

# Toshiba's Comedown And What Lies Beyond

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Today's focus will be on the upcoming acquisition of Toshiba's extremely profitable and strategic NAND chips business unit, Toshiba Memory. The Japanese Toshiba currently holds the second biggest share of the very sought-after and monopolistic NAND chips market, behind Samsung Electronics. The company has been in financial distress since the Westinghouse case and desperately needs to liquidate assets to turn the tide in its financial downturn. The sale of Toshiba Memory could hence lead to an approximately \$20bn deal within the TMT industry before the end of 2017.

We will browse through how Toshiba ended up desperate enough to sell what many experts consider as the jewel of its business, then we will look at the various players currently taking part in the bidding and at the business for sale itself. Finally, we will try to draw the bigger picture and see how this deal, on top of being of major financial importance when it closes, is the best indicator of how the TMT industry will be reshaped in the next decades.

## Toshiba and Westinghouse: Acquisition, problems and bailout

In 2006, when Toshiba completed the acquisition of Westinghouse (the US power plant arm of the state owned British Nuclear Fuels) for \$5.4bn, it made an offer that went far beyond the expectations of the BNF and the markets. Analysts viewed severely the takeover from the Japanese conglomerate because the nuclear producer was valued at approximately \$1.8bn at the time, and top management of Westinghouse wasn't even expecting a bid three times higher!

Toshiba argued that the acquisition was strategic and would enable the company to diversify its range of reactor types (Toshiba mainly produced boiling water reactors, while Westinghouse was specialized in the more widely used pressurized water reactors), empower its R&D development and take a dominant stance versus its fiercest competitor of the time, General Electric.

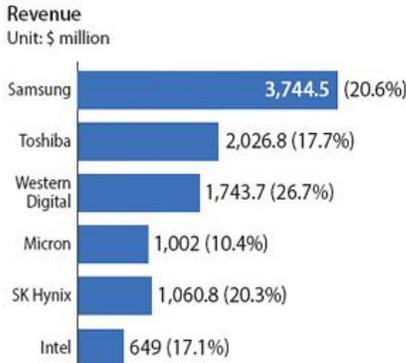
The acquisition itself wasn't ill-advised, and investors were definitely willing to fund huge power plants projects in the years to come, especially in China and the United States. But problems started to pile up in 2015, when Westinghouse acquired CB&I Stone & Webster (a nuclear plant builder) for a price that would later be revealed as much overvalued. Toshiba accused the management of Westinghouse to have embellished the economic situation of CB&I Stone & Webster and the group was forced to impair \$6.2bn in assets to account for this mispricing. Worse, in 2016 it was acknowledged that Westinghouse would have to face billions in overcharging in two nuclear plant projects in Georgia and Southern Carolina. The construction work on those sites was already more than three years late and Westinghouse had guaranteed to cover any cost surplus.

In an urgent will to soothe investors and markets, Toshiba agreed to bail out Westinghouse at the end of March 2017 and insured most of the group-wide losses. Hence came the need to replenish the company with cash and the sale of the NAND / 3D NAND businesses became the best option on the table.

Rewinding the full story, it appears that aggressive external growth via the Westinghouse deal is what put Toshiba in such a blatant financial distress and need for heavy restructuring today. But one man's loss is another man's gain, and competitors now seek large profit and market dominance in the acquisition of Toshiba Memory.

**Revenue and market shares**  
– NAND market, 2016

**Toshiba Memory and the chips market gold rush**



Toshiba Memory is a special vehicle restructured internally for the purpose of the sale. It holds all Toshiba's assets in researching, developing and manufacturing NAND and 3D NAND chips. Toshiba holds a strong position in the NAND business and lags a bit more when it comes to the 3D NAND business, but the company has extremely innovative patents when it comes to storage techniques. It is worth noting that this deal, no matter the outcome and the bids shortlisted, will involve some of the biggest players in the industry. They all look down to Toshiba Memory, with envy because the opportunities at stake are tremendous.

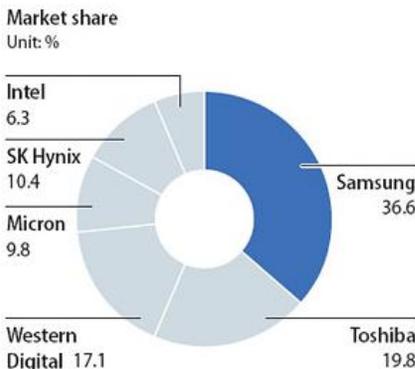
In the current state of offers, Foxconn, the Taiwanese electronic manufacturer, seems to have set the highest bid at \$18bn and would be financially backed up by the two American deep-pocket giants Apple and Amazon (which are both Foxconn's clients in the production of various flagship products) up to \$28bn. Other significant offers are lead by major TMT companies backed up, more traditionally, by super PE firms: The American Broadcom with Silver Lake, the South Korean SK Hynix with Bain Capital, and possibly Western Digital with the semi-public Japanese Innovation Network Corporation of Japan (INCJ) fund and KKR.

All those players compete for the acquisition of one of the most lucrative and central areas of expertise within the TMT industry. NAND / 3D NAND chips equip all connected devices, from smartphones to tablets and PCs and offer outstanding flash memory performance. The Internet of things era will only further boost an already very strategic business that offers massive synergies for any electronic manufacturer.

But it is Foxconn, as its CEO Terry Gou confirmed, that seems to be the most actively involved in the deal making. As described above, Mr. Gou sought the support of international players close to but not part of the chips market (such as Apple and Amazon, who are present in the vertical value chain and need chips for their devices but don't manufacture them directly) to back up Foxconn's offer and also renewed personal promises to maintain the current Toshiba structure and teams as they are. Foxconn is currently not present on the chips market and Mr. Gou's plan to enter it so swiftly with M&A is extremely ambitious, to say the least.

\*Quarter to quarter growth

Source : DRAMeXchange



Source : DRAMeXchange

**Foxconn's emerging leadership and the power shift**

It can be argued that this deal has an analytical value that ranges far beyond the money involved, the market shares that will possibly be redistributed and the modus operandi that will eventually be taken on. It unveils key future trends in the TMT sector.

The Taiwanese company Foxconn, which used to be considered as the biggest low-cost producer and assembler of electronic parts, pushes towards an upgrade in its service quality and product range versus historical Japanese, American and South Korean market leaders that now either tend to fall apart (Toshiba's current situation is in this respect clear) or decide to step down as followers trying to stabilize their market positions rather than conquer new

market shares (Samsung for instance, has expressed no interest in the acquisition yet, although Toshiba Memory would complement easily and effectively its line of products).

The role of public institutions seems to be shifting: on the one hand, when Foxconn used to be massively supported by the Chinese government, it now finds private sponsorships via Apple and Amazon to take on its ventures and seems to be operating more and more on its own. On the other hand, governments in the countries historically leading in TMT tend to take always more conservative stances by defending their national industry versus aggressive Chinese participations. In that respect, the struggle of the Japanese government refusing to let Toshiba fall into Taiwanese hands is evident.

In spite of the fear of foreign investments they trigger in Japan, Foxconn and Chinese investors in TMT seem to look for more long-term participations within the firms they acquire, especially compared to traditional PE-backed acquisitions. Foxconn tries to use the aura of Apple and Amazon as tokens of stability and argues, it would seem in all fairness, that its similar acquisition of Sharp last year helped this other Japanese company renew its operations while keeping a Japanese DNA.

### What comes next?

All in all, previous transactions suggest that a deal supported by the Japanese government will most likely come out as selected no matter if Foxconn is willing to pay more, tries to shield itself with an American aura and offers better perspectives for the development of the business acquired. One has to dive in the complex historical relationship between Japan and China and the dominating control the Japanese government has retained in national conglomerates to fully grasp the possible outcome of the deal.

More bidders could yet very well enter the game and it is impossible to foresee the result with certainty, but it wouldn't be the first time that geopolitics and governance issues come before the interests of shareholders if Foxconn's offer is rejected!

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**Sources:** DRAMeXchange, Bloomberg Intelligence, The New York Times, L'Usine Digitale, Le Figaro

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