Your Passport To Future Horizons

Making Sense Of The Industry ‘Tea Leaves’

Analyse The Facts
◆ Economy (IMF)
◆ Unit Sales (WSTS/Markets)
◆ Fab Capacity (SEMI/Company)
◆ ASPs (WSTS)

Interpret The Analysis
◆ Historical Precedents
◆ Underlying Trends
◆ Experience & Understanding
◆ Common Sense

All Inter-Related But Mathematically Disconnected

The Global Semiconductor Industry Analysts
About Future Horizons
31st Anniversary “Taking Care Of Our Clients” Founded April 1, 1989

Malcolm Penn (Venner, ITT SC, ITTE, Dataquest) Chairman & CEO SC Industry Analysis & Executive Support

Lane Mason Denali, IBM Micro, Vanguard, Viking Research Dataquest Senior Industry Analyst Worldwide Memory Market Analyst

Mike Bryant (HP, Fujitsu, Westell Soundcraft) Chief Technology Officer IC & System Design Analysis & Support

Jo Penn PR & Events Mgr WebSite & B2B Network Events & Forums Client Support

Masanori Sugane (ITT SC, Infineon, Oxford SC, Etc) Japan Industry Analyst

Jean Evans Administration Assistant Paula Gilzean Company Secretary

Sergey Orlov Research Analyst Russia/CIS Operations Business Opportunity Development

What
Research Reports Consulting Projects Seminars & Forums Design Services Due Diligence

How Top Down, Bottom Up With Multiple Cross Checks & Common Sense We Are Independent & Honest PLUS Unashamedly Glass Half Full We Tell It Straight, Not What’s Politically Correct … & The Reasons Why

Why No Other Analyst Has The Same Breath Of Industry Experience (From 1962, Spanning Technology & Design Though Operations, Sales & Marketing)
Company Chronology & Background

- Company Founded (Apr 1, 1989)
- Worldwide Semiconductor & Microelectronics Industry Focus
- European & Russia/CIS Semiconductor Industry Specialisation
- Cover Full Spectrum – From Advanced Research To End Markets
- Market Research, Technology Analysis & Industry Training
- Custom Consulting & Marketing Studies
- Independent Industry Expert Witness, Board Advisor & Non-Exec Director
- Due Diligence & IP/Product Development & Positioning
- Business Development Opportunities & 1-2-1 Contacts
  - Off-The-Shelf Research Reports & Industry Intelligence/Analysis
  - Bespoke Research Assignments - From Proof Of Concept To Full Market Development
  - Due Diligence Analysis - From Seed Funding Through IPO
  - Competitive Benchmarking & Positioning - From the Basic IC Design & Technology Up
  - Unique Combination Of Chip Design Know-How With Market & Operations Insight

Global Organisation, Headquartered In Sevenoaks, Kent, UK
Regional Offices In The UK & Russia
Affiliates In Europe, India, Israel, Japan, Russia & USA
Malcolm Penn - Founder, Chairman & CEO

- **1962-69** EE Degree (Industry Sponsored)
  (British Aerospace & London University)
  Professional (Rock, Blues & Jazz) Musician

- **1966-69** Electronic System Design
  (Professional Test & Measurement Equipment)

- **1969-80** ITT Semiconductors
  (Logic, DRAM, ASSP, Operations & Business Development)

- **1980-82** ITT Europe
  (Telecoms System House, Now Alcatel)

- **1982-89** Founded Dataquest Europe
  (IT Industry Market Research, SCs & EDA to Telecoms, PCs & OE)

- **1989** Founded Future Horizons
  (Industry Analyst & Consultant)

>5 Decades Of Semiconductor Industry Experience
(Longer Than ANY Other Industry Analyst & Most Industry Execs)
Mike Bryant – Chief Technology Officer

- **Hewlett Packard, Telecommunications Division**
  - Audio & PCM Test Equipment
  - Large-Scale System Performance Monitoring S/W

- **Fujitsu Microelectronics**
  - Analogue & Digital VLSI ICs For ISDN, Voice Data Compression, X.25 Frame Relay Controllers & Telecom Systems, HDL & Logic Synthesis

- **Westell**
  - ADSL and HDSL modems
  - High performance ATM switching & network interface cards
  - SNMP based management system (DSLAM)

- **Soundcraft**
  - Professional audio mixing equipment using high-performance DSP/24 bit A-D and D-A, with Ethernet, ATM, USB, Firewire, Bluetooth, ADAT and TDIF interfaces

>4 Decades Experience In The Electronics Industry
Future Horizons Since 1991 (Incl Work For European Commission As External Expert Project Reviewer)
Lane Mason – Senior Industry Analyst

◆ Denali
  - Memory Analyst
◆ Vanguard Semiconductor
  - Memory Marketing Director
◆ IBM Microelectronics
  - DRAM Strategic Marketing Manager
◆ Viking Research
  - Memory Industry Analyst
◆ Viking Research
  - Memory Market Research Director

>4 Decades Semiconductor Memory Experience
Future Horizons Since 2008
(Incl Work For Successful SK-Telecom Hynix Acquisition)
Sergey Orlov – Research Analyst

- 1989 - AmSovInvest Project Manager
  (One of the first JV companies in former USSR)
- 1991 - Future Horizons Account Manager
- 1993 - Executive Director East-West Electronics
  (wholly-owned subsidiary of Future Horizons)
- 2001 - Marketing & Commercial Director of Elint
  (Future Horizons' Russian Affiliate)

>3 Decades Semiconductor Industry Experience
Future Horizons Since 1991
Research Philosophy (Experience & Common Sense)

"Plus ça change … plus c'est la même chose“ (The More Things Change … The More They Stay The Same)

- Analyse The Industry Fundamentals – Ignore Them At Your Peril
  (By The Time A Trend Or Market Is Clear It’s Already Far Too Late To React)
- Customers & Markets Shift Dramatically – It’s A 10-15 Year ‘Renewal’ Cycle
- Create Your Own Destruction – If You Don’t Your Competitors Will
- NEVER Believe Your Own PR Or Management Spin - Hype Springs Eternal!
- Long-Term Visibility Is Good – Near-Term Poor (3-6 Months At Best)
- Vision & Commitment – If You Don’t Believe It Can Be Done It Won’t Be Done
- We Tell The Facts Plus The Rationale – Not What Is Politically Correct

Future Horizons
The Global Semiconductor Industry Analysts

My Industry Experience Started Here …

- Focus On The Basic Fundamentals
- Look For Changes In Industry Characteristics
- Analyse Deviations From Long-Term Trends
- Analyse Cause Of Cycles, Not ‘Best Historical Fit’
- Sales Value = Units Sold x Price Sold For
- Markets Don’t Buy Chips - Only Customers
- All Markets Are Finite - They Eventually Saturate
- Over Capacity => Meltdown => Revenue Downturn
- Look For The Facts Not Hype, Fashion Or Denial
- Past Industry Cycles Poor Indicator Of The Future
- Good Old-Fashioned Common Sense & Experience (Slide Rule Sanity Check Mentality)
Future Horizons Organisation & Services

- Market Research Reports - *Covering Basic Industry Statistics*
- Research & Due Diligence Reports - *Expert Advice & Analysis*
- Dedicated Studies - *For a More Focused Analysis*
- Industry Networking Events – *With Key Industry Executives*
- Monthly Newsletters - *For The Latest News & Information*
- Dedicated Research - *For Added Insight & Analysis*
- Flexible Resource Support - *A Few Hours To Custom Study*
- Clearly Defined Objectives - *You Get Exactly What You Want*
- Controlled Budget - *Pay Only For What You Want*
- Insight & Analysis - *From Seasoned Industry Veterans*
- Expert Opinion - *From Litigation Thro Political Advice & Support*
Industry Awareness Workshops & Webinars

Please Check Our Website For Details, Dates & Locations

All Seminars Can Be Held In-House If Preferred, Please Call
In-House Industry Outlook Clinic

Resident At Your Premises, 1 Day, 1 Week or More

1-ON-1 Market Research Support

- Industry Update Presentation
- 1-On-1 Group Sessions
- Support Specific Projects Or General Enquiries
In-House Market Research Workshop

How To Undertake Effective Market Research & Analysis

One Day Workshop
- Research Methodologies
- Do’s & Don’t’s
- Effective Report Writing
- Spread Sheet Structure & Analysis
- Tricks Of The Trade

1-ON-1 Mentoring
- Work At Our Sevenoaks, Kent, UK HQ
- Observe First Hand Research & Analysis In Practice
- Work On Your Project Or Our On-Going Research
- One Week Minimum Assignment, Longer By Agreement
The CEO Service

... The Ultimate Non-Exec, Non-Exec Service

1-ON-1 Sanity Check
- Market Research ... What You Won’t Get Doing It In-house
- Analysis ... What Does It Really Mean?
- Market ‘G2’ ... What Does The Market Really Think?
- What The Board/Employees Won’t Want To Tell You
- What You Think You Don’t Want To Hear!
- Quarterly Exec Presentations
- Beyond The SC Monthly Update Report
Future Horizons Ltd
Blakes Green Cottage
Sevenoaks, Kent
TN15 0LQ, England
T: +44 (0)1732 740440
F: +44 (0)1732 608045
E: mail@futurehorizons.com

Regional Offices In The UK & Russia
Affiliates In Europe, India, Israel, Japan, Russia & USA

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