Forward-Looking Statements

All statements in this document that are not historical, such as those relating to Universal Display Corporation’s technologies and potential applications of those technologies, the Company’s expected results as well as the growth of the OLED market and the Company’s opportunities in that market, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on any forward-looking statements in this document, as they reflect Universal Display Corporation’s current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated. These risks and uncertainties are discussed in greater detail in Universal Display Corporation’s periodic reports on Form 10-K and Form 10-Q filed with the Securities and Exchange Commission, including, in particular, the section entitled “Risk Factors” in Universal Display Corporation’s annual report on Form 10-K for the year ended December 31, 2018. Universal Display Corporation disclaims any obligation to update any forward-looking statement contained in this document.
Who We Are

- Critical OLED Innovator & Enabler
- Proprietary PHOLEDS
- 5,000+ Global Patents*
- OLED IP Licensor & Material Supplier

*5000+ Pending and Issued Patents Worldwide as of February 10, 2019
**What is an OLED?**

- An Organic Light Emitting Diode is a series of organic thin films between two conductors.
- When electrical current is applied, bright light is emitted.
- OLEDs can be used for displays and lighting.
- OLEDs are not just thin and efficient - they can also be made *flexible* and *transparent*.
Business Model

Revenues
- License & Royalty Fees
- Material Sales

OLED Enabler
- Patent Licensing
- PHOLED Emitters & Hosts

Innovation & Invention
- Device & Architecture IP
- Composition of Matter IP

COLOR IS UNIVERSAL
OLED Display Market Potential

Mobile Growth  TV Growth  IT/Wearables Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobile</th>
<th>TV</th>
<th>IT/Wearables</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$22.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$23.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$27.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>$32.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>$36.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$40.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>$43.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Unit Numbers are for mobile phones only

Source: IHS OLED Display Market Tracker – Q4 2018 (April 2019)
OLED Panel Area Demand

**Mobile Growth**

- **Mobile**
- **TV**
- **IT/Wearables**
- **Other**

**Mobile Growth**

- **2017**: 5.2
- **2018**: 6.7
- **2019**: 8.7
- **2020**: 12.5
- **2021**: 14.6
- **2022**: 17.9
- **2023**: 21.0

**TV Growth**

- **2017**: 0
- **2018**: 5
- **2019**: 10
- **2020**: 15
- **2021**: 20
- **2022**: 17.9
- **2023**: 12.1M*

**IT/Wearables Growth**

- **2017**: 5.2
- **2018**: 6.7
- **2019**: 8.7
- **2020**: 6.7M*
- **2021**: 7.7M*
- **2022**: 10.0M*
- **2023**: 12.1M*

*Unit Numbers are for OLED TVs only

**Source**: IHS OLED Display Market Tracker – Q4 2018 (April 2019)
Strong OLED Display Market Drivers

**Lower Power Usage**
- **RED** Phosphorescence reduces power consumption by 25%
- **Add GREEN**: 45% cumulative reduction
- **Add BLUE**: 75% cumulative reduction
- Enabled by PHOLEDs

**Superior Aesthetics**
- Improved image quality
- Thin and Light
- 180 degree viewing angle
- 2,000,000+: 1 contrast ratio – TRUE BLACK
- Real-time video speeds – excellent for 3D
- Self-emissive display
- Low UV output
- Minimal Bezel
- **Flexible**

**More Cost Effective**
- Fewer manufacturing process steps
- Lower bill-of-materials
- No backlight required
- No color filter required
- No liquid crystal required
- Reduced driver IC costs
- Enables non-glass substrates
New OLED Smartphones

- Sharp Aquos Zero
- ZTE Axon 10 Pro 5G
- Google Pixel 3a XL
- Nokia 9 PureView
- vivo V15 Pro
- LG V50 ThinQ 5G
- Samsung Galaxy S10
- Meizu Zero
- Xiaomi Mi 9
- Sony Xperia 1
- Huawei P30 Pro
- Apple iPhone XS Max
More OLED Products

- Samsung Galaxy Tab S5e
- Royole FlexPai Developer
- Lenovo Yoga C730
- LG OLED TV
- LG's Automotive Displays @ CES 2019
- Huawei Watch GT
- LG Watch Style
- ZTE nubia Alpha
- Pimax 4K VR Headset
- Sony - A8F BRAVIA Series
- Samsung Galaxy Tab S5e
- ZTE nubia Alpha
- Apple Watch Series 4
- LG Watch Style
- Samsung Galaxy Tab S5e
LCD vs. OLED

- Lower BOM (bill of materials)
- Better Performance, More Efficient
- Thinner and Flexible Form Factor
- Vivid Colors and Superior Contrast Ratio

Image source: LG
Strong OLED Lighting Market Drivers

Energy-efficient & environmentally friendly
- Low drive voltage
- Low operating temperatures, cool to touch
- Long lifetime
- Easy to control

Highly desirable color quality
- Wide range of CCT, high CRI possible
- Color tunable
- Instant “ON”, Dimmable without flicker
- No glare, no noise
- Low UV content

Novel form factor & Low Cost Potential
- Thin and lightweight
- Transparent
- Non-breakable, Conformable, Flexible, Foldable, Rollable
- Scaling advantage
- Roll to roll process

Image source: LG Display
OLED Lighting Around the World Today
Innovation: Future Revenue Streams

Ink Jet

Organic Vapor Jet Printing (OVJP)

Barrier Encapsulation

Liquid Solution Printing

P2OLED

COLOR IS UNIVERSAL
Future Growth: Flexible

New Form Factors  Unbreakable  Lighter  Thinner

Samsung Galaxy Fold
Huawei Mate X
Patents are Universal

Over 5,000 patents and pending applications*

*as of February 10, 2019
## Strategic Display & Lighting Partnerships

<table>
<thead>
<tr>
<th>Display</th>
<th>Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU Optronics</td>
<td>Fraunhofer IPMS</td>
</tr>
<tr>
<td>BOE Technology</td>
<td>Kaneka</td>
</tr>
<tr>
<td>China Star Optoelectronics</td>
<td>Konica Minolta</td>
</tr>
<tr>
<td>EverDisplay Optronics</td>
<td>LG Display</td>
</tr>
<tr>
<td>Japan Display</td>
<td>NEC Lighting</td>
</tr>
<tr>
<td>Innolux</td>
<td>OLEDWorks</td>
</tr>
<tr>
<td>LG Display</td>
<td>Pioneer</td>
</tr>
<tr>
<td>Pioneer</td>
<td>Sumitomo Chemical</td>
</tr>
<tr>
<td>Royole</td>
<td></td>
</tr>
<tr>
<td>Samsung Display</td>
<td></td>
</tr>
<tr>
<td>Seeya Technology</td>
<td></td>
</tr>
<tr>
<td>Sharp</td>
<td></td>
</tr>
<tr>
<td>Tianma Micro-electronics</td>
<td></td>
</tr>
<tr>
<td>Visionox</td>
<td></td>
</tr>
</tbody>
</table>
### Historical Financial Performance

#### Revenues ($ in millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>ASC 605 Adjustment</th>
<th>Hosts</th>
<th>Royalty &amp; License</th>
<th>Emitters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$-</td>
<td>$34.2</td>
<td>$47.0</td>
<td>$61.6</td>
</tr>
<tr>
<td>2014</td>
<td>$-</td>
<td>$41.3</td>
<td>$63.2</td>
<td>$85.6</td>
</tr>
<tr>
<td>2015</td>
<td>$-</td>
<td>$12.5</td>
<td>$77.8</td>
<td>$100.6</td>
</tr>
<tr>
<td>2016</td>
<td>$-</td>
<td>$1.4</td>
<td>$96.1</td>
<td>$97.9</td>
</tr>
<tr>
<td>2017</td>
<td>$-</td>
<td>$1.6</td>
<td>$126.5</td>
<td>$198.7</td>
</tr>
<tr>
<td>2018</td>
<td>$78.9</td>
<td>$-</td>
<td>$80.6</td>
<td>$153.2</td>
</tr>
</tbody>
</table>

#### Income ($ in millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$48.1</td>
</tr>
<tr>
<td>2014</td>
<td>$115.4</td>
</tr>
<tr>
<td>2015</td>
<td>$130.5</td>
</tr>
</tbody>
</table>

(1) Adjusted net income excludes the net benefit from release of the income tax valuation allowances and its related impact on the effective tax rate.
(2) Adjusted net income excludes the inventory write-down and its related impact on the effective tax rate.
(3) Adjusted net income excludes the one-time charge due to the enactment of the Tax Cuts and Jobs Act.

See "Reconciliation of Non-GAAP Measures" for further discussion of these non-GAAP measures on slide 20.
Reconciliation of non-GAAP measures

The following table details our reconciliation of non-GAAP measures to the most directly comparable GAAP measures:

(in thousands, except per share data)
(Unaudited)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$103,885</td>
<td>$48,070</td>
<td>$14,678</td>
<td>$41,854</td>
<td>$74,052</td>
</tr>
<tr>
<td>Net income per share:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>$2.19</td>
<td>$1.02</td>
<td>$0.31</td>
<td>$0.90</td>
<td>$1.61</td>
</tr>
<tr>
<td>Diluted</td>
<td>$2.18</td>
<td>$1.02</td>
<td>$0.31</td>
<td>$0.90</td>
<td>$1.59</td>
</tr>
<tr>
<td>Net income adjustments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory write-down</td>
<td>—</td>
<td>—</td>
<td>33,000</td>
<td>3,918</td>
<td>—</td>
</tr>
<tr>
<td>Income tax effect of inventory write-down</td>
<td>—</td>
<td>—</td>
<td>(2,836)</td>
<td>(251)</td>
<td>—</td>
</tr>
<tr>
<td>Deferred income tax expense</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>17,934</td>
</tr>
<tr>
<td>Release of income tax valuation write-down</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(59,352)</td>
</tr>
<tr>
<td>Tax Cuts and Jobs Act</td>
<td>11,514</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Adjusted net income</td>
<td>$115,399</td>
<td>(2)</td>
<td>$48,070</td>
<td>$44,842</td>
<td>(3)</td>
</tr>
<tr>
<td>Adjusted net income per share:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic (1)</td>
<td>$2.43</td>
<td>$1.02</td>
<td>$0.96</td>
<td>$0.98</td>
<td>$0.71</td>
</tr>
<tr>
<td>Diluted (1)</td>
<td>$2.43</td>
<td>$1.02</td>
<td>$0.94</td>
<td>$0.98</td>
<td>$0.70</td>
</tr>
</tbody>
</table>

(1) The adjusted net income per common share, basic and diluted is derived from dividing adjusted net income by the number of weighted average shares used in computing basic and diluted net income per common share.
(2) Adjusted net income is based on excluding the impact of the one-time charge due to the enactment of the Tax Cuts and Jobs Act for the year ended December 31, 2017.
(3) Adjusted net income assumes an effective tax rate of 32% and 29% for the years ended December 31, 2015 and 2014, respectively and is based on excluding the impact of the inventory write down.
(4) Adjusted net income is based on excluding the impact of the net benefit from release of the income tax valuation allowances and its related impact on the effective tax rate for the year ended December 31, 2013.
(5) The adjusted net income per common share, diluted for the year ended December 31, 2013, is derived from dividing adjusted net income by adjusted weighted average shares of 46,582,347, which excludes the amount of any excess tax benefits in assumed proceeds in calculating the weighted average shares using the treasury stock method. The exclusion is intended to present our diluted net income per common share for the year ended December 31, 2013, as if our assessment of the future realizability of our deferred tax assets did not change and the income tax valuation allowances were not reversed, consistent with prior periods. For the year ended December 31, 2014, there is no difference between net income per common share and adjusted net income per common share.

Non-GAAP Measures - To supplement our selected financial data presented in accordance with U.S. generally accepted accounting principles (GAAP), we use certain non-GAAP measures. These non-GAAP measures include adjusted net income (loss), adjusted net income (loss) per common share, basic and adjusted income (loss) per common share, diluted. Reconciliation to the nearest GAAP measures of all non-GAAP measures included in the presentation can be found within the tables detailing the reconciliation of non-GAAP measures to GAAP measures above. We have provided these non-GAAP measures to enhance investors’ overall understanding of our current financial performance, and as a means to evaluate period-to-period comparisons. We believe that these non-GAAP measures provide meaningful supplemental information regarding our financial performance by excluding the effect of the release of income tax valuation allowances that may not be indicative of recurring core business operating results. We believe that the non-GAAP measures that exclude the impact of the release of income tax valuation allowances and deferred income tax expense recognized after the release of the allowances, when viewed with GAAP results, enhance the comparability or results against prior periods and allow for greater transparency of financial results. The presentation of non-GAAP measures is not intended to be considered in isolation or as a substitute for, or superior to, the financial information prepared and presented in accordance with GAAP.
(\textit{\$ in thousands})

<table>
<thead>
<tr>
<th>Category</th>
<th>March 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Investments</td>
<td>$526,597</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$968,190</td>
</tr>
<tr>
<td>Long-term Debt</td>
<td>\textit{------}</td>
</tr>
<tr>
<td>A/P and Accrued Liab.</td>
<td>$34,494</td>
</tr>
<tr>
<td>Deferred Revenue</td>
<td>$127,892</td>
</tr>
<tr>
<td>Shareholders’ Equity</td>
<td>$716,201</td>
</tr>
<tr>
<td>Total Shares Outstanding*</td>
<td>46,931,999</td>
</tr>
</tbody>
</table>

*Weighted average diluted shares used in computing net income (loss) per common share
Company Summary

Global OLED Materials & Technology Leader

- Lighting up the OLED Revolution
- License & Sell Proprietary Phosphorescent OLED Technology and Materials to Display & Solid-State Lighting Manufacturers
- Fabless Model; Partnering w/ PPG
- ~284 Employees (183 R&D, 109 PhDs); Largest Global PHOLED Team

Blue-Chip Customer Base

- Displays: Samsung, LG Display, BOE, Tianma, Visionox, Sharp
- Lighting: Kaneka, Konica Minolta, LG Display, OLEDWorks, Pioneer, Sumitomo Chemical
- Working with over 25 Companies

OLED Leader

Strong Financials

- $527M Cash, no debt*
- $11.00+ in cash/share*
- High Margin Business
- Lean Operating Model
*as of December 31, 2018

Leading Customers

Robust IP

Comprehensive & Robust IP

- Largest Phosphorescent OLED (PHOLED) Technology & Materials Portfolio
- Over 5,000** Issued & Pending Patents Worldwide and Growing
**as of Feb 10, 2019