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The Global Semiconductor Industry Analysts

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RFID Tag Exporter Syrma To Take On Domestic Market

BENGALURU — Chennai-based exporter of electronic products Syrma Technologies, part of the Tandon group of companies, has emerged as dark horse in the Indian electronics manufacturing landscape and poised to take on the domestic market as well.

Founded in 2006, Syrma Technologies, today, is a \$60-million manufacturer and exporter of radio frequency identity (RFID) tags, magnetics coils, printed circuit boards assemblies (PCBAs), and box-built products for a wide range of applications. It also provides design-for-manufacturing (DFM) solutions to its customers.

In the last decade alone, Syrma has successfully co-developed, manufactured, and shipped over 200 million product units for more than 100 reputed original equipment manufacturers (OEMs)in over 50 countries.

Automotive Continue to Drive 200mm Fab Investment

The industry has transformed from one that learned its trade making microprocessors and memory for PCs to one that now supplies chips for cloud computing, AI, machine learning, VR, robotics, medical, mobile, IoT, and automotive. Automotive, though currently dwarfed by PCs and mobile in market share, shows the highest potential for growth, with an estimated compound annual growth rate for the five years ending in 2021 of nearly 14%, according to IC Insights.

The end-game for automotive manufacturers is self-driving cars, though there is general agreement that wide-spread adoption of fully autonomous driving is still at least ten years away. That adoption will be paced by the wide variety of technologies and infrastructure that must be developed to support it. The diversity of these requirements will make collaboration between automotive manufacturers and new industry players, including semiconductor equipment manufacturers, an essential ingredient for success.

TSMC: Floundering Foundry

Apple shares have risen since the tech group reported decent sales numbers last month. But this offers little relief for the smartphone's main chip supplier Taiwan Semiconductor Manufacturing Co. Apple's first-quarter earnings revealed iPhone revenues fell 15 per cent from a year earlier. That will hit TSMC's top line.

TSMC warned of its biggest quarterly revenue drop ahead of Apple earnings. A further downward revision in guidance followed, in tandem with disruption in chip production caused by a defective batch of chemicals in its Taiwanese production lines. These chemicals create patterns on chips by reacting to light.

The disruption will mostly affect production of chips for Huawei and Nvidia. TSMC expects to make up for the damaged devices through the second quarter. The incident comes six months after a WannaCry computer virus attack sabotaged chip output.

The Race Is On

As the flood of data being produced rises exponentially, will new technologies be ready before SRAM collapses?

The world's most valuable resource isn't gold, nor land, nor oil — it's data. And the amount of data being produced virtually and instantaneously all over the world by our ever-online lives is dizzyingly immense.

5G is supposed to provide efficient wireless piping of all this data to the Cloud, where AI solutions will refine and extract value from this information deluge — to deliver customized experiences and drive further advancements for innovations like self-driving vehicles. This goal for AI has pushed technological innovation to improve compute performance by a factor of 10 each year over the last six years. We're now beginning to feel the aftershocks of this rapid change, as existing technologies are hitting their limitations.

Politics Play a Role In 5G Outlook

SAN JOSE, Calif. — Global techno-politics may play a significant role in what slice of the emerging 5G cellular business stalwarts Nokia and Ericsson take.

China's Huawei has become the big dog, with a 28% share of global telecom equipment revenue in third quarter of 2018, nearly as large as second and third place vendors Nokia and Ericsson combined, according to market watcher Dell'Oro Group. But the rising star faces pressures from Western governments concerned its systems have embedded cybersecurity backdoors for Beijing.

So far Australia, New Zealand and the U.S. have said they do not want Huawei systems used in their nations' 5G networks. Japan, France and Germany are said to be mulling similar moves.