		3													
Total Revenue		7,063	7,599	8,029	8,567	11,060	12,251	14,222	16,463	17,798	19,098	20,083	21,016	21,867	22,872
	Growth in %		7.6%	5.7%	6.7%	29.1%	10.8%	16.1%	15.8%	8.1%	7.3%	5.2%	4.6%	4.1%	4.6%
COGS		(4,442)	(4,714)	(5,035)	(5,791)	(6,800)	(7,473)	(8,675)	(10,043)	(10,857)	(11,650)	(12,251)	(12,820)	(13,339)	(13,952)
	% of Revenue	62.9%	62.0%	62.7%	67.6%	61.5%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%
Gross profit		2,621	2,885	2,994	2,776	4,260	4,778	5,546	6,421	6,941	7,448	7,833	8,196	8,528	8,920
	% Gross margin	37.1%	38.0%	37.3%	32.4%	38.5%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%
R&D expenses		(776)	(836)	(945)	(1,113)	(1,448)	(1,470)	(1,659)	(1,866)	(1,958)	(2,101)	(2,209)	(2,312)	(2,405)	(2,516)
	% of Revenue	11.0%	11.0%	11.8%	13.0%	13.1%	12%	12%	11%	11%	11%	11%	11%	11%	11%
SG&A expenses		(819)	(850)	(865)	(1,042)	(1,354)	(1,409)	(1,582)	(1,770)	(1,847)	(1,910)	(2,008)	(2,102)	(2,187)	(2,287)
	% of Revenue	11.6%	11.2%	10.8%	12.2%	12.2%	11.5%	11.1%	10.8%	10.4%	10.0%	10.0%	10.0%	10.0%	10.0%
Other operating income/expense (net)		(43)	270	(23)	(40)	12									
Operating profit		983	1,469	1,161	581	1,470	1,899	2,305	2,785	3,137	3,438	3,615	3,783	3,936	4,117
	% Operating margin	13.9%	19.3%	14.5%	6.8%	13.3%	15.5%	16.2%	16.9%	17.6%	18.0%	18.0%	18.0%	18.0%	18.0%
Depreciation and Amortization		(812)	(861)	(945)	(1,260)	(1,513)	(1,600)	(1,910)	(2,205)	(2,481)	(2,681)	(2,738)	(2,816)	(2,908)	(3,009)
	% of Revenue	11.5%	11.3%	11.8%	14.7%	13.7%	13.1%	13.4%	13.4%	13.9%	14.0%	13.6%	13.4%	13.3%	13.2%
EBITDA		1795	2330	2106	1841	2983	3499	4215	4990	5617	6119	6353	6599	6845	7126
	% EBITDA Margin	25.4%	30.7%	26.2%	21.5%	27.0%	28.6%	29.6%	30.3%	31.6%	32.0%	31.6%	31.4%	31.3%	31.2%
Financial income		10	15	26	29	22									
Financial expenses		(63)	(68)	(98)	(177)	(182)	(136)	(125)	(126)	(114)	(106)	(88)	(71)	(56)	(47)
Share of profit (loss) of associates and joint ventures, using the equity method		3	(5)	(6)	(9)	9									
Profit before income taxes		933	1,411	1,083	424	1,319	1,763	2,180	2,659	3,023	3,332	3,527	3,712	3,880	4,070
	% Revenue	13%	19%	13%	5%	12%	14%	15%	16%	17%	17%	18%	18%	18%	18%
Income tax		(142)	(193)	(194)	(52)	(144)	(264)	(363)	(487)	(605)	(722)	(823)	(928)	(970)	(1,017)
	% Effective tax rate	15.22%	13.68%	17.91%	12.26%	10.92%	15%	17%	18%	20%	22%	23%	25%	25%	25%
Net income continuing operations		791	1,218	889	372	1,175	1,498	1,817	2,171	2,418	2,610	2,704	2,784	2,910	3,052
Profit (loss) from discontinued operations		(1)	(143)	(19)	(4)	(6)									
Net income available to common stockholders		790	1,075	870	368	1,169	1,498	1,817	2,171	2,418	2,610	2,704	2,784	2,910	3,052
	% Net income margin	11%	14%	11%	4%	11%	12%	13%	13%	14%	14%	13%	13%	13%	13%

Balance Sheet

Balance Sheet		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Assets															
Cash and cash equivalents		860	732	1,021	1,851	1,749	2,225	2,422	2,646	2,780	2,910	3,008	3,102	3,187	3,287
	% of Revenue	12%	10%	13%	22%	16%	18%	17%	16%	16%	15%	15%	15%	15%	14%
	% of TA	8.6%	6.7%	7.5%	8.4%	7.5%	8.6%	8.5%	8.6%	8.6%	8.7%	8.8%	8.8%	8.8%	8.8%
Financial investments		1,592	1,811	2,758	1,376	2,173	2,761	3,206	3,711	4,012	4,305	4,527	4,737	4,929	5,155
	% of TA	16.0%	16.6%	20.3%	6.3%	9.3%	10.6%	11.3%	12.1%	12.5%	12.9%	13.2%	13.4%	13.6%	13.8%
	% of Revenue	22.5%	23.8%	34.4%	16.1%	19.6%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
Trade receivables		851	971	1,057	1,196	1,483	1,602	1,859	2,152	2,327	2,497	2,625	2,747	2,859	2,990
	% of Revenue	12%	13%	13%	14%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
	% of TA	8.6%	8.9%	7.8%	5.4%	6.4%	6.2%	6.6%	7.0%	7.2%	7.5%	7.7%	7.8%	7.9%	8.0%
Inventories		1,240	1,480	1,701	2,052	2,181	2,400	2,787	3,226	3,487	3,742	3,935	4,118	4,285	4,481
	% of COGS	28%	31%	34%	35%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%
	% of TA	12.5%	13.6%	12.5%	9.3%	9.3%	9.2%	9.8%	10.5%	10.8%	11.2%	11.5%	11.7%	11.8%	12.0%
Current income tax receivables		5	52	83	77	57	57	57	57	57	57	57	57	57	57
	% of TA	0.1%	0.5%	0.6%	0.4%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Contract assets				91	97	82	82	82	82	82	82	82	82	82	82
	% of TA			0.7%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
Other current assets		300	366	770	530	518	723	840	972	1,051	1,128	1,186	1,241	1,291	1,351
	% Revenue	4%	5%	10%	6%	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%
	% of TA	3.0%	3.4%	5.7%	2.4%	2.2%	2.8%	3.0%	3.2%	3.3%	3.4%	3.5%	3.5%	3.6%	3.6%
Assets classified as held for sale		23	11	12		9	9	9	9	9	9	9	9	9	9
	% of TA	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total current assets		4,871	5,423	7,493	7,179	8,252	9,860	11,261	12,855	13,804	14,729	15,429	16,092	16,698	17,412
	% of TA	49.0%	49.8%	55.2%	32.6%	35.4%	37.9%	39.7%	41.8%	42.9%	44.2%	45.0%	45.5%	46.0%	46.5%
Property, plant and equipment		2,659	3,038	3,510	4,110	4,443	5,811	6,967	7,922	8,503	8,745	9,052	9,399	9,765	10,165
	% of TA	26.7%	27.9%	25.8%	18.7%	19.0%	22.4%	24.6%	25.8%	26.4%	26.2%	26.4%	26.6%	26.9%	27.1%
	% Growth		14.3%	15.5%	17.1%	8.1%	30.8%	19.9%	13.7%	7.3%	2.8%	3.5%	3.8%	3.9%	4.1%
Goodwill		759	764	909	5,897	5,962	5,962	5,962	5,962	5,962	5,962	5,962	5,962	5,962	5,962
	% of TA	7.6%	7.0%	6.7%	26.8%	25.6%	22.9%	21.0%	19.4%	18.5%	17.9%	17.4%	16.9%	16.4%	15.9%
Other intangible assets		827	832	896	3,621	3,349	3,037	2,818	2,684	2,599	2,557	2,542	2,549	2,572	2,613
	% of TA	8.3%	7.6%	6.6%	16.5%	14.4%	11.7%	9.9%	8.7%	8.1%	7.7%	7.4%	7.2%	7.1%	7.0%
Right-of-use assets					286	336	336	336	336	336	336	336	336	336	336
	% of TA				1.3%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%
Investments accounted for using the equity method		28	37	29	87	71	71	71	71	71	71	71	71	71	71
	% of TA	0.3%	0.3%	0.2%	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Non-current income tax receivables					1	1	1	1	1	1	1	1	1	1	1
	% of TA				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred tax assets		612	648	599	627	695	695	695	695	695	695	695	695	695	695
	% of TA	6.2%	6.0%	4.4%	2.9%	3.0%	2.7%	2.5%	2.3%	2.2%	2.1%	2.0%	2.0%	1.9%	1.9%
Other non-current assets		189	137	145	191	225	225	225	225	225	225	225	225	225	225
	% of TA	1.9%	1.3%	1.1%	0.9%	1.0%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%
Total non-current assets		5,074	5,456	6,088	14,820	15,082	16,137	17,075	17,896	18,393	18,592	18,884	19,238	19,627	20,068
	% of TA	51.0%	50.2%	44.8%	67.4%	64.6%	62.1%	60.3%	58.2%	57.1%	55.8%	55.0%	54.5%	54.0%	53.5%
Total Assets		9,945	10,879	13,581	21,999	23,334	25,997	28,336	30,751	32,197	33,321	34,313	35,330	36,326	37,480
	Growth in %		9.4%	24.8%	62.0%	6.1%	11.4%	9.0%	8.5%	4.7%	3.5%	3.0%	3.0%	2.8%	3.2%

Balance Sheet

Balance Sheet		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Liabilities															
Short-term financial debt and current portion of long-term financial debt		323	25	22	505	833	834	807	765	685	588	606	624	641	662
	% of TA	3.2%	0.2%	0.2%	2.3%	3.6%	3.2%	2.8%	2.5%	2.1%	1.8%	1.8%	1.8%	1.8%	1.8%
Trade payables		1,020	1,181	1,089	1,160	1,569	1,720	2,020	2,380	2,573	2,761	2,903	3,038	3,161	3,306
	% of TA	10.3%	10.9%	8.0%	5.3%	6.7%	7.4%	7.8%	8.4%	8.4%	8.6%	8.7%	8.9%	8.9%	9.1%
Current provisions		422	590	383	436	815	908	990	1,074	1,125	1,164	1,198	1,234	1,269	1,309
	% of TA	4.2%	5.4%	2.8%	2.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Current income tax payables		103	117	144	340	288	309.4	337.3	366.0	383.2	396.6	408.4	420.5	432.4	446.1
	% of TA	1.0%	1.1%	1.1%	1.5%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Current leasing liabilities					59	66	66	64	61	54	47	48	49	51	52
	% of TA				0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Other current liabilities		230	269	575	950	872	887.8	967.7	1,050.1	1,099.5	1,137.9	1,171.8	1,206.5	1,240.5	1,279.9
	% of TA	2.3%	2.5%	4.2%	4.3%	3.7%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
Total current liabilities		2,098	2,182	2,213	3,450	4,443	4,726	5,186	5,695	5,919	6,094	6,336	6,572	6,795	7,055
	% of TA	21.1%	20.1%	16.3%	15.7%	19.0%	20.3%	19.9%	20.1%	19.2%	18.9%	19.0%	19.2%	19.2%	19.4%
Long-term financial debt		1,511	1,507	1,534	6,528	5,752	5,761	5,573	5,282	4,728	4,063	4,184	4,308	4,429	4,570
	% of TA	15.2%	13.9%	11.3%	29.7%	24.7%	22.2%	19.7%	17.2%	14.7%	12.2%	12.2%	12.2%	12.2%	12.2%
Pensions and similar commitments		503	552	733	739	617	852	1,108	1,397	1,667	1,725	1,776	1,829	1,880	1,940
	% of TA	5.1%	5.1%	5.4%	3.4%	2.6%	3.3%	3.9%	4.5%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Deferred tax liabilities		18	9	20	293	324	324	324	324	324	324	324	324	324	324
	% of TA	0.2%	0.1%	0.1%	1.3%	1.4%	1.2%	1.1%	1.1%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%
Other non-current provisions		67	46	283	313	319	310	338	367	384	398	410	422	434	448
	% of TA	0.7%	0.4%	2.1%	1.4%	1.4%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Non-current leasing liabilities					235	265	265	257	243	218	187	193	198	204	211
	% of TA				1.1%	1.1%	1.0%	0.9%	0.8%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%
Other non-current liabilities		112	137	165	222	213	287	313	340	356	368	379	390	401	414
	% of TA	1.1%	1.3%	1.2%	1.0%	0.9%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Total non-current liabilities		2,211	2,251	2,735	8,330	7,490	7,800	7,913	7,953	7,676	7,065	7,265	7,471	7,672	7,906
	% of TA	22.2%	20.7%	20.1%	37.9%	32.1%	30.0%	27.9%	25.9%	23.8%	21.2%	21.2%	21.1%	21.1%	21.1%
Total liabilities		4,309	4,433	4,948	11,780	11,933	12,525	13,099	13,648	13,595	13,159	13,601	14,043	14,467	14,962
	% of TA	43%	41%	36%	54%	51%	48%	46%	44%	42%	39%	40%	40%	40%	40%
	Growth in %		2.9%	11.6%	138.1%	1.3%	5.0%	4.6%	4.2%	-0.4%	-3.2%	3.4%	3.3%	3.0%	3.4%
Equity:															
Ordinary share capital		2,272	2,274	2,501	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612
	% of TA	22.8%	20.9%	18.4%	11.9%	11.2%	10.0%	9.2%	8.5%	8.1%	7.8%	7.6%	7.4%	7.2%	7.0%
Additional paid-in capital		4,774	4,486	5,494	6,462	6,513	7,556	8,075	8,450	8,290	8,061	6,755	5,420	3,995	2,561
	% of TA	48.0%	41.2%	40.5%	29.4%	27.9%	29.1%	28.5%	27.5%	25.7%	24.2%	19.7%	15.3%	11.0%	6.8%
Retained earnings (accumulated deficit)		-1,404	-333	421	435	1,407	2,435	3,681	5,171	6,830	8,621	10,476	12,386	14,383	16,477
	% of TA	-14.1%	-3.1%	3.1%	2.0%	6.0%	9.4%	13.0%	16.8%	21.2%	25.9%	30.5%	35.1%	39.6%	44.0%
Other reserves		31	56	254	-460	-306	-306	-306	-306	-306	-306	-306	-306	-306	-306
	% of TA	0.3%	0.5%	1.9%	-2.1%	-1.3%	-1.2%	-1.1%	-1.0%	-1.0%	-0.9%	-0.9%	-0.9%	-0.8%	-0.8%
Own shares		37	37	37	33	28	28	28	28	28	28	28	28	28	28
	% of TA	-0.4%	-0.3%	-0.3%	-0.2%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Hybrid capital					1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203
	% of TA				5.5%	5.2%	4.6%	4.2%	3.9%	3.7%	3.6%	3.5%	3.4%	3.3%	3.2%
Total equity		5,636	6,446	8,633	10,219	11,401	13,472	15,237	17,102	18,601	20,163	20,712	21,287	21,858	22,519
	% of TA	56.7%	59.3%	63.6%	46.5%	48.9%	51.8%	53.8%	55.6%	57.8%	60.5%	60.4%	60.3%	60.2%	60.1%
Total liabilities and equity		9,945	10,879	13,581	21,999	23,334	25,997	28,336	30,751	32,197	33,321	34,313	35,330	36,326	37,480
	Growth in %		9.4%	24.8%	62.0%	6.1%	11.4%	9.0%	8.5%	4.7%	3.5%	3.0%	3.0%	2.8%	3.2%

Cashflow Statement

Cashflow Statements	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating activities														
Net income	790	1075	870	368	1,169	1,498	1,817	2,171	2,418	2,610	2,704	2,784	2,910	3,052
Plus: loss (profit) from discontinued operations net of income taxes	1	143	19	4	6									
Depreciation and Amortization	812	861	945	1,260	1,513	1,600	1,910	2,205	2,481	2,681	2,738	2,816	2,908	3,009
Income tax	142	193	194	52	144									
Net interest result	56	45	36	101	150									
Loss (Gain) on disposals of PPE	2	(1)	(11)	(22)	(5)									
Loss (Gain) from sale of RF power business line		(270)	1											
Dividends received	2	8		2	4									
Impairment charges/reversals of impairments	5	7	6	12	12									
Other non-cash result	28	7	16	56	5									
Change in trade receivables	(91)	(116)	71	46	(279)	(119)	(258)	(293)	(174)	(170)	(129)	(122)	(111)	(131)
Change in inventories	(73)	(251)	(239)	124	(121)	(219)	(386)	(439)	(261)	(255)	(193)	(183)	(167)	(197)
Change in trade payables	177	158	(109)	(71)	407	151	300	359	193	188	142	135	123	145
Change in provisions	91	(1)	(25)	65	372	319	366	402	337	111	98	100	98	114
Change in other assets and other liabilities	(23)	(25)	(4)		11	(94)	17	6	4	(13)	(2)	3	7	7
Interest received	9	14	25	17	3									
Interest paid	(58)	(50)	(67)	(129)	(148)									
Income tax paid	(142)	(226)	(125)	(68)	(180)									
Net cash provided by operating continuing operations	1,728	1,571	1,603	1,817	3,063	3,137	3,767	4,411	4,997	5,153	5,359	5,534	5,768	5,999
Net cash provided by discontinued operations	(5)	4	(2)	(6)	2									
Net operating cashflow	1,723	1,575	1,601	1,811	3,065	3,137	3,767	4,411	4,997	5,153	5,359	5,534	5,768	5,999
Investing activities														
Purchases of financial investments	(3,300)	(3,277)	(3,760)	(6,045)	(4,275)									
Proceeds from sales of financial investments	3,303	3,067	2,836	7,417	3,480									
Net purchases of financial investments						(588)	(444)	(505)	(301)	(293)	(222)	(210)	(192)	(226)
Purchases of other equity investments	(9)	(1)												
Acquisitions of businesses, net of cash acquired	(5)	(16)	(123)	(7,433)	(19)									
Acquisition of shares in MoTo, net cash acquired	(112)													
Proceeds from sales of businesses and interests in subsidiaries, net of cash disbursed	10	324		(1)	13									
Investments in related companies		(17)	(5)	(44)										
Purchases of other intangible assets and other assets	(148)	(164)	(156)	(184)	(229)	(255)	(296)	(343)	(371)	(398)	(418)	(438)	(455)	(476)
Purchases of PPE as % of Revenue	2.10%	2.16%	1.94%	2.15%	2.07%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%
Purchases of PPE	(874)	(1,090)	(1,295)	(915)	(1,268)	(2,400)	(2,552)	(2,683)	(2,607)	(2,483)	(2,611)	(2,732)	(2,843)	(2,973)
Proceeds from sales of PPE and other assets	4	11	15	33	14									
Net cash provided by investing continuing operations	(1,131)	(1,163)	(2,488)	(7,172)	(2,284)	(3,244)	(3,292)	(3,531)	(3,278)	(3,174)	(3,251)	(3,380)	(3,490)	(3,676)
Net cash provided by discontinued operations														
Net investing cashflow	(1,131)	(1,163)	(2,488)	(7,172)	(2,284)	(3,244)	(3,292)	(3,531)	(3,278)	(3,174)	(3,251)	(3,380)	(3,490)	(3,676)
Financing activities														
Net change in short-term debt	(1)				2									
Net change in related party financial receivables and payables		(18)	(14)											
Proceeds from issuance of long-term financial debt	2		1	9,815	1,084									
Repayments of long-term financial debt	(119)	(321)	(23)	(5,372)	(1,570)									
Net borrowings						11	(226)	(350)	(666)	(800)	145	149	146	169
Payments for leasing liabilities				(63)	(76)									
Payments for financing-related derivatives			(41)											
Deposits for financing-related derivatives			19	25										
Change in cash deposited as collateral		74												
Proceeds from issuance of ordinary shares	26	6	1,530	1,043										
Cash outflows due to changes of non-controlling interests				(2)										
Dividend payments	(248)	(283)	(305)	(336)	(286)	(470)	(570)	(682)	(759)	(819)	(849)	(874)	(913)	(958)
Proceeds from hybrid capital				1,184										
Adjustments for additional paid-in capital						1,043	519	376	160	230	1,306	1,335	1,425	1,434
Cash outflow to hybrid capital investors				(20)	(39)									
Net cash provided by financing continuing operations	(340)	(542)	1,167	6,274	(885)	583	(278)	(656)	(1,585)	(1,849)	(2,009)	(2,060)	(2,193)	(2,223)
Net cash provided by discontinued operations														
Net financing cashflow	(340)	(542)	1,167	6,274	(885)	583	(278)	(656)	(1,585)	(1,849)	(2,009)	(2,060)	(2,193)	(2,223)
Cash and cash equivalents at beginning of period	625	860	732	1,021	1,851	1,749	2,225	2,422	2,646	2,780	2,910	3,008	3,102	3,187
Net cashflow	252	(130)	280	913	(104)	476	197	224	133	130	98	93	85	100
Effect of foreign exchange rate changes on cash and cash equivalents	(17)	2	9	(83)	2									
Cash and cash equivalents at end of period	860	732	1,021	1,851	1,749	2,225	2,422	2,646	2,780	2,910	3,008	3,102	3,187	3,287

Additional Calculations

PPE Schedule														
Remaining Useful Life	3.27	3.53	3.71	3.26	2.94	3.63	3.65	3.59	3.43	3.26	3.31	3.34	3.36	3.38
PPE BOP (old)		2,659	3,038	3,510	4,110	4,443	5,811	6,967	7,922	8,503	8,745	9,052	9,399	9,765
Depreciation		702	804	919	1,001	1,032	1,395.43	1,727.31	2,025.80	2,240.54	2,304.38	2,385.13	2,476.54	2,573.04
Capex		1,090	1,295	915	1,268	2,400	2,552	2,683	2,607	2,483	2,611	2,732	2,843	2,973
Purchases of PPE as % of Revenue		14%	16%	11%	11%	20%	18%	16%	15%	13%	13%	13%	13%	13%
PPE EOP (old)						5,811	6,967	7,922	8,503	8,745	9,052	9,399	9,765	10,165
Dep % of PPE		26%	26%	26%	24%	23%	24%	25%	26%	26%	26%	26%	26%	26%
Dep % Revenue		9%	10%	11%	9%	8%	10%	10%	11%	12%	11%	11%	11%	11%
Working Capital	1,071	1,270	1,669	2,088	2,095	2,282	2,625	2,998	3,241	3,478	3,657	3,827	3,982	4,165
Change in NWC		199	399	419	7	187	343	373	243	237	179	170	155	183

Dividends														
Dividends	248.00	283.00	305.00	336.00	286.00	470.35	570.35	681.64	759.18	819.37	848.86	874.03	913.46	958.24
Payout ratio	31%	26%	35%	91%	24%	31%	31%	31%	31%	31%	31%	31%	31%	31%

Debt Schedule														
Total Debt	1,834	1,532	1,556	7,327	6,916	6,927	6,701	6,351	5,685	4,885	5,030	5,179	5,325	5,495
% of TA	18%	14%	11%	33%	30%	27%	24%	21%	18%	15%	15%	15%	15%	15%
Total Debt / EBITDA	1.02	0.66	0.74	3.98	2.32	1.98	1.59	1.27	1.01	0.80	0.79	0.78	0.78	0.77
ST Debt % of Total Debt	18%	2%	1%	7%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
LT Debt % of Total Debt	82%	98%	99%	89%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
ST Leases % of Total Debt	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
LT Leases % of Total Debt	0%	0%	0%	3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%

Cash	860	732	1,021	1,851	1,749	1,894	2,113	2,375	2,487	2,595	2,678	2,755	2,827	2,910
Cash buffer				1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cash net buffer				851	749	894	1,113	1,375	1,487	1,595	1,678	1,755	1,827	1,910
				10%	7%	7%	8%	8%	8%	8%	8%	8%	8%	8%

Intangible Assets Schedule														
Intangibles BOP	857	827	832	896	3,621	3,349	3,037	2,818	2,684	2,599	2,557	2,542	2,549	2,572
Purchases						255	296	343	371	398	418	438	455	476
Amortization	160	159	141	341	512	568	515	478	455	441	433	431	432	436
Intangibles EOP	827	832	896	3,621	3,349	3,037	2,818	2,684	2,599	2,557	2,542	2,549	2,572	2,613
Amortization as % of intangibles		19%	17%	38%	14%	17%	17%	17%	17%	17%	17%	17%	17%	17%

Ratios

Infineon Ratios	Units	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Historic Median	
Activity Ratios																	
Receivables turnover	x	8.3	7.8	7.6	7.2	7.5										7.6	
Inventory Turnover	x	3.6	3.2	3.0	2.8	3.1										3.1	
Payables Turnover	x	4.4	4.0	4.6	5.0	4.3										4.4	
Days Sales	days	44	47	48	51	49	48	48	48	48	48	48	48	48	48	48	48
Days Inventory	days	102	115	123	129	117	117	117	117	117	117	117	117	117	117	117	117.1
Days Payables	days	84	91	79	73	84	84	85	86	86	86	86	86	86	86	86	83.8
Asset Turnover	x	0.7	0.7	0.6	0.4	0.5										0.6	
Fixed Assets Turnover	x	2.7	2.5	2.3	2.1	2.5										2	
Working Capital Turnover																	
Liquidity Ratios																	
Current ratio	x	2.32	2.49	3.39	2.08	1.86	1.01	1.25	1.50	1.80	2.15	2.16	2.18			2.3	
Quick ratio	x	0.96	0.95	1.29	1.04	0.84	0.90	1.08	1.32	1.59	1.98	2.02	2.06			1.0	
Cash ratio	x	0.41	0.34	0.46	0.54	0.39	0.48	0.58	0.70	0.85	1.06	1.08	1.10			0.4	
Cash Conversion Cycle	days	62	70	92	107	82	81	80	78	78	78	78	78			82	
Debt to Equity	%	33%	24%	18%	72%	61%										33%	
Debt to Capital	%	25%	19%	15%	42%	38%										25%	
Debt to Assets	%	18%	14%	11%	33%	30%										18%	
Financial Leverage																	
Interest coverage	x	15.6	21.6	11.8	3.3	8.1										11.8	
EBITDA/Interest expenses	x	28.49	34.26	21.49	10.40	16.39										21.5	
Total debt/EBITDA	x	1.02	0.66	0.74	3.98	2.32										1.0	
Equity multiplier		1.76	1.69	1.57	2.15	2.05										1.8	
Profitability Ratios																	
Gross Margin	%	37.1%	38.0%	37.3%	32.4%	38.5%										37.3%	
SG&A Margin	%	11.6%	11.2%	10.8%	12.2%	12.2%										11.6%	
Operating Margin	%	13.9%	19.3%	14.5%	6.8%	13.3%										13.9%	
EBITDA Margin	%	25.4%	30.7%	26.2%	21.5%	27.0%										26.2%	
Pretax Margin	%	13.2%	18.6%	13.5%	4.9%	11.9%										13.2%	
Net Income Margin	%	11.2%	14.1%	10.8%	4.3%	10.6%										10.8%	
ROA	%	7.9%	9.9%	6.4%	1.7%	5.0%	5.8%	6.4%	7.1%	7.5%	7.8%	7.9%	7.9%			6.4%	
ROE	%	14.0%	16.7%	10.1%	3.6%	10.3%	11.1%	11.9%	12.7%	13.0%	12.9%	13.1%	13.1%			10.3%	
ROIC	%	11.2%	15.9%	9.4%	2.9%	7.1%										9.4%	
Reinvestment Rate			18.1%	36.7%	-67.7%	-18.7%										-0.3%	
Sustainable growth Rate			2.9%	3.4%	-2.0%	-1.3%										0.8%	
Capex/Sales	%	12.4%	14.3%	16.1%	10.7%	11.5%										12.4%	
Capex/Depreciation	%	107.6%	-126.6%	-137.0%	-72.6%	-83.8%										-83.8%	

Revenue Forecast I

Infineon	Units	2022	2023	2024	2025	2026	2027	2028	2029	2030
Semiconductors	%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Infineon - Group Revenue	million	12,251.42	14,221.65	16,463.19	17,797.64	19,098.46	20,083.37	21,015.84	21,867.47	22,871.77
% growth	%	11%	16%	16%	8%	7%	5%	5%	4%	5%
5yr CAGR	%	12%	13%	15%	16%	12%	10%	8%	6%	5%
3yr CAGR	%	15%	18%	14%	13%	10%	7%	6%	5%	4%
World Semiconductor Market - Market Size	million	528,589.41	547,401.41	564,452.21	590,864.61	617,277.02	634,885.29	652,493.56	670,101.83	687,710.10
5yr CAGR	%	8%	7%	6%	5%	5%	4%	4%	3%	3%
3yr CAGR	%	7%	5%	5%	4%	4%	4%	3%	3%	3%
Infineon - Share	%	2.32%	2.60%	2.92%	3.01%	3.09%	3.16%	3.22%	3.26%	3.33%
Automotive (ATV) - Revenue Share	%	44%	46%	48%	47%	46%	45%	45%	45%	45%
ATV Revenue	million	5,363.23	6,583.97	7,876.40	8,380.31	8,751.40	9,099.75	9,461.24	9,837.04	10,228.43
5yr CAGR	%	12%	15%	18%	19%	13%	11%	8%	5%	4%
3yr CAGR	%	15%	23%	18%	16%	10%	5%	4%	4%	4%
Market Size of ATV	million	71,890.00	85,172.50	98,455.00	111,737.50	125,020.00	129,996.41	135,160.59	140,529.20	146,120.40
5yr CAGR	%	6%	8%	11%	13%	13%	13%	10%	7%	6%
Market Share ATV	%	7%	8%	8%	8%	7%	7%	7%	7%	7%
World Automotive Semiconductor - Market Size	million	45,820.00	56,545.00	67,270.00	77,995.00	88,720.00	91,492.50	94,265.00	97,037.50	99,810.00
5yr CAGR	%	6%	8%	13%	15%	16%	15%	11%	8%	5%
3yr CAGR	%	7%	14%	16%	19%	16%	11%	7%	3%	3%
Infineon - Share	%	13.70%	13.95%	14.20%	14.45%	14.70%	14.95%	15.20%	15.45%	15.70%
Power Semiconductors - Market Size	million	8,500.00	9,717.50	10,935.00	12,152.50	13,370.00	14,223.49	15,131.46	16,097.40	17,124.99
5yr CAGR	%	2%	4%	6%	8%	10%	6%	6%	6%	6%
3yr CAGR	%	2%	6%	10%	13%	11%	11%	11%	11%	11%
Infineon - Share	%	26.60%	26.80%	27.00%	27.20%	27.40%	27.60%	27.80%	28.00%	28.20%
Microcontrollers - Market Size (miu c)	million	7,526.00	7,962.00	8,398.00	8,834.00	9,270.00	9,271.04	9,272.08	9,273.11	9,274.15
5yr CAGR	%	2%	3%	4%	5%	6%	4%	4%	4%	4%
3yr CAGR	%	3%	4%	6%	5%	5%	5%	5%	5%	5%
Infineon - Share	%	17.10%	17.20%	17.30%	17.40%	17.50%	17.60%	17.70%	17.80%	17.90%
Sensors - Market Size	million	10,044.00	10,948.00	11,852.00	12,756.00	13,660.00	15,009.38	16,492.05	18,121.19	19,911.26
5yr CAGR	%	12%	11%	10%	9%	8%	10%	10%	10%	10%
3yr CAGR	%	11%	10%	9%	8%	8%	8%	8%	8%	8%
Infineon - Share	%	15.70%	15.80%	15.90%	16.00%	16.10%	16.20%	16.30%	16.40%	16.50%
Industrial power control segment (IPC) - Revenue Share	%	14%	14%	13%	13%	14%	14%	14%	14%	14%
IPC Revenue	million	1,734.37	1,938.03	2,152.98	2,383.94	2,621.04	2,748.85	2,883.88	3,026.58	3,177.47
5yr CAGR	%	8%	8%	9%	11%	11%	10%	8%	7%	6%
3yr CAGR	%	7%	11%	12%	11%	11%	8%	7%	5%	5%
Market Size of IPC	million	30,215.33	32,007.00	33,798.67	35,660.91	37,443.38	39,269.35	41,198.27	43,236.90	45,392.47
5yr CAGR	%	5%	3%	4%	5%	6%	5%	5%	5%	5%
3yr CAGR	%	6%	6%	6%	7%	7%	7%	7%	7%	7%
Market Share IPC	%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Discrete power semiconductors & modules - Market Size	million	22,364.00	23,508.00	24,652.00	25,796.00	26,940.00	27,981.64	29,063.55	30,187.30	31,354.49
5yr CAGR	%	4%	2%	3%	4%	5%	4%	4%	4%	4%
3yr CAGR	%	2%	4%	5%	5%	5%	5%	5%	5%	5%
Infineon - Share	%	19.90%	20.00%	20.10%	20.20%	20.30%	20.40%	20.50%	20.60%	20.70%
IGBT modules - Market Size	million	4,345.33	4,705.00	5,064.67	5,424.33	5,784.00	6,269.20	6,795.10	7,365.11	7,982.95
5yr CAGR	%	11%	8%	9%	8%	8%	8%	8%	8%	8%
3yr CAGR	%	9%	9%	8%	8%	7%	8%	8%	8%	8%
Infineon - Share	%	38.30%	39.20%	40.10%	41.00%	41.90%	42.80%	43.70%	44.60%	45.50%
Intelligent power modules (IPMs) - Market Size	million	1,806.00	1,994.00	2,182.00	2,370.00	2,462.91	2,559.45	2,659.79	2,764.05	2,872.40
5yr CAGR	%	3%	3%	7%	11%	4%	4%	4%	4%	4%
3yr CAGR	%	4%	12%	10%	9%	10%	10%	10%	10%	10%
Infineon - Share	%	11.80%	12%	12%	12%	12%	12%	12%	13%	13%
Discrete IGBT power transistors - Market Size	million	1,700.00	1,800.00	1,900.00	2,070.58	2,256.48	2,459.06	2,679.84	2,920.43	3,182.63
5yr CAGR	%	9%	7%	6%	9%	9%	9%	9%	9%	9%
3yr CAGR	%	6%	4%	6%	6%	6%	6%	6%	6%	6%
Infineon - Share	%	24.50%	24.10%	24.00%	23.98%	23.97%	23.97%	23.97%	23.97%	23.97%

Revenue Forecast II

Infineon	Units	2022	2023	2024	2025	2026	2027	2028	2029	2030
Power & sensor systems (PSS) - Revenue Share										
PSS Revenue	million	3,606.98	3,998.82	4,571.16	5,003.54	5,523.44	5,853.76	6,105.44	6,248.27	6,513.81
5yr CAGR	%	11%	12%	13%	14%	11%	10%	9%	6%	5%
3yr CAGR	%	14%	15%	12%	12%	11%	9%	7%	4%	4%
Market Size of PSS		43,273.33	46,843.67	50,357.00	53,818.33	57,289.67	60,959.08	65,497.75	70,407.64	75,723.27
5yr CAGR				8%	10%	7%	7%	7%	7%	7%
Market Share PSS		8%	9%	9%	9%	9%	9%	9%	9%	9%
Power & sensor systems - Market Size	million	1,950.00	2,537.00	3,067.00	3,545.00	4,033.00	4,640.90	5,340.43	6,145.40	7,071.71
5yr CAGR	%			15%	15%	19%	15%	15%	15%	15%
3yr CAGR	%	9%	13%	23%	22%	17%	22%	22%	22%	22%
Infineon - Share	%	4%	4%	5%	5%	6%	6%	7%	7%	8%
Discrete Power MOSFETs	million	9,080.00	9,570.00	10,060.00	10,550.00	11,040.00	11,608.18	12,205.61	12,833.78	13,494.28
5yr CAGR	%	6%	5%	4%	5%	5%	5%	5%	5%	5%
3yr CAGR	%	4%	6%	5%	5%	5%	5%	5%	5%	5%
Infineon - Share	%	24.00%	23.80%	23.60%	23.40%	23.20%	23.00%	22.80%	22.60%	22.40%
Power ICs	million	32,243.33	34,736.67	37,230.00	39,723.33	42,216.67	44,710.00	47,951.71	51,428.45	55,157.28
5yr CAGR	%	6%	6%	9%	10%	7%	7%	7%	7%	7%
3yr CAGR	%	10%	13%	8%	7%	7%	6%	7%	7%	7%
Infineon - Share	%	8.40%	8.50%	8.60%	8.70%	8.80%	8.90%	9.00%	9.10%	9.20%
Connected Secure Systems (CSS) - Revenue Share										
CSS Revenue	million	1,546.83	1,700.82	1,862.65	2,029.85	2,202.58	2,381.01	2,565.28	2,755.57	2,952.05
5yr CAGR	%	17%	21%	24%	16%	10%	9%	9%	8%	8%
3yr CAGR	%	34%	20%	10%	9%	9%	9%	8%	8%	7%
Market Size of CSS		21,324.15	21,674.36	22,068.18	22,469.79	22,879.36	23,297.04	23,723.00	24,157.40	24,600.42
5yr CAGR		1%	1%	2%	2%	2%	2%	2%	2%	2%
Market Share CSS		7%	8%	8%	9%	10%	10%	11%	11%	12%
Security ICs - Market Size	million	2,862.15	2,874.36	2,886.62	2,898.93	2,911.29	2,923.71	2,936.17	2,948.70	2,961.27
5yr CAGR	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3yr CAGR	%	-4%	-4%	-4%	-4%	-4%	-4%	-4%	-4%	-4%
Infineon - Share	%	25.00%	25.20%	25.40%	25.60%	25.80%	26.00%	26.20%	26.40%	26.60%
Microcontrollers (MCUs) - Market Size	million	18,462.00	18,800.00	19,181.56	19,570.86	19,968.07	20,373.33	20,786.82	21,208.71	21,639.15
5yr CAGR	%	2%	1%	2%	2%	2%	2%	2%	2%	2%
3yr CAGR	%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Infineon - Share	%	14.05%	13.73%	13.40%	13.08%	12.75%	12.43%	12.10%	11.78%	11.45%
Other Operating Segments - Revenue Share										
	million	-	-	-	-	-	-	-	-	-

WACC Calculation

ERP calculation	% of Revenue	ERP	Weighted ERP
EMEA (excl. Germany)	13%	5.71%	0.74%
Germany	12%	4.24%	0.51%
APAC (excl. China and Japan)	16%	5.88%	0.93%
China	38%	4.94%	1.88%
Japan	10%	4.94%	0.49%
Americas	11%	6.13%	0.70%
SUM of weighted ERP			5.24%

Cost of Equity	
Beta	1.40
10Y GER Treasury Bond as of 08.01.2022	-0.05%
Cost of Equity	7.29%

Cost of Debt	
CDS-Spread for BBB Rating 10Y	1.28%
10Y GER Treasury Bond as of 08.01.2022	-0.05%
Cost of debt pre tax	1.23%

Debt Ratio	12.9%
Equity Ratio	87.1%
Tax Rate	25%

WACC	6.47%
-------------	--------------

LT growth rate	% of Revenue	ERP	GDP	Weighted GDP
EMEA (excl. Germany)	13%	5.71%	2.60%	0.34%
Germany	12%	4.24%	1.10%	0.13%
APAC (excl. China and Japan)	16%	5.88%	4.60%	0.73%
China	38%	4.94%	4.90%	1.86%
Japan	10%	4.94%	0.50%	0.05%
Americas	11%	6.13%	2.05%	0.23%
Implied LT growth rate				3.34%

Cost of Debt	Year	Time to Maturity	Principal Due	Interest Rate	Weighting	Weighted TTM	Weighted Interest Rate
Bond due 2022	2022	1	500	1.500%	8%	0.08	0.11%
Bond due 2023	2023	2	737	0.750%	11%	0.22	0.08%
Bond due 2026	2026	5	744	1.125%	11%	0.57	0.13%
Bond due 2029	2029	8	741	1.625%	11%	0.90	0.18%
Bond due 2032	2032	11	638	2.000%	10%	1.07	0.19%
Convertible bonds 2022	2022	1	330	4.500%	5%	0.05	0.23%
Term loan 2022-2024	2024	3	954	1.040%	15%	0.44	0.15%
USPP notes 2024	2024	3	302	4.090%	5%	0.14	0.19%
USPP notes 2026	2026	5	302	4.090%	5%	0.23	0.19%
USPP notes 2027	2027	6	302	2.880%	5%	0.28	0.13%
USPP notes 2028	2028	7	203	4.090%	3%	0.22	0.13%
USPP notes 2029	2029	8	302	2.880%	5%	0.37	0.13%
USPP notes 2031	2031	10	302	2.880%	5%	0.46	0.13%
USPP notes 2033	2033	12	216	2.880%	3%	0.39	0.09%
SUM			6,573			5.40	

Interest	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bond due 2022	7.5								
Convertible bonds 2022	14.9								
Bond due 2023	5.5	5.5							
Term loan 2022-2024	9.9	6.6	3.3						
USPP notes 2024	12.4	12.4	12.4						
USPP notes 2026	12.4	12.4	12.4	12.4	12.4				
Bond due 2026	8.4	8.4	8.4	8.4	8.4				
USPP notes 2027	8.7	8.7	8.7	8.7	8.7	8.7			
USPP notes 2028	8.3	8.3	8.3	8.3	8.3	8.3	8.3		
USPP notes 2029	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	
Bond due 2029	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
USPP notes 2031	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Bond due 2032	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
USPP notes 2033	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
	136.3	110.6	101.8	86.1	86.1	65.4	56.7	48.4	27.7

Repayment	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bond due 2022	500								
Convertible bonds 2022	330								
Bond due 2023		737							
Term loan 2022-2024	318	318	318						
USPP notes 2024			302						
USPP notes 2026					302				
Bond due 2026					744				
USPP notes 2027						302			
USPP notes 2028							202.8		
USPP notes 2029								302	
Bond due 2029								741	
Total Repayments (Old)	1,148	1,055	620		1,046	302	203	1,043	
Total debt BOP	6916	6927	6701	6351	5685	4885	5030	5179	5325
Total Repayments (Old)	1,148	1,055	620		1,046	302	203	1,043	
Total Debt (Mid Line)	5,768	5,872	6,081	6,351	4,639	4,583	4,828	4,136	5,325
Issued	1,159	829	270	666	246	447	352	1,189	169
Total debt EOP	6927	6701	6351	5685	4885	5030	5179	5325	5495
Interest	2022	2023	2024	2025	2026	2027	2028	2029	2030
Interest on issued debt Y1		14.25	14.25	14.25	14.25	14.25			
Interest on issued debt Y2			10.20	10.20	10.20	10.20	10.20		
Interest on issued debt Y3				3.32	3.32	3.32	3.32	3.32	
Interest on issued debt Y4				-	8.19	8.19	8.19	8.19	8.19
Interest on issued debt Y5						3.03	3.03	3.03	3.03
Interest on issued debt Y6							5.50	5.50	5.50
Interest on issued debt Y7								4.33	4.33
Interest on issued debt Y8									14.62
Interest Total	136	125	126	114	106	88	71	56	47

KPI Calculation 1.0086

KPIs in €mn	2019	2020	2021
Equity Ratio			
Book value of equity (last FY)	8,633	10,129	11,401
Total assets (last FY)	13,581	21,999	23,334
Equity ratio	64%	46%	49%
Rating score for KPI	1	2	2

Dynamic gearing ratio			
Total debt (last FY)	1,556	7,033	6,585
Pensions (last FY)	733	739	617
Lease liability (last FY)	0	294	331
Pref. Equity (last FY)	0	0	0
Minorities (last FY)	0	0	0
Cash (last FY)	1,021	1,851	1,749
Operating Cashflow (last FY)	1,601	1,811	3,065
Dynamic gearing ratio	0.79x	3.11x	1.67x
Rating score for KPI	2	3	3

Interest coverage ratio			
EBIT	1,161	581	1,470
Interest expense (total)	98	177	182
Dynamic gearing ratio	1185%	328%	808%
Rating score for KPI	1	3	2

EBIT Margin			
EBIT	1,161	581	1,470
Total revenue	8,029	8,567	11,060
EBIT Margin	14%	7%	13%
Rating score for KPI	2	3	2

EBITDA to total assets ratio			
EBITDA	2,106	1,841	2,983
Total assets / E+L (last FY)	13,581	21,999	23,334
EBIT Margin	16%	8%	13%
Rating score for KPI	2	3	2

Quick ratio			
Current assets	7,493	7,179	8,252
Current liabilities	2,213	3,450	4,443
Inventories	1,701	2,052	2,181
Quick ratio (last FY)	2.62x	1.49x	1.37x
Rating score for KPI	1	2	3

Return on Assets			
EBIT	1,161	581	1,470
Total assets / E+L (last FY)	13,581	21,999	23,334
Return on Assets	9%	3%	6%
Rating score for KPI	3	4	3

FCFO / Total Debt			
Free Cashflow	1,601	1,811	3,065
Total debt (last FY)	1,556	7,033	6,585
Pensions (last FY)	733	739	617
FCFO / Total Debt	0.70x	0.23x	0.43x
Rating score for KPI	1	1	1

Rating Criteria

Rating criteria for synthetic rating

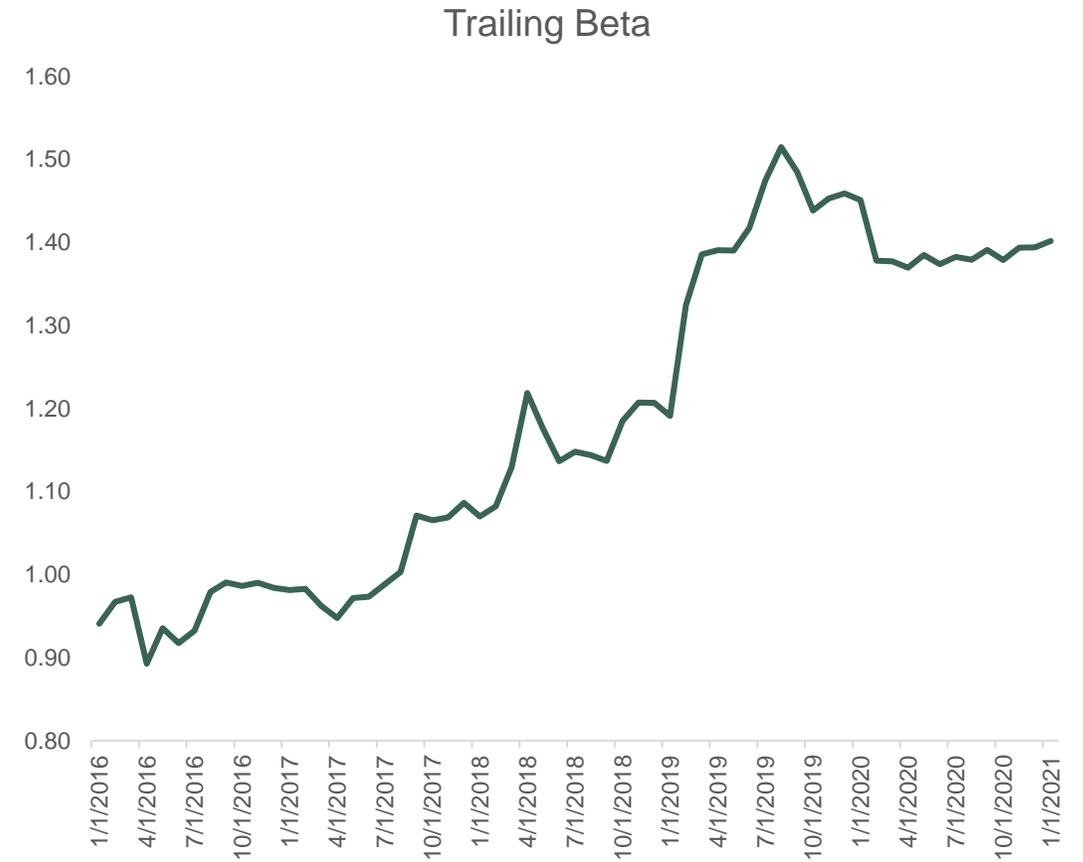
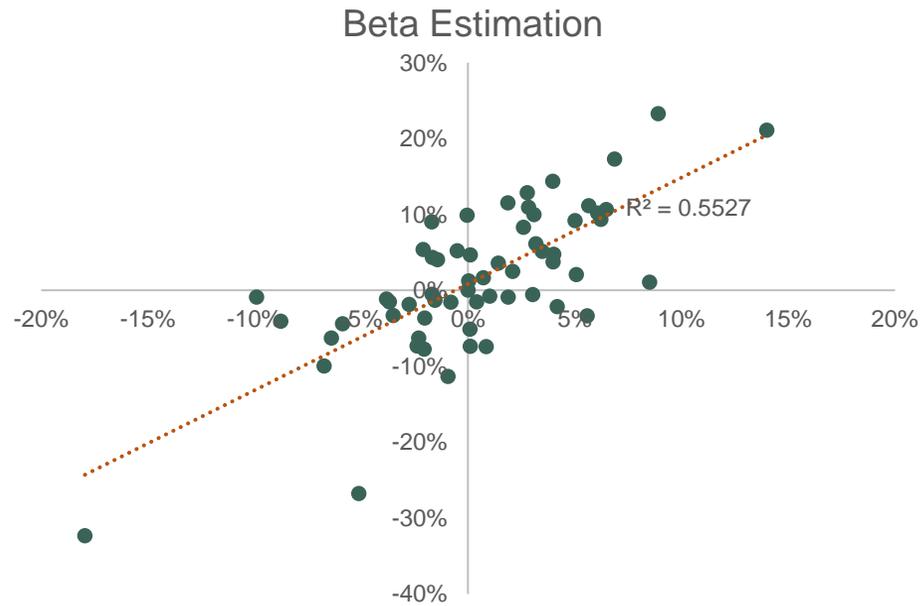
Rating criteria	1	2	3	4	5
1 Equity ratio	≤60%	≤35%	≤20%	>10.0%	≤10.0%
2 Dynamic gearing ratio	<0.0x	<1.0x	<4.0x	<8.0	≥8.0
3 Interest coverage ratio	<9.0x	<4.0x	<2.5x	>1.0	≤1.0
4 EBIT margin	≤15%	≤10%	≤5%	>0.0%	≤0.0%
5 EBITDA to total assets ratio	<0.3x	<0.1x	<0.1x	>0.0%	≤0.0%
6 Quick ratio	<2.0x	<1.4x	<0.9x	>60.0%	≤60.0%
7 Return on assets ¹⁾	≤20%	≤10%	≤5%	≥0.0%	<0.0%
8 Free cashflow to debt ratio	<0.2x	<0.1x	<0.0x	>-10.0%	≤-10.0%

#	S&P Rating	Moody's Rating	Rating Note
1	AAA	Aaa	n/a
2	AA+	Aa1	<0.00
3	AA	Aa2	<1.12
4	AA-	Aa3	<1.25
5	A+	A1	<1.42
6	A	A2	<1.58
7	A-	A3	<1.75
8	BBB+	Baa1	<2.00
9	BBB	Baa2	<2.25
10	BBB-	Baa3	<2.50
11	BB+	Ba1	<2.83
12	BB	Ba2	<3.17
13	BB-	Ba3	<3.50
14	B+	B1	<3.75
15	B	B2	<4.00
16	B-	B3	<4.50
17	CCC+	Caa1	>4.50
18	CCC	Caa2	n/a
19	CCC-	Caa3	n/a
20	CC	Ca	n/a
21	C	C	n/a

Synthetic Rating

Synthetic Rating based on Gleissner/Füser (2010)

	2019	2020	2021
Average Rating Score	1.63	2.63	2.25
Synthetic Rating	BBB	BBB	BBB



This document is being made available by WUTIS Trading and Investment Society, acting through its society ("WUTIS"), for information purposes only and for the sole and exclusive use of the addressee in connection with the matter or possible transaction to which this document relates. This document is incomplete without reference to, and should be assessed solely in conjunction with, the oral briefing provided by WUTIS. This document is strictly confidential and remains the property of WUTIS. You agree that you shall only use this document for the purpose of evaluating and considering the matter or possible transaction to which this document relates.

This document may not be distributed, published, reproduced, or disclosed, in whole or in part, to any other person, nor relied upon by you or any other person, nor used for any other purpose at any time, in each case without the prior written consent of WUTIS. This document does not constitute nor does it form part of an offer to sell or purchase, or the solicitation of an offer to sell or purchase, any securities or any of the businesses or assets described herein or an offer or recommendation to enter into any transaction described herein nor does this document constitute an offer or commitment to provide, arrange or underwrite any financing. You are responsible for making your own independent investigation and appraisal of the risks, benefits, appropriateness and suitability of any transaction or matter contemplated by this document and WUTIS is not making any recommendation (personal or otherwise) or giving any investment advice and will have no liability with respect thereto. The decision to proceed with any transaction or action contemplated by this document must be made by you in the light of your own commercial assessments and WUTIS will not be responsible for such assessments.

Neither WUTIS nor any of its subsidiaries or affiliates, nor any of their respective officers, directors, employees or agents (WUTIS together with such persons being the "WUTIS Group") accepts any liability whatsoever for any direct, indirect or consequential losses (in contract, tort or otherwise) arising from the use of this document or its contents or any reliance on the information contained herein. WUTIS Group is not responsible for any specialist advice, including legal, regulatory, accounting, model accounting, tax, actuarial or other advice.

This document was prepared on the basis of information and data, obtained from publicly available sources and, where applicable, from you and/or any other entity that may be involved in any transaction or matter contemplated by this document (and/or any of your or the aforementioned entities' affiliates), in each case prior to or on the date hereof. The information in this document has not been independently verified by WUTIS. WUTIS has relied on any information provided by you or from third party or public sources as complete, true, fair, accurate and not misleading. With respect to any financial or operating forecasts and analyses provided to it, WUTIS has assumed that they are achievable and have been reasonably and properly prepared on bases reflecting the best currently available information, estimates and judgments as to the future financial performance of the entity(ies) to which they relate and that such forecasts or analyses would be realised in the amounts and time periods contemplated thereby. No member of the WUTIS Group, makes any warranty or representation, express or implied, as to the accuracy, completeness or reasonableness of the information (including projections and assumptions) contained in this document whether obtained from or based upon third party or public sources or otherwise. This document is given as at the date hereof, may not be final, is based on information available to WUTIS as at the date hereof, is subject to any assumptions set out therein and is subject to change without notice. Accordingly, this document may be based on (a) data and information that may no longer be current and (b) estimates that may involve highly subjective assessments. It should be understood that subsequent developments may affect this document and the WUTIS Group does not undertake any obligation to provide any additional information or to update any of the information or the conclusions contained herein or to correct any inaccuracies which may become apparent. Any data or information regarding, or based on, past performance is no indication of future performance. Members of the WUTIS Group are involved in a wide range of commercial banking, investment banking and other activities out of which conflicting interests or duties may arise. In the ordinary course of its business, the WUTIS Group may provide services to any other entity or person whether or not a member of the same group as you (a "Third Party"), engage in any transaction (whether on its own account, on behalf of any Third Party or otherwise, and including any transaction or matter contemplated by this document), notwithstanding that such services, transactions or actions may be adverse to you or any member of your group, and the WUTIS Group may retain for its own benefit any related remuneration or profit.

The WUTIS Group operates in accordance with a conflicts of interest policy which identifies conflicts of interest it faces in the ordinary course of its business, and establishes organisational and procedural measures to manage those conflicts where it is reasonably able to do so. Neither WUTIS nor any other part of the WUTIS Group shall have any duty to disclose to you or utilise for your benefit any non-public information acquired in the course of providing services to any other person, engaging in any transaction (on its own account or otherwise) or otherwise carrying on its business. WUTIS' research analysts and research departments are independent and are subject to certain regulations and internal policies. WUTIS research analysts may hold opinions and make statements or investment recommendations and/or publish research reports with respect to any company referred to herein, the transactions contemplated herein or any person or entity involved therein or related thereto that differ from or are inconsistent with the views or advice communicated by WUTIS.