# FutureHorizons

The Global Semiconductor Industry Analysts

## **FH MONDAY**

6 August 2018

NAND Market Hit by Arm Confirms Treasure Q'comm–NXP Break-Up: Oversupply Data Buy, IoT Platform There Will Be Fallout After a banner year in 2017, For two years, Qualcomm and Arm Holdings confirmed the the NAND flash market NXP have been thinking about acquisition of Treasure Data, continues to cool significantly what they could do together. saying it would become part of in 2018. Analysts say that the The two companies, a new connectivity and data shortages of NAND parts that independently, might have management software-as-apersisted throughout last year service (SaaS) platform that it even delayed some key have given way to oversupply, will offer within the next six to decisions, wondering how this resulting in significant price potential merger might juice nine months. erosion. their customer base, technology expertise, and market share. read more read more read more FutureHorizons TALK TO US OLED Displays Fold in YMTC to Detail 3D NAND Smartphones - Literally Chips **EVENTS** Silicon Chip Industry A smartphone that unfolds Yangtze Memory into a tablet could emerge Seminar Technologies Co., Ltd. next year in an effort to (YMTC) will unveil next week - 12 Nov 2018 - London UK reinvigorate the maturing its latest 3D NAND chips. The mobile market. A bendable talk by chief executive Simon Industry Forecast Briefing screen passed U.S. safety Yang at the Flash Memory tests, Samsung Display Summit here will mark the first - 18 Sept 2018 - London UK announced late last week, in public discussion of an effort DON'T MISS OUT.the latest sign that the longfrom China to produce BOOK NOW BY rumored concept may be leading-edge memory chips. about to become a reality. CALLING +44 1732 740440 read more read more OR EMAIL mail@futuraharizana aam

Future Horizons Ltd, • 44 Bethel Road • Sevenoaks • Kent TN13 3UE • England Tel: +44 1732 740440 • Fax: +44 1732 740442 e-mail: <u>mail@futurehorizons.com</u>• <u>http://www.futurehorizons.com/</u> Affiliates in Europe, India, Israel, Japan, Russian, San Jose California, USA

### Q'comm-NXP Break-Up: There Will Be Fallout

PARIS — For two years, Qualcomm and NXP have been thinking about what they could do together. The two companies, independently, might have even delayed some key decisions, wondering how this potential merger might juice their customer base, technology expertise, and market share.

Their rivals, too, wondered how the competitive landscape — especially in automotive and IoT — might change after the birth of this full-grown, half-ton, high-tech gorilla.

Now that Qualcomm has walked away from the NXP acquisition — because China missed the deadline to approve the deal — what next?

#### Arm Confirms Treasure Data Buy, IoT Platform Offering

LONDON — Arm Holdings confirmed the acquisition of Treasure Data, saying it would become part of a new connectivity and data management software-as-a-service (SaaS) platform that it will offer within the next six to nine months.

While Arm would not confirm published reports that the deal was worth \$600 million, Joyce Kim, Arm's chief marketing officer, said, "I can confirm it's the largest cash deal we have ever done."

The IoT has become many things to many people, but one thing is clear: It's a fragmented market for devices, platforms, connectivity, and data analytics. While many readers might be focused on device development (Arm's heritage), at a business level, there's really no point of having a connected device unless you can do something with the data and act upon it. The value in all of the talk that we hear about smart cities, smart energy, and smart manufacturing (and Industrie 4.0) is not just about integrating chips and sensors at end points but more about doing something useful with the measurements and data that result.

#### NAND Market Hit By Oversupply

SAN FRANCISCO — After a banner year in 2017, the NAND flash market continues to cool significantly in 2018. Analysts say that the shortages of NAND parts that persisted throughout last year have given way to oversupply, resulting in significant price erosion.

According to TrendForce, a research firm that tracks memory chip pricing, the average selling price of NAND flash is expected to decline by 10 percent in the third quarter and another 10 percent in the fourth quarter. Noting that the third quarter typically heralds the peak season for consumer electronics sales, the firm says that demand has been weaker than expected. Meanwhile, the supply of 3D NAND flash continues to expand as suppliers improve yield rates and expand capacity.

Prices are also expected to continue declining in the first half of next year, which is traditional the slower time of year for electronics sales. Shipment forecasts for smartphones, notebooks and tablets are fairly conservative for the first half of 2019, according to TrendForce.

#### **OLED Displays Fold In Smartphones - Literally**

SAN JOSE, Calif. — A smartphone that unfolds into a tablet could emerge next year in an effort to reinvigorate the maturing mobile market. A bendable screen passed U.S. safety tests, Samsung Display announced late last week, in the latest sign that the long-rumored concept may be about to become a reality.

Engineers have worked for years on versions of flexible, even roll-able, displays. They aim to enable mobile devices in new form factors, opening new markets.

A smartphone with a bendable OLED display could open to a 7- to 8-inch screen size, delivering perhaps UHD resolution at 120 Hz. It would need to withstand at least 100,000 open/close cycles and could cost as much as \$2,000, said Y.J. Kim, chief executive of MagnaChip, an independent maker of display driver chips for OLEDs.

#### YMTC To Detail 3D NAND Chips

SAN JOSE, Calif. — Yangtze Memory Technologies Co., Ltd. (YMTC) will unveil next week its latest 3D NAND chips. The talk by chief executive Simon Yang at the Flash Memory Summit here will mark the first public discussion of an effort from China to produce leading-edge memory chips.

YTMC will describe what it calls Xtacking as an approach to 3D NAND that delivers a "speed-up to DRAM DDR4 while delivering industry-leading bit density, marking a quantum leap for the NAND market." Xtacking "enables parallel processing of the NAND array and periphery ... a modular approach [that will] shorten the time-to-market for new generations of 3D NAND and open the possibility for customized NAND flash products," according to a press statement.