Technology Flash...

April 20, 2016

J.Gold Associates, LLC 6 Valentine Road, Northborough, MA 01532 USA
www.jgoldassociates.com +1-508-393-5294
Research, Analysis, Strategy, Insight

Intel: Where does it go from Here?

A PUBLICATION OF J.GOLD ASSOCIATES

Intel announced its earnings for the Q1 2016 quarter, which were not stellar. Earnings more or less met expectations, but expectations were already lowered. And Intel's prediction for the next quarter wasn't inspiring. It also announced a 12,000 employee reduction over the next year as it moves to a more efficient operation.

So what is Intel's problem? A large piece of its revenues (>50%) is driven by the Personal Computing Group, which includes PC, tablets, phones, wireless, etc. By its own estimation, Intel expects the PC market to decline this year in the 7-10% range. That clearly hurts. On top of that, this quarter saw Intel's sales into the tablet space drop by 44%! Tablets, especially high end tablets where Intel plays most effectively, is also a market in retreat. But in my estimation, a large part of Intel's reduction was due to backing away from its high level of subsidies to vendors who used Intel chips. Indeed, Intel stated its margins increased dramatically in the tablet segment, so clearly it is no longer willing to sell parts at any price to establish market position.

...Intel announced its earnings for the Q1 2016 quarter, which were not stellar. Earnings more or less met expectations, but expectations were already lowered. And Intel's prediction for the next quarter wasn't inspiring...."

The highlights in Intel's earnings were in the Data Center Group (Servers) and IoT markets. While only about half the size of PCG. DCG generated close to as much in profits ($1.885B vs. $1.764B). Clearly, cloud is becoming an increasingly important market as more severs go into data centers whose purpose is to enable cloud-based apps and services. Intel has played a key role in supplying the processors that power these cloud "factories". And while the roll out of enterprise based data centers has done well for Intel in the past, the larger market is now being driven by other service centers geared towards consumer and business services. But in this space, where Intel has traditionally sold well, it is now being challenged by small, light-weight but large volume servers powered by ARM-based chips. This will remain a competitive threat to Intel going forward but I expect Intel to continue to react appropriately, and x86 architecture to remain the dominant engines powering the quickly growing cloud ecosystem for the foreseeable future. In this space, it's not only about chips, but also about the total SW ecosystems that matter.

In the IoT segment, Intel is clearly coming from behind. ARM based technologies, so dominant in the mobile phone space, have captured a large portion of the market for consumer-based "things". But clearly there is a very large and lucrative industrial IoT space that is much less cost sensitive

and more interested in high performance and compatibility in software. Although not as big a potential market as consumer products in volume, it represents a much more profitable place to play and can generate substantial revenues (and profits). It's also a market that Intel knows well and has played in for some time with its large embedded business. That's not to say that Intel won't look to move downstream into the higher end consumer focused "things" space, but it will pick and chooses its markets. It has been "bulking up" in key areas, with chips (Atom, Edison, Quark) SW development (Wind River), security (McAfee), sensors (Basis, Recon), VR (Intel RealSense, Replay Technologies), Drones (Ascending Technologies) etc., which will put it in good position to play in health care and personal appliances as well as smart cities and AR/VR application areas. I expect to see more strategic asset purchases in the coming months and years.

"...It would be a mistake to think that Intel can't pivot to the new markets, and generate significant revenues at compelling margins... The transition will take a couple of years, but Intel will remain a major force in the emerging market areas, and in some cases, will be dominant....."

Going forward in the cloud and IoT markets, Intel's traditional competitors that it had in the PC and server market will change. Indeed, Intel's primary competitors will be ARM-based, and its single biggest competitor will no longer be AMD, but Qualcomm, who itself is trying to build out a broader base of chips targeted at the "things" space. Certainly there will be many other players nipping at the heels of Intel, especially those in the Far East, but the best positioned competitor will remain Qualcomm. AMD will make a play for the server space with its ARM-based products, but its relatively small footprint won't be a big threat.

Intel does have some interesting leverage points that could give it a competitive advantage in the IoT and small server markets. It will continue to make PC and server chips. After all, this is still a huge market generating $7.5B in PCG and $4B in DCG revenues this quarter. Its large investments in CPU and GPU architectures for the high end, together with its work in new wireless technology, can be readily repurposed to lower end systems, and for relatively low cost. This means Intel can produce cost competitive chips and sell them at relatively high margins as the R&D to develop the chips have already been accounted for. Another advantage that Intel has is its ability to create a complete infrastructure for the new cloud based and "things" environment. Intel has developed expertise not only in chips, but also has invested heavily in analytics capabilities that's required to make any "things" environment work. It also has a significant play in security (McAfee) which is a must-have in the new cloud based world of "things". And it has a significant embedded OS operation (Wind River) to help it with developers. All of these are competitive advantages that other will have difficulty meeting on their own.

Overall, the realignment of Intel's business towards growth areas and away from more mature and stagnant markets will help it, even if there is some pain involved (the reduction of 12,000 workers by next year). It would be a mistake to think that Intel can't pivot to the new markets, and generate significant revenues at compelling margins (they have consistently had the best margins in the business). The transition will take a couple of years, but Intel will remain a major force in the emerging market areas, and in some cases, will be dominant.

Jack Gold is the founder and principal analyst at J.Gold Associates, LLC., an information technology analyst firm based in Northborough, MA., covering the many aspects of business and consumer computing and emerging technologies. Follow him @jckgld

J.Gold Associates, LLC
6 Valentine Road
Northborough, MA 01532 USA

Phone:
+1-508-393-5294

Web:
www.jgoldassociates.com

Research, Analysis, Strategy, Insight