

Semiconductor Forecast Scenario Tool

Part of the Semiconductor Market Service Area Package

When purchased alongside the Semiconductor Application Forecast (AMFT) Spotlight Service, this tool allows users to generate their own forecasts based on their own expectations of various macro factors that influence the semiconductor industry

“ The recent, unprecedented disruptions in the market have put a premium on the ability to forecast the impact of best-case and worst-case scenarios for the semiconductor industry. ”

Danny Blodgett

Senior Research Analyst

Semiconductor Forecast Scenario Tool

Part of the Semiconductor Market Service Area Package

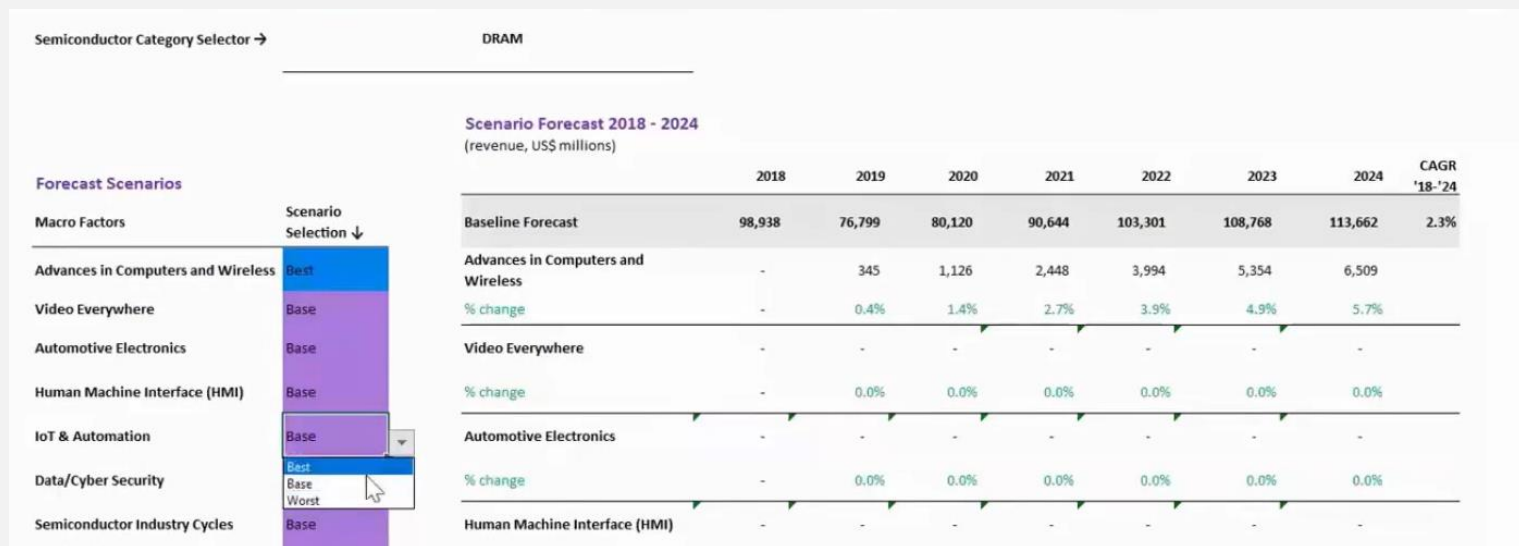
HOW OMDIA HELPS YOU

- Starting with the baseline forecasts in Omdia's Semiconductor Application Forecast (AMFT), understand the impacts of best-case and worst-case scenarios for the semiconductor market
- Generate your own forecasts based on your expectations of various macro factors that influence the semiconductor industry
- Make dynamic adjustments to the individual factors to alter the outcome of the overall semiconductor market forecast

KEY QUESTIONS ADDRESSED

- How will key macro factors influence the semiconductor market?
- How do the impacts of various macro factors compare to, or compound, each other?
- What will the impact of particular macro factors (or combinations of macro factors) be on specific segments of the semiconductor market?
- How would components' growth rate forecasts be impacted by changes in the baseline scenarios?
- What would be the impact of potential best-case or worst-case scenarios on total revenues in the semiconductor market?

Forecast Generator in the Semiconductor Forecast Scenario Tool



Source: Omdia

© 2021 Omdia

Memory & Storage: Our Expert Analysts



Danny Blodgett
Senior Research
Analyst



Myson Robles-Bruce
Senior Principal
Analyst

Macro Factors

TECHNOLOGY INNOVATION

Automotive Electronics

- Autonomous driving
- Connectivity & telematics progress
- Other infotainment
- Powertrain (hybrid/electric adoption)
- Fuel efficiency
- Safety
- Government standards.

Computers and Wireless Advances

- Edge and 5G deployments
- 4G enhancements
- Data center expansions
- Evolution in computing
- Communications hardware platforms.

Data/Cybersecurity

- Secure web surfing solutions
- Secure connected object solutions
- Embedded hardware adoption
- Password/ID advances
- Cost-effective implementations
- Privacy law protection/enforcement
- Communications infrastructure confidence.

Human Machine Interface (HMI)

- VR, AR, AI
- Voice recognition
- Ecosystem development
- All elements of advancing HMI in commercial and industrial applications.

IoT & Automation

- Secure web surfing solutions
- Secure connected object solutions
- Embedded hardware adoption
- Password/ID advances
- Cost effective implementations
- Privacy law protection/enforcement
- Communications infrastructure confidence.

Video Everywhere

- Expansion of video-enabled hardware
- Mobile penetration
- Display technologies
- Video capture & storage
- Online offerings/platforms
- Network & transmission technology
- User-generated content/social video.

SEMICONDUCTOR INDUSTRY DYNAMICS

Semiconductor Industry Cycles

- Investment cycles (CAPEX)
- Supply/demand balance and pricing pressure
- Supply chain management (inventory)
- Industry consolidations

Semiconductor Technology Development

- Process geometries (7nm, 5nm, 3nm)
- Packaging and materials

ECONOMIC TRENDS

Global Economy (GDP)

- Global GDP
- Worldwide trade environment

Semiconductor Category Selector →

Total Semiconductor

Select component category from drop down menu

Forecast Scenarios

Macro Factors	Scenario Selection ↓
Advances in Computers and Wireless	Base
Video Everywhere	Base
Automotive Electronics	Base
Human Machine Interface (HMI)	Base
IoT & Automation	Base
Data/Cyber Security	Base
Semiconductor Industry Cycles	Base
Semiconductor Technology Development	Base
Global Economy (GDP)	Base

Source: Omdia © 2020 Omdia

Select scenarios from drop down menus

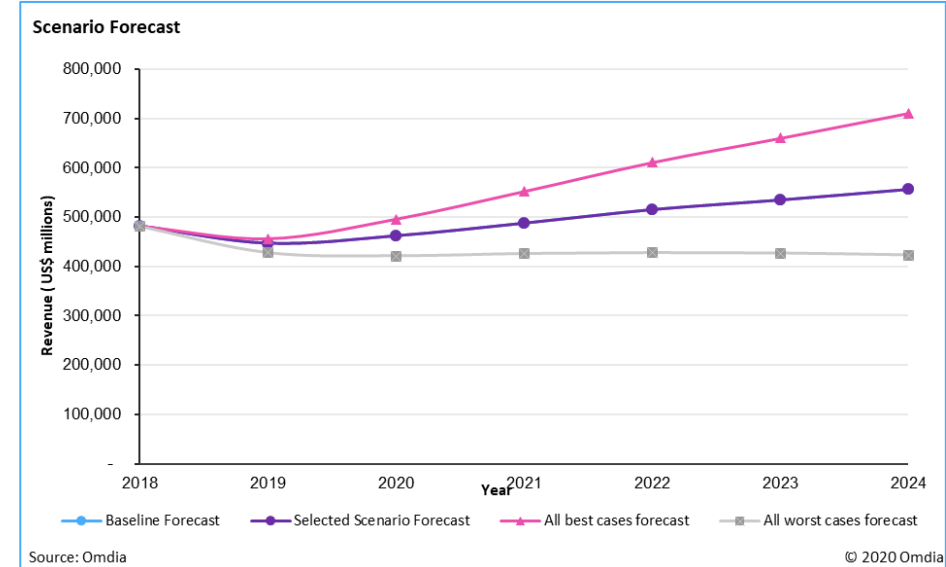
Scenario Forecast 2018 - 2024

(revenue, US\$ millions)

	2018	2019	2020	2021	2022	2023	2024	CAGR '18-'24
Baseline Forecast	481,950	446,194	461,605	487,630	515,526	535,337	557,117	2.4%
Advances in Computers and Wireless	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Video Everywhere	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Automotive Electronics	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Human Machine Interface (HMI)	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
IoT & Automation	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Data/Cyber Security	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Semiconductor Industry Cycles	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Semiconductor Technology Development	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Global Economy (GDP)	-	-	-	-	-	-	-	-
% change	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Selected Scenario Forecast	481,950	446,194	461,605	487,630	515,526	535,337	557,117	2.4%

Source: Omdia © 2020 Omdia

Data based on each scenario selection presented in table



Total semiconductor revenue based on scenario choices graphed in figure

Complete semiconductor component forecast presented based on scenario selections

Semiconductor categories in revenue (millions) and growth rate (y/y)

Integrated Circuits (IC)

- Memory IC
 - DRAM
 - SRAM
 - Flash Memory
 - NAND
 - NOR
 - Other Non-Volatile Memory
 - Other Memory

Microcomponent IC

- Microprocessor (MPU)
 - General Purpose MPU
 - Application Specific MPU
- Microcontroller (MCU)
 - 4 bit MCU
 - 8 bit MCU
 - 16 bit MCU
 - 32 bit MCU
- Digital Signal Processor (DSP)
 - DSP ASSP
 - DSP ASIC
 - Multipurpose & Other DSP

Logic IC

- General Purpose Logic
 - Standard Logic
 - Display Drivers
 - PLD
- Logic Application Specific IC
 - Logic ASSP
 - Logic ASIC

Analog IC

- General Purpose Analog
 - Amplifier/Comparator
 - Voltage Regulator/Reference
 - Data Converters
 - Interface
- Analog Application Specific IC
 - Analog ASSP
 - Analog ASIC

Discretes

- RF & Microwave
- Power Transistor & Thyristor
- Rectifier & Power Diodes
- Small Signal & Other Discretes

Optical Semiconductor

- Image Sensors
 - CCD Image Sensors
 - CMOS Image Sensors
- Laser Diodes
- LEDs
- Other Optical

Sensors & Actuators

Foundry

Total Semiconductor

Related Content: Semiconductor Market Service Area Coverage



Service Area Package: **Semiconductor Market**

China Semiconductor
Intelligence Service

Design Activity Tool

Industrial Semiconductor
Intelligence Service

OEM Semiconductor Spend
Tracker

OEM Semiconductor Spending &
Design Activity
Intelligence Service

Semiconductor Forecast
Scenario Tool

Semiconductor Application
Forecast AMFT Spotlight Service

Semiconductor Competitive
Landscape CLT Spotlight Service

About Omdia's Semiconductor Market Research

Omdia's leading semiconductor market research is provided by a highly experienced team of analysts. Many are industry veterans with deep technical background as well as hands-on market and product experience in their coverage area.

The foundation of all the coverage comes from primary research with the major semiconductor suppliers across the global industry. This insight feeds a global and regional view of the industry by technology and by application including historical and forecasted views presented through the CLT and AMFT solutions.

From this core data, the research is augmented through additional primary research to deliver China, Industrial and then an OEM spend and design activity views as well as the forecast Scenario Tool.

Related Content: Semiconductor Service Area Coverage

SERVICE AREA PACKAGE			
Memory & Storage	Semiconductor Components	Semiconductor Manufacturing	Semiconductor Market
<ul style="list-style-type: none"> • DRAM Memory Intelligence Service • Mobile & Embedded Memory Intelligence Service • NAND Memory Intelligence Service • SSD & HDD Storage Memory Intelligence Service 	<ul style="list-style-type: none"> • Key Mobile Component Price Intelligence Service • LED Intelligence Service • Magnetic Sensors Report - 2019 • MEMS & Sensors for Consumer & Mobile Intelligence Service • MEMS & Sensors Intelligence Service • Microcontroller Market Tracker • Optoelectronic Components Report - 2020 • Power Semiconductor Intelligence Service • Processors for Graphics & Artificial Intelligence Market Tracker • Processors for Network Infrastructure Market Tracker • Processors Spotlight Service • System-on-Chip (SoC) Market Tracker 	<ul style="list-style-type: none"> • Global Semiconductor Manufacturing Market Tracker • Pure Play Foundry Market Tracker • Semiconductor Silicon Demand Forecast Tool 	<ul style="list-style-type: none"> • China Semiconductor Intelligence Service • Design Activity Tool • Industrial Semiconductor Intelligence Service • OEM Semiconductor Spend Tracker • OEM Semiconductor Spending & Design Activity Intelligence Service • Semiconductor Application Forecast AMFT Spotlight Service • Semiconductor Competitive Landscape CLT Spotlight Service • Semiconductor Forecast Scenario Tool

Our “Ask an Analyst” Service Provides Best in Class Customer Support

Whether you need guidance to navigate the service, information regarding our methodologies or you want to better understand a data trend, Omdia’s support team is here to help.

Draw on our expertise

- Make the right decisions
- Sanity-check your own findings
- Get the most out of your subscription
- Understand more about our methodologies

Our Ask an Analyst service gives you direct contact via telephone, email or face-to-face session with our expert analyst team:



Tom Coate
Customer Success
Manager



Kâren Dyer
Customer Success
Manager



CONNECT WITH US

 @OmdiaHQ | [omdia.com](https://www.omdia.com)

Customer Success

E: customersuccess@omdia.com

SALES

US: +1 (212) 652 5335

APAC: +61 (0)396 016 700

EMEA: +44 (0)7771 980 316

ABOUT OMDIA

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired Omdia technology research portfolio*. We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses—today and tomorrow.

* The majority of Omdia technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.