

Himax 2015 AGM Q&A Minutes

Q: There are several M&As in the DDIC space such as Synaptics, Cypress, Parade and Ilitek just acquired by MStar/MTK. How does that impact Himax?

A (CEO):

- This is a big question. We don't rule out M&A possibilities but we will stay low profile before both parties reach an agreement.
- Focaltech+Orise & Synaptics+Renesas are both after TDDI. This is the evidence that in-cell touch is an important trend.
- Himax's touch, though still small in rev scale, has already been recognized by t-1 customers including key brands.
- We are pioneers in on-cell and pure in-cell. We started the development way earlier because we've been planning our product roadmap since day 1.
- I don't see the synergy between Ilitek & Mstar. For Synaptics and Parade, it may take years to see the synergies due to post M&A pain.
- Ilitek's DDIC and Mstar's touch are both servicing low end market. Mstar touch rev is even declining every year. Some say Mstar might be looking at total solution for TV since they have TCON and scaler business in TV.
- The companies that did M&A in this space are all companies with single or less diversified product line and they have to buy others to complete their product offerings.
- Himax hasn't done any major M&A because there's just no need as of now. If we ever acquire anyone, we will evaluate very carefully in terms of human resource, cost, sales channel and customer coverage to ensure there's enough synergy.
- We really don't see the need to spend big money and go through post M&A pain now just to obtain a certain product.
- The only thing we need to be cautious is that our competitors might grow bigger.

(Chairman):

- People must think that we do a lot of products. We are very thankful that our investors who have supported us in completing the roadmap. Thank you for your patience and trust.
- Our diversified product portfolio includes 2 parts- panel system related and non-panel related.
- Panel system related: DDIC, TCON, PMIC, & touch controller. We developed those products because we see, from panel system level prospective, there are a lot of rooms for components to be integrated. We've been preparing

for this from day 1.

(Shareholder):

- Yes, I recall that you mentioned TDDI is the trend since 2008. I asked some engineer friends of mine. They said it's impossible because touch is analog and DDIC is logic. It will be very hard to integrate.

(CEO):

- True. Most companies think from IC/semi conductor perspective. We don't. We always think from panel system level prospective. What will panel makers want? Is there room to improve? Then we design an IC for those needs.
- It is exactly because the integration is very difficult. TDDI ASP will not be diluted. It is just touch ASP + DDIC ASP.

Q: Will TDDI be used in TV? Is TDDI SOC or SIP?

A (Chairman):

- No, only smartphone, tablet, and maybe notebooks.
- It is more like SOC but technology barrier is even higher. We need to solve problems on the panel, including circuit layout.
- As current market sentiment is low, panel makers have idle capacities and available R&D resources to develop in-cell panels to seek for differentiation. We are working with literally all panel makers now.

Q: It's in the news that BOE has a fund to home-grow DDIC. Will BOE become a competitor?

A (Chairman):

- It is true that Chinese gov is interested in semi business. To home grow DDIC is another deal. There are always plenty of rumors. We will continue to watch closely yet I think it's a rumor.

(CEO):

- No. BOE is a key customer of ours
- We have solid and close relationship with them

Q: OV is acquired. Does that impact your business?

A (CEO):

- Yes. You know everything.
- OV is very aggressively slashing price since Chinese gov bought them.
- It is weird but from our close observation, OV is in very bad shape now, perhaps the worst we've ever seen.

- OV's shipment volume, GM and technology are deteriorating fast.
- Our CIS business is very small compared to them but our 13MP sensors are receiving way better customer feedback than OV's. With their price, they are still not getting design wins in 13MP.
- CIS market is largely dominated by Sony. They provide very high end products and are expanding capacity for the business. However, some Chinese customers worry that Sony always favors Apple in terms of resource and capacity allocation. The runner up for this market is Samsung. We see some room to expand our sales channel in 13MP here because customers would like to have a second source aside from Samsung, if not Sony. We can seize the chance and become a distant #3.
- We expect CIS rev to improve in 4Q mainly because of 13MP shipment.
- Our goal now is not expand market share with 8MP & 13MP. Before we achieve that, we will not invest in higher resolution.
- Niche market is also worth trying for. We are shipping to auto customers and are also talking with Microsoft on Win 10 face recognition and eye recognition sensors.

Q: Why do you partner with TowerJazz on 13MP?

A (Chairman):

- For CIS, each foundry has different recipes which lead to different performances. TowerJazz can make our FSI product performing better than BSI. We are happy with the performance and cost.
- We select foundry partners based on every product's positioning, cost, etc. TSMC will remain our important sensor partner.

Q: Will Google participate in the second round raise of HDI? What will you use the money for?

A (CEO):

- No but business relationship ongoing and very close.
- I have to make it clear that for Google to invest in such a small portion of equity of a hardware partner is a very rare case. It's not weird that they stop here.
- The money will be used to pay back debt (to parent company) and to invest in RD and facilities, including purchasing new machines.
- We can't disclose further due to NDA with customers.

(Finance):

- We are at the final stage of the raise now- waiting for investment

commission to approve Himax Cayman's participation.

- Capital increase by cash ~NTD 900M

(Chairman):

- Our technologies are way ahead of other LCOS or microdisplay companies.
- We have accumulated the know-hows through working with mega customers.
- We need a lot of advanced machines for automation. However, it's still a comparatively capital light business.
- Our front-lit LCOS has received very positive feedback from customers.

(CEO):

- People think LCOS and WLO are 2 secretive yet interesting business of Himax. We are a semi company but these 2 technologies are in optics and photo electronics.
- After 15 years of investment, I now feel that we've really made the right investment. VR & AR are really coming. Don't doubt this.
- We have to always stay ahead of the industry so that when VR&AR has become a big market, we will be the biggest beneficiary.
- There were many microdisplay companies out there 15 years ago. Nearly all of them went bankrupt. Why are we still standing strong?
 - Our RD is really strong
 - We have the right business model. We never burn money for a certain customer before they show us the money. We always want our customers to pay more than we do to make sure they are serious about the game.
 - We are cautious in facility and equipment investment.
- To our shareholders: this is a risky investment, however we try to manage risks to the minimum.

Q: Why VR devices all use OLED?

A (Chairman):

- This has to do with brightness. VR is not see through and is rarely used outdoors. OLED is dark but it's sufficient for certain VR applications.
- To be honest, VR can go with TFT-LCD as well. Even cheaper.
- LCOS's light source is LED, which can be very very bright.
- For some customers, it was difficult to make optical engine for LCOS microdisplay, so they leveled down and settled for OLED. However, our FL-LCOS solves this issue. That's why it's popular.
- LCOS empowered HMD will not be bulky.

Q: LCOS in other products?

A (Chairman):

- HUD and projector

Q: For WLO, is every company who does this looking at the same application?

A (Chairman):

- No, and not many companies left now in WLO.
- We are the most advanced one in light-guide application.