

Revisiting Universal Display Short Thesis

Jun. 12, 2018 12:15 PM ET 32 comments | 6 Likes

by: Lucid Capital

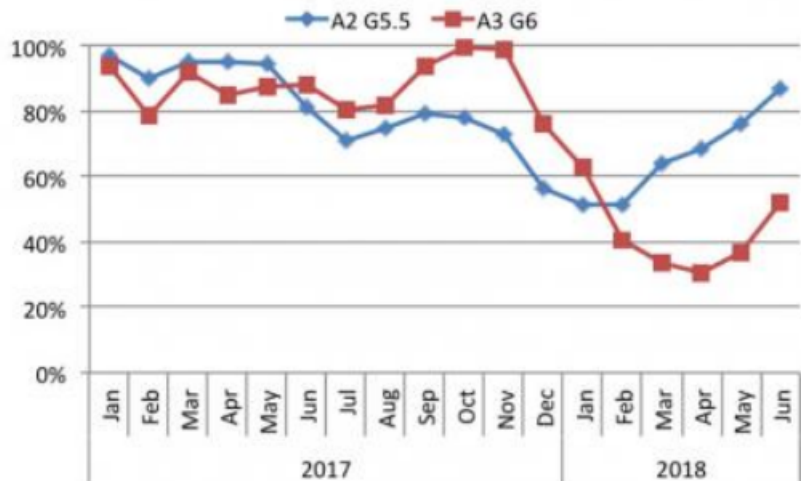
Summary

- Since our short thesis published, Universal Display declined ~50%, bringing its value far closer to our Realistic scenario target price (\$75).
- In the latest display conference (SID 2018), Cynora and Kyulux, it was clear the two OLED TADF startups nipping UDC heels seemed to struggle more than expected.
- OLED industry suffers from overcapacity mainly due to lower iPhone X demand, but this temporary weakness starts to fade.
- 2019-20 may be regained momentum years as OLED TVs continue to grow and LG puts its chips behind it.
- OLED for automotive seems to cross the chasm. Samsung expects that its growth will explode from 100K units to 3M by 2022.

Six months ago, when Universal Display (OLED) stock hovered around \$200, we detailed our short thesis, since then stock declined ~50%. Among the key culprits were the sky-high valuations and lackluster Apple's (AAPL) iPhone X sales.

In the recent months, it seems that the utilization of Samsung's (OTC:SSNLF) OLED fab (where Apple's iPhone X OLED displays are fabricated) starts to improve:

Samsung OLED fabs utilization



Source: DSCC

It's a good timing to re-examine the pillars of our short thesis that was published 6 months ago and see if they still hold:

Pillar 1: "The TADF OLED has crossed the chasm, offering better cost and energy consumption than UDC's emitters".

TADF (thermally activated delayed fluorescence) is a rare-earth-free OLED emitter that reaches 100% internal quantum efficiency (IQE), hence providing better cost and energy efficiency.

At the time, it seemed that Cynora and Kyulux, two TADF startups that LG and Samsung invested in, will be able to demonstrate major advancements. We expected SID 2018 - the largest global display conference, held in May 2018 to be the latest date where both will showcase commercial TADF OLED.

From our original article,

Cynora just reaffirmed three days ago that it will have a commercial blue OLED emitter ready by the end of 2017, which means it could be adopted by LG (LPL) or Samsung as early as next year"

Yet, no groundbreaking news announced by either Cynora or Kyulux.

Even in the most important display conferences, SID 2018, held few a weeks ago, Cynora issued a vague PR about its blue TADF:

"CYNORA has made tremendous progress on blue TADF emitters again. Since our last presentation at SID in 2017, we have achieved the requested performance on efficiency and color point" says Thomas Baumann, CYNORA's CSO, "We have now put all of our focus on lifetime where we are in the final development stage."

Since we always like to examine what is missing in a company's statements, we noticed that no concrete numbers were given, which is an indication that 6 months after it promised to bring commercial blue OLED, Cynora still struggles with it.

That may change in the coming future, but given the huge efforts invested by Universal Display (AKA UDC) to develop blue OLED, we lost some confidence in Cynora's ability to bring blue OLED before UDC.

Kyulux as well seems to struggle more than expected as it still demonstrates only Passive Matrix OLED (PMOLED), expected "to be in production by the end of 2018".

Kyulux and Wisechip unveiled a flexible HF PMOLED display.

No AMOLED (Active Matrix OLED, the ones used in Smartphones and TVs) plans were disclosed.

Pillar 2: "The bulk of UDC's patents are set to expire by the end of 2017, significantly increasing the risk of UDC's sales to low-to mid-end smartphones".

We're still holding up this argument and will follow closely UDC materials sales margins to look for MS loss or pricing pressure.

Pillar 3: Merck has been making strides with its OLED materials business, biting increasing share.

Merck's OLED business (see Merck's OLED materials here) continues to grow, despite currency headwind, as stated in Merck Q1/2018 conf call: "our Semiconductor Materials business and OLED achieved double-digit growth rates in Q1".

Merck continues to make strides with OLED ink-jets material, recently it was announced that a new Fab estimated to be opened in 2021 will use Merck materials.

We'll continue to keep an eye on the developments, looking for actual constructions to start as a red sign for UDC.

Pillar 4: "Samsung will be looking to only renew its UDC contract for the short term, or to minimize its commitment until TADF OLED has hit the market".

Samsung's (Universal Display's largest customer) contract was renewed in what seems to be a bit less favorable terms on Feb. 14th, yet we lack details on the termination terms and minimum quantities.

Pillar 5: Insiders have been selling en masse.

In the last six months of 2017, UDC's insiders have sold \$250M worth of stock. Since the beginning of the year, insiders have sold ~25M, a tenth of the preceding 6 months.

Can Automotive be a White Swan?

Some new car concepts are using flexible OLEDs, trying to innovate car displays. LG Display is developing FHD 12.3" curved plastic-based flexible OLEDs, and the company is collaborating with Tesla (TSLA) and others, promising to start producing those display commercially by 2018.

Samsung has also been developing OLEDs for automotive - including flexible ones and transparent/mirror OLEDs. At its latest SID 2018, Samsung unveiled its immersive 3-D AMOLED prototype displays, which can be seen in the following video:

SDC automotive OLEDs SID 2018



Samsung expects that its growth will explode from 100K units to 3M by 2022. While that may be over-optimistic the automotive seems to cross the chasm and emerges as the 3rd pillar for AMOLED on top of TV panels and smartphones.

Yet, while the automotive may be lucrative for display manufacturers, it may be a mild opportunity for UDC (Universal Display) as quantities may be limited (think the number of cars sold each year compared to smartphones).

Bottom Line - After a 50% fall, it seems like a good timing close the short position, yet risks are mounting in 2020-21 for UDC. Hence a neutral position is recommended.

Disclosure: I am/we are long OLED. I wrote this article myself, and it expresses my own opinions. I am not receiving compensation for it (other than from Seeking Alpha). I have no business relationship with any company whose stock is mentioned in this article.

Additional disclosure: We closed our short positions and sold few long terms Put options, looking for the volatility to wind-down

Comments (32)

rynethegreat

Just was thinking about opening a position. Think it's great entry. Thanks for the article.

12 Jun 2018, 12:33 PM

Ayara

True that, opened one about 3 weeks ago

12 Jun 2018, 12:37 PM

markrogersforwine

I did as well with VMW, which I am trading for TWITTER

12 Jun 2018, 12:48 PM

markrogersforwine

that was confusing. Bought OLED and VMW. Long OLED from here.

12 Jun 2018, 12:49 PM

1eye2C

We are LONG OLED, & VMW, AAXN. Look at the explosion in OLED TV nationwide needed 6-12 per area, the New Gaming industry laws CHANGED, getting all those wanting needing big OLED screens for new sports betting gaming parlors, bets on college, high school, basketball, soccer, e sports arena, golf, ANY sport. Just buy OLED LONG, & SQ, AAPL, some form of payservice for ALL that income, & the new TAX CUTS allowed 100% remodel construction deductible costs written off 1st yr 100% DEDUCTABLE . Markets will be growing as will more e sports areas,. all needing OLED screens.

15 Jun 2018, 06:44 PM

danrick135120

Long OLED.

12 Jun 2018, 01:15 PM

glareds_Rule1

If I already own shares at a higher cost avg, say \$125, could anyone advise on how to use options to bring down this cost while still maintaining a long position?

12 Jun 2018, 02:00 PM

craig.nazareth

two ways off the bat to bring down cost through options.. sell puts at lower prices or buy covered calls out of money. if you sell puts, you agree to purchase shares in the future at a lower cost. if the strike price never comes to fruition, the optiin expires worthless and you keep the premium paid to you. through covered calls you should go out of the money..ie. options are not executable...but yoi have to hope the price doesnt trigger on expiration othewise your stock will get called away. this brings down your cost basis because yiu will keep the premiums on both the put sale and the call contracts

12 Jun 2018, 07:55 PM

glareds_Rule1

Thank you for that explanation!

13 Jun 2018, 10:21 AM

craig.nazareth

no problemo

13 Jun 2018, 10:22 AM

mickleicester

you mean sell covered calls ?

20 Jun 2018, 06:04 AM

shanfighter

Sell covered calls to bring down cost.

12 Jun 2018, 02:21 PM

Eohippus

so yes the price did go down 50%, but the fact that you were wrong on 4 out of 5 pillars, means you had no idea why it was going to go down! But at least you admit you got lucky... And your thoughts that Merck competition or patent cliff are still in play show that you are still clueless. As for automotive lighting, it's nice but minimal impact for UDC.

12 Jun 2018, 04:26 PM

Eohippus

so the real reasons this will go up? decreasing prices of AMOLED TVs will cause an explosion of sales, especially in the 4th quarter. Apple standardizing on more OLED phone Screens going forward. BOE hitting production stride in late 2018 with AMOLED fabs, Other Chinese production, continuing to lower street price. OLED vapor printing reducing costs of AMOLED production and time to market. Transparent OLED, that is your white Swan. Glass that converts to a screen at the touch of button.

12 Jun 2018, 04:39 PM

Stephen Tips

I was under the impression that UDC receives royalties on anything OLED?

12 Jun 2018, 06:09 PM

Eohippus

pretty much yes

14 Jun 2018, 01:18 PM

Eohippus

pretty much phosphorescent OLED

14 Jun 2018, 01:20 PM

Eohippus

pretty much phosphorescent OLED

14 Jun 2018, 01:21 PM

1eye2C

Have you ran the explosion in OLED TV SCREENS? As legal betting on e sports, soccer, college, high school, any games, ALL LEGAL gaming industry changed laws will be buying beyond the avg think in terms of 6-12 big screens min, per area, in ALL those new legal betting gaming parlors. OLED long.

15 Jun 2018, 06:32 PM

JohnnyM

This is such a dangerous area trying to figure out where the OLED biz will end. \$OLED is sinking. Your \$75 PT may be right on target now as more chips fall away.

jm

18 Jun 2018, 09:10 AM

rynethegreat

OLED is the future buy these dips

18 Jun 2018, 11:26 AM

Chris Lau, Marketplace Contributor

Would you 'swing trade' \$OLED and go long? \$LPL is also at a new low.

18 Jun 2018, 12:14 PM

Alex74

Hi Chris what do you think about LPL? i bought it at 9.20 looking at valuation. Do you think next years LPL earnings can growth and what valuation do you think is fair for LPL? Thanks

20 Jun 2018, 03:04 PM

Chris Lau, Marketplace Contributor

I just started digging deeper into \$LPL. It will be the next DIY value analysis for subscribers here: bit.ly/...

Past picks (\$NUAN, \$SYNA).

20 Jun 2018, 10:21 PM

Lucid Capital, Contributor

Author's reply » Puts' St.Dev offer a wide margin of safety for those who believe that UDC worth 70-80\$.

We've a small opportunistic position

21 Jun 2018, 08:24 AM

imrasul2

I will open a position at 75

26 Jun 2018, 02:36 AM

Chris Lau, Marketplace Contributor

You just might get \$OLED at \$75 this week.

26 Jun 2018, 08:49 AM

imrasul2

What you think if it go down to 75 can it go lower do to trade tension.

27 Jun 2018, 03:30 AM

mickleicester

or not as the case my be

01 Aug 2018, 10:06 PM

Zach Schweinsberg, Contributor

Good article. Given that their patents will expire soon, I do not feel comfortable buying OLED.

20 Jul 2018, 11:19 AM

1eye2C

why? long term hold

22 Jul 2018, 04:15 PM

1eye2C

will not open lucid capital.still.

04 Aug 2018, 04:10 PM