

FUTURE HORIZONS

Presents

The Global Semiconductor Monthly Report

Sample Report – July 2022

The Storm Clouds Are Gathering ... Are Years Of Plenty Dulling Minds?

Over 33 years As *THE* Authoritative Industry Scorekeeper, With An Exemplary Record Of Accuracy & Calling The Trends Right ... We Were The Only Analyst To:

- ☑ Correctly Call Double-Digit Upturn In 2018 (Nov 2016)
- ☑ Correctly Call 'Stay Calm' Advice Re 2020 Covid-19 Impact (April 2020)
- ☑ Correctly Call 2021 Double-Digit Growth, With Upside Of 24% (Sep 2020)
- ☑ Correctly Call Systemic & Widespread Shortages Throughout 2021-22 (Sep 2020)

Mark Your Diary NOW! ... IFS2022-MT ... 13 Sep 2022
Mid-Term Industry Forecast

(Visit Our Website www.futurehorizons.com for Further Details & Registration)

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“We pride ourselves on the integrity of our work and the rigour and discipline employed in everything we do, not least of which is our commitment to accurate, impartial and usable information” – Malcolm Penn, Founder & CEO, Future Horizons

A **C-Suite favourite**, the **Global Semiconductor Monthly Report** provides monthly **analysis** and **commentary** on the **global semiconductor industry** and the future **market outlook** and **forecast**.

Founded in 1989 Future Horizons is the **premier global IT & Semiconductor industry watcher**. Its focused **expert team** has almost **300 years’ experience** of the industry, starting from the **first commercial IC**.

Future Horizons offers an **unparalleled industry database** addressing markets, technologies, suppliers, and customers in every significant geographic area. With services ranging from **bespoke industry studies** to standard monthly and quarterly **industry reports and forecasts** as well as **deep dive reports** on key strategic issues on **what drives the industry**.

“Malcolm has the longest history in the industry of anyone who is still publicly active in reporting data so you need to listen to him he’s seen a lot of cycles” – Wally Rhines, SemiWiki Podcast EP70, 8 Apr 2022

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The Global Semiconductor Industry Analyst

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Typically Consists Of 20 Pages / 28 Graphs & Tables

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Ask The Analyst

- ✓ **Got a question** on the information in this month's Report?
- ✓ **Need** more information on what we've said?
- ✓ **Don't agree** with our conclusions?

Just call ... please contact us with any questions or comments on either this month's Report or any other aspect of the industry and our research ... contact: mail@futurehorizons.com.

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Sample Extracts From The July 2022 Report

Executive Overview

Growth Momentum Indicator

Figure E1 shows the worldwide semiconductor market value growth momentum indicator which compares the 3/12 and 12/12 trends. The 3/12 curve plots the last three months sales growth vs the same three-month period a year earlier, whilst the 12/12 curve plots the last twelve months sales growth vs the same twelve-month period a year earlier.

As can be seen from the graph, the two curves ... **(read more)**

IC Market Growth

Figure E2 shows the 12/12 worldwide monthly growth rate trend for IC sales in US dollars, units and ASP for Jan 2015 to May 2022 inclusive.

Table E2, shows the current month-on-month growth rates as well as the annualised rate for the same period a year before ... **(read more)**

FH Analysis

Monthly IC unit shipments and ASPs grew sequentially 3.3 and 7.8 percent in May resulting in a double-digit sales value growth of 11.3 percent. The comparable numbers for the previous month were 11.2 percent, -1.3 percent and 9.9 percent respectively. On an annualised basis, the market in May 2022 grew 20.3 percent vs. May 2021 and April's 2022 14.7 percent number.

With May's growth rates continuing to defy gravity, little wonder many in the industry still see this current boom continuing throughout 2022 and beyond.

That's nothing unusual ... **(read more)**

IC Unit Growth

Figure E3 shows the IC unit shipments trend from Jan 2003 to date. This clearly shows the current IC unit shipment run rate is running ... **(read more)**

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IC ASPs

Figure E4 shows the quarterly IC ASP growth rate trend from Q1-1978 to date. What this chart clearly shows, based on 45 years of data, is first ASPs are ... **(read more)**

Fab Capacity

In the post-Lehman years, with the global economy struggling to recover, IC unit demand entered into a prolonged below average growth and the CapEx spend was adjusted accordingly, Figure E5.

At the same time, in 2015, ... **(read more)**

The prime cause for industry cyclicalities is the lag between demand and new supply, which takes a year (for an existing or empty clean room) or two (for a greenfield site) to build up. Until the industry learns to tackle this problem head on and, importantly, find a way for the investment risk to be shared, this conundrum will continue to haunt the industry and the cycles never tamed.

Market Outlook

Future Horizons' current forecast (as of May 2022) is for the market to grow 6.5 percent in 2022 only to shrink in 2023, Figure E6. This was a downgrade from our Jan 2022 forecast. So why are we once again out on a limb and so different? **(Read more)**

Market Snapshot

Figures M1 and M2 show the worldwide and European industry growth rates for ICs, Opto, and Discrete Devices from January 2015 to May 2022 inclusive. These show the current month as compared with the same period 12 months ago and are a useful industry momentum indicator. Figures M3a-M3h show 15-month rolling worldwide and European sales by major product category with Figures M4a-M4h showing the comparable worldwide unit and ASP trends.

Figure M1 – World Sales By Product Category Growth Rate

Figure M2 – Europe Sales By Product Category Growth Rate

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Figure M3 – WW & Europe Sales Rate By Product

- M3a - Total WW Semiconductor
- M3b - Total Europe Semiconductor
- M3c - Total WW IC
- M3d - Total Europe IC
- M3e – Total WW Optoelectronics
- M3f – Total Europe Optoelectronics
- M3g – Total WW Discretes
- M3h – Total Europe Discretes

Figure M4 – WW Unit Sales & ASPs By Product

- M4a – Total Semiconductor Units
- M4b – Total Semiconductor ASP
- M4c – Total IC Units
- M4d – Total IC ASP
- M4e - Total Optoelectronics Units
- M4f - Total Optoelectronics ASP
- M4g - Total Discretes Units
- M4h - Total Discretes ASP

Exchange Rates

Figure R1 shows the weekly Euro exchange rate vs the US\$ and UK£ for 2011. Figure R2 shows the historical trend since its 1st Jan 1999 launch (*read more*).

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**33 Years Of Service
Founded April 1989**

**6th Decade
Of Semiconductor
Industry Experience**

**Our Experience
Started With The First
Commercial IC**

**Detailed Analysis
plus
The Reasons Why**



Established in April 1989, Future Horizons provides market research, technical appraisal and industry analysis for use in due diligence opportunity assessment, business planning and new market development. Its industry information seminars and forums are widely considered to be the best of their kind. Emphasis is placed on the worldwide microelectronics and associated electronics industry and European market environment.



Malcolm Penn is the founder and CEO of Future Horizons, with over 50 years experience in all aspects of the IT industry, from semiconductors to end-electronics equipment; advance research to manufacturing and applications together with an extensive network of C-level industry contacts. He has worked extensively throughout Europe as well as in the United States, the former USSR, Japan and Korea, and was an early pioneer of pan-European research and product development collaboration in the 1970s during his tenure with ITT Europe.

His wide range of experience includes brokering partnerships and helping firms develop their joint activity relationships. Prior to establishing Future Horizons, he held various operations, marketing and business development positions in the semiconductor and IT industry having worked his way through university as a professional musician.



Mike Bryant is Future Horizons CTO. With more than 40 years in the electronics industry, he is an experienced RF and analogue/mixed signal IC design engineer, specialist in providing IC design and consultancy services on hardware and systems design partitioning, software and digital signal processing design methodology and implementation. Recognising the convergence of many software and digital hardware design techniques, Mike was one of the first in Europe to use HDL and

logic synthesis exclusively for all logic design

In an era dominated by an abundance of 'free' web-based information and an infinite permutation of 'expert' opinions, from PR hype to bloggers, Future Horizons offers a high-quality, unbiased, flexible information-based service with justified analyses for key industry decision makers. For all of your semiconductor-based business development needs ...

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