Still waiting for a solid upturn

The much-awaited 2013 “global recovery” experienced some regional setbacks this spring. Based upon May PMI leading indicator data (Chart 1) the world is just barely in a growth mode with Japan and Europe reporting improved Purchasing Managers’ Indices, China, Taiwan and S. Korea seeing weakening and the USA falling back into contraction.

On a 3/12 growth basis (Chart 2) key components of the electronic supply chain (semiconductors, PCBs and electronic equipment) have had declining revenues with their leading indicator pointing to minimal growth (excluding seasonality) in the near term.

Global electronic equipment production (Chart 3) suffered in early 2013 and sales results through April showed only a modest seasonal “electronics end market” recovery.

In the USA most of the electronic supply chain has been contracting in 2013 (Chart 4) with military electronics (Chart 5) being especially hard hit. One encouraging sign was the April improvement in measurement and control equipment orders (Chart 6) but overall domestic electronics demand has been weak.

In SE Asia suppliers are being forced to adjust to diminished personal computer demand as tablets and smartphones have assumed the roles of many traditional PCs (Chart 7).

World semiconductor demand remained flat through April with Custer Consulting Group’s semiconductor leading indicator pointing to minimal improvement over the next few months (Chart 8).

In summary 2013 is not shaping up as the solid growth year that was hoped. We will see a normal seasonal expansion this summer and autumn but robust year-on-year expansion still remains elusive.

End markets
IT spending expectations were lowered to 4.9% growth by IDC as sequester and global economic uncertainty diminished business confidence.

Mobile Communications
- Mobile phone sales increased 0.7% y/y to nearly 426 million units in 1Q’13.
- More than 226 million mobile phones were sold in Asia/Pacific.—Gartner
- Global handset touch panel shipments are expected to grow 5.5% q/q to 284 million units in 2Q’13.—Digitimes Research
- Global smartphone shipments are expected to reach 937 million units in 2013.—NPD DisplaySearch
- NFC (Near Field Communication) enabled cell phone shipments will reach 1.2 billion units from 2012 through 2017.—IHS subsidiary of IMS Research

Computers & Peripherals
- Notebook touch screen shipments increased 51.8% q/q to 57 million units in 1Q’13.—Displaybank
- Worldwide PC shipments are expected to fall by 7.8% y/y in 2013 as market shifts to tablets.—IDC
- Worldwide tablet shipments are expected to grow 58.7% y/y to 229.3 million units in 2013.—IDC
- Worldwide server shipments declined 0.7% y/y to 2.3 million units in 1Q’13.—Gartner
- Personal & entry level storage market grew 73.4% y/y with 20.2 million units shipped in 1Q’13.—IDC
- Taiwan’s contract notebook shipments are forecast to drop 9% y/y in 2013.—SinoPac Securities

Data Communications
- Optical network hardware market (including SONET/SDH and WDM equipment) totaled $2.6 billion in 1Q’13.—Infonetics Research
- Home networking device market increased 5% y/y to $4.9 billion in 2H’12.—Infonetics Research
Internet of Everything to grow from $16.43 billion in 2012 to $81.7 billion in 2013.—ABI Research

Other

Automotive electronics market is set to rise more than 50% from $157 billion in 2010 to $240 billion in 2020.—IMS

LED light bulb shipments are forecast to increase 151% y/y to 842 million units in 2013.—Digitimes Research

LCD monitor OEM shipments decreased 13.9% y/y to 33.1 million in 1Q’13.—TPV

Touch-screen panel shipments will double from 2012 to nearly 3 billion units in 2016.—IHS

Large-area TFT LCD revenue is expected to fall 2% y/y-from $83.6 billion in 2012 to $81.7 billion in 2013.—NPD DisplaySearch

Hardcopy peripherals market decreased 9.7% y/y with 25.8 million units shipped in 1Q’13.—IDC

Large format printer market declined 12.0% y/y in 1Q’13.—IDC

Medical industry EMS opportunities will increase 151% y/y to 842 million devices in 2020.—Frost & Sullivan

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EMS, ODM & related assembly activity

Medical industry EMS opportunities will grow from $16.43 billion in 2012 to $34.38 billion in 2019.—Frost & Sullivan

Bittele Electronics began offering prototype PCB assembly services. Cirtronics added two Pillarhouse Jade selective solder machines, two MY100DX pick and place machines and a PDR IR-C3 Chipmate SMT rework system. Connor Solutions appointed Steve Henderson as Business Development Director Creation Technologies’ facility in Ontario, Canada achieved FDA registration. Dorigo celebrated 25 years as an EMS provider. EastBridge Engineering established its Design Launch division. EMS Solutions moved into a 45,000 SF facility in Business Depot Ogden in Ogden, Utah. Engent joined the High Density Packaging User Group. Escatec added a Nikon XTV160 2.5D X-Ray inspection system. appointed Johan Halling, GM of Escatec Electronics and Escatec Medical in Penang, Malaysia.

Flextronics spent $25 million on improvements and equipment at its 445,870 SF Fort Worth, Texas facility, which began smartphone assembly for Motorola.

Foxconn/Hon Hai

• acquired technology for carbon nanotube touch panel production.

• became major investor in Tai Tung Communication’s fiber-optic JV.

• opened a display R&D center in Sakai City, Japan.

• partnered with PT Erajaya Swasembada to build a factory to produce mobile phones, tablets and other telecommunication products in Indonesia.

• was ranked 5th among top 1,000 firms in Greater China.—CommonWealth Magazine poll

World Electronic Equipment Monthly Shipments

Present Growth Rates (%) U.S. Economy & Electronics Industry

Global PMI, Electronic Equipment, PCB & Semiconductor Shipments
Still waiting for a solid upturn

Inovar appointed Gene Sparks as Southwest U.S. Sales Director. Lacroix appointed François Beauxis as Managing Director of its electronics division. PCA Technology was acquired by MSKK Investments. Pegatron plans to hire 40,000 new workers in 2H’13. Pektron Group upgraded two production lines that include six Hitachi Sigma Series machines in Derby, UK. Power Design Services achieved ITAR compliancy under the U.S. Department of State. Proto-Pac Engineering leased a 42,872 SF manufacturing building in Wilmington, MA.

Saline Lectronics appointed David Cusumano, VP of Engineering. Sanmina received a contract to provide the majority of repair services for Motorola Solutions. Season Group acquired Outsource Electronics Limited. SMTC appointed Larry Silber as Interim CEO, Clarke Bailey as Executive Chairman and Steve Brown as VP, Quality and Engineering. TT electronics-IMS division merged with New Chapel Electronics.

**PCB fabrication**
Flexible devices (primarily flexible printed circuits) manufactured by roll-to-roll technologies will grow from $10.8 billion in 2012 to nearly $22.7 billion by 2017.—BCC Research
Printed, flexible and organic electronics will grow at a 15.3% CAGR from $16.04 billion in 2013 to $76.79 billion in 2023.—IDTechEx
Taiwan PCB production value is expected to rise 3% q/q to NT$119 billion (US$4 billion) in 2Q’13.—IEK
Asian Circuits launched a turn-key PCB assembly service. AT&S plans to close its Klagenfurt plant at the end of 2013. Farnell and Eurocircuits entered quick-turn bare board PCB prototyping services collaboration. Invotec Group appointed John Fitzpatrick, Sales Account Manager for South East UK. MTI Electronics installed an AOI system. Stevenage Circuits added an Orbotech Sprint 120 ink jet legend printing machine. Sumitomo Electric
• developed thin construction for flexible circuits filling via holes with conductive nano paste.
• began mass-production for new type FPCs at Minakuchi Works.
Würth Elektronik began offering wire bonding service.

**Materials & process equipment**
Global laser materials processing systems market grew 9% y/y to €7.9 billion in 2012 (market grew 1% when measured in US-dollars)—Optech Consulting
OLED materials market will grow from $450 million in 2013 to over $4.6 billion by 2021.—NanoMarkets
Taiwan’s specialty chemicals output will grow 6% y/y to NT$678.54 billion (US$22.79 billion) in 2013.—Industry and
Technology Intelligence Services
Agfa Materials appointed Rich Breitlow, Channel Sales Manager for North America. Agilent laid off 450 workers. Aisimalibar North America named Gareth Parry, Chief Field Application Engineer. Bayer MaterialScience inaugurated a regional innovation hub in Shanghai. Cambridge Nanotherm is building a nanoceramic-aluminum substrate prototype manufacturing plant in Haverhill, UK. Chomerics achieved ISO 14001:2004 certification for its facility in Saint Ouen l’Aumone, France. Dymax named Marufur Rahim, R&D Manager and Margo Martin, Global Account Manager. Equipment Technologies merged with North East Automation. Finetech & Martin named Al Cabral, Regional Sales Manager. GT Advanced Technologies acquired Thermal Technology. H.B. Fuller entered electronics and assembly materials market with total solutions “eco-system” approach that includes materials, processes and equipment. Isola enhanced its Quick Turnaround Service in Europe. Mannencorp moved into its 18,000 SF headquarters in Huntingdon Valley, Pennsylvania. MYDATA Royonic moved into new offices in Unterhaching, Germany. Optomec is developing new digital production solution that enables direct printing of antennas used in mobile device applications. Park Electrochemical appointed Linda Lagnese, Director of Human Resources. SIPLACE appointed Technica USA as its new sales partner for its SMT placement equipment, software and services in Western USA. Teledyne acquired Axiom IC. ZESTRON appointed Stefan Theil, Regional Sales Manager for South Germany.

**Semiconductors & other components**

China electronic components distributors expect 23% revenue growth in 2013.— Global Sources

European semiconductor distribution sales fell 5% y/y to 1.48 billion Euros in Q1/ CY13.—DMASS

IC Insights lowered its forecast for 2013 semiconductor market from 6% to 5%, citing tepid 1Q’13 GDP estimates in many of the world’s largest economies. North American semiconductor equipment industry posted $1.17 billion in orders worldwide in April 2013 (3-month average basis) and a book-to-bill ratio of 1.08.—SEM

**China electronic components distributors expect 23% revenue growth in 2013.**

Global nanomagnetic materials and devices market will reach $9 billion by 2017.—BCC Research

iNEMI published its tenth roadmap. Smart grid sensor market is expected to top $100 million in 2015.—IHS

Taiwan-based IC design houses’ shipments grew 21.6% y/y to NT$20.18 billion (US$673.8 million) in 1Q’13.—Digitimes

Total MPU sales will grow 10% y/y to $62 billion in 2013.—IC Insights

Worldwide semiconductor market contracted 2.2% y/y in 2012 to $295 billion however 3-4% revenue growth is expected in 2013.—IDC

Worldwide silicon wafer area shipments increased 4.8% y/y to 2,128 million square inches in 1Q’13.—SEMI

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