

**TAIEX**: 6552

2019/11/27

JMC's statements of its current expectations are forward looking statements subject to significant risks and uncertainties and actual results may differ materially from those contained in the forward-looking statements.

\* Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

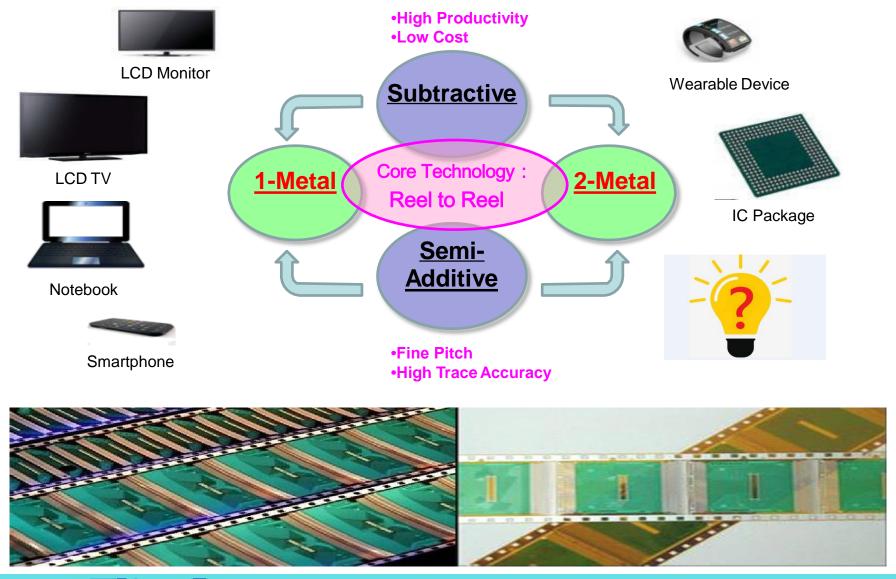


## 1. Company Introduction - Company Snapshot

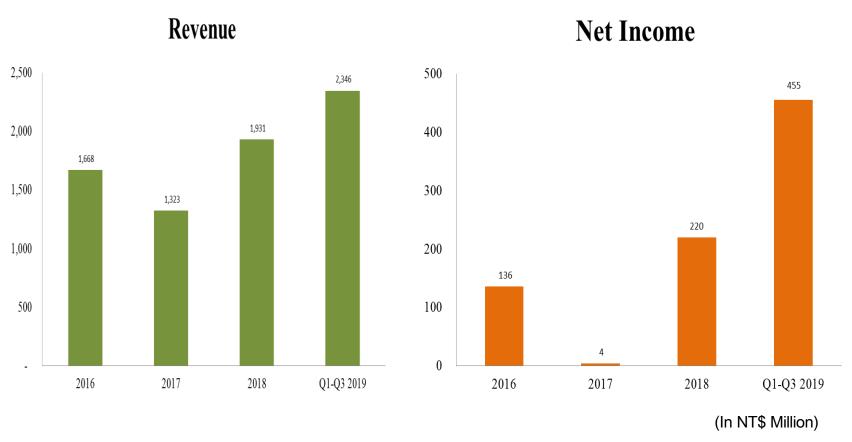
- Established : October 6 ,1973
- Chairman : Canon Huang
- General Manager : Jane Lee
- Capital Stock : 1,000 million
- Major Shareholders: CWE 42%、ChipMos 10%
- Number of employees as of Sep. 30,2019: 773
- Major Product : COF(Reel to Reel Chip on Film)
- Headquarter: Kaohsiung, Taiwan



## 1. Company Introduction - Product Application



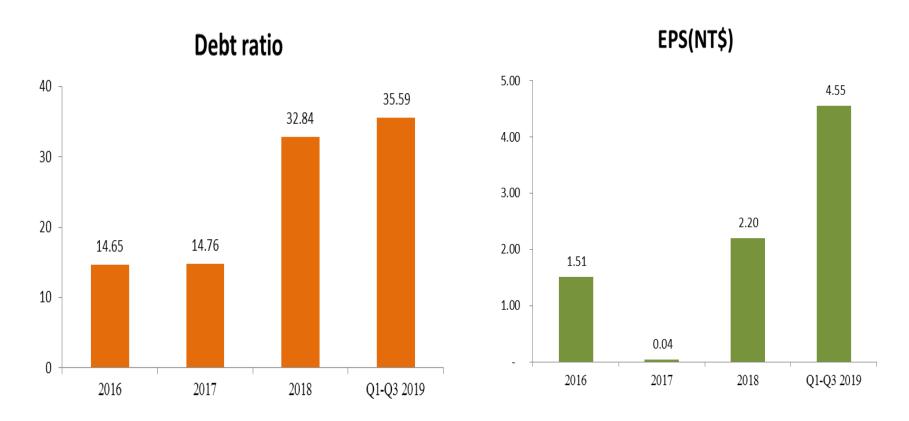
## 2. Financial Results - Results Highlights



| Year       | 2016  | 2017  | 2018  | Q1-Q3 2019 |
|------------|-------|-------|-------|------------|
| Revenue    | 1,668 | 1,323 | 1,931 | 2,346      |
| Net Income | 136   | 4     | 220   | 455        |



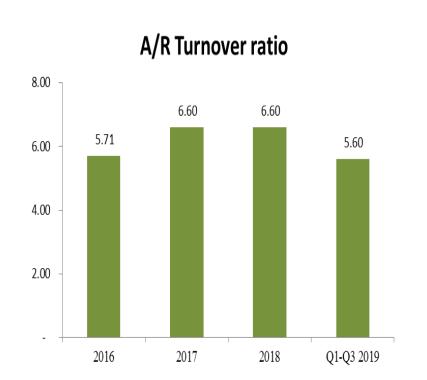
## 2. Financial Results - Results Highlights



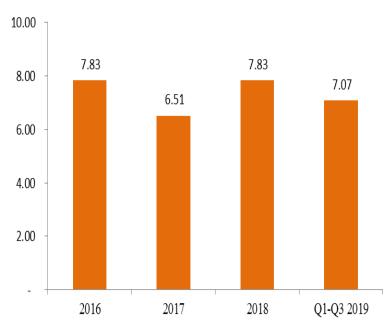
| Year          | 2016  | 2017  | 2018  | Q1-Q3 2019 |
|---------------|-------|-------|-------|------------|
| Debt Ratio(%) | 14.65 | 14.76 | 32.84 | 35.59      |
| EPS(NT\$)     | 1.51  | 0.04  | 2.20  | 4.55       |



## 2. Financial Results - Results Highlights



## **Inventory Turnover ratio**

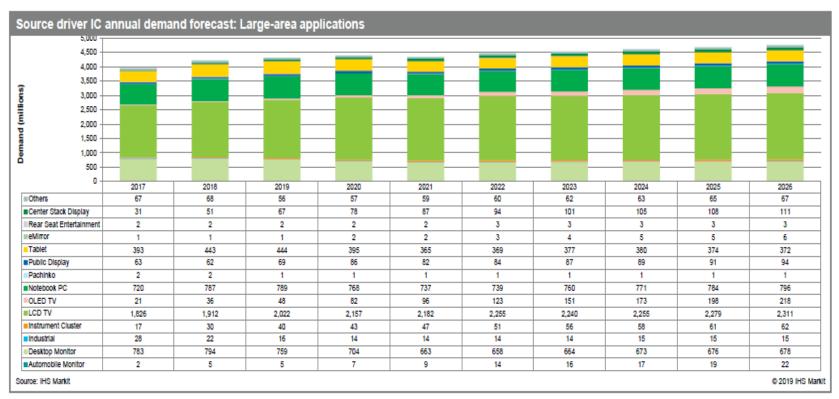


| Year                     | 2016 | 2017 | 2018 | Q1-Q3 2019 |
|--------------------------|------|------|------|------------|
| A/R Turnover Ratio       | 5.71 | 6.60 | 6.60 | 5.60       |
| Inventory Turnover ratio | 7.83 | 6.51 | 7.83 | 7.07       |



## 3. Market & Business Overview - Large Panel

### ✓ Currently – High inventory levels and weak demand



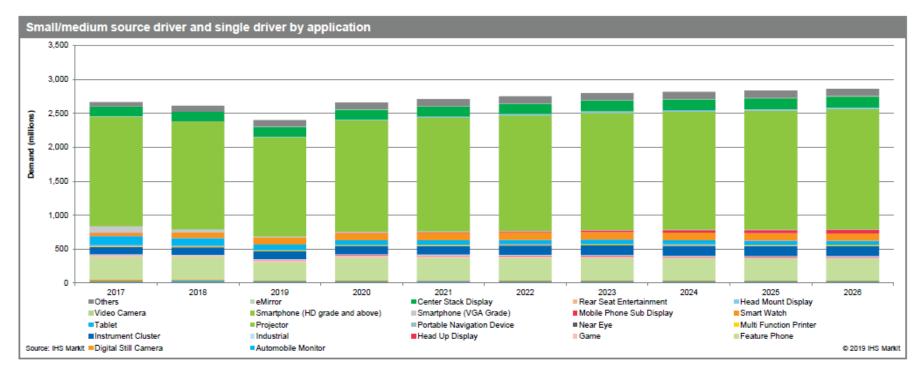
#### **✓** Future trend – New design and application

- \* TV Panel 4K to 8K, Dual Cell.
- \* Monitor/NB/Tablet Panel COG moves to COF due to full-screen/narrow edge design.
- \* Automotive Panel comes to COF.



#### 3.Market & Business Overview - Small Panel

#### ✓ Currently – Smartphone panel uses COF for TDDI is significant growth.



#### ✓ Future trend – New design and application

- \* High-end Smartphone with Flexable OLED: COP / 1-Metal COF.
- \* Mid-range Smartphone with Rigid OLED/LTPS: FHD TDDI/FTDDI uses 1-Metal COF / partial COG.
- \* Low-end Smartphone with a-Si/LTPS: HD uses COG / FHD TDDI uses 1-Metal COF.
- \* Wearable Device: The design turns to <u>1-Metal COF</u> instead of COG due to the narrow border panel.



# 3.Market & Business Overview - Technology & Product Development

#### ✓ A full service of flexible IC substrate provider

| Process<br>Technology  | Competitive<br>advantages  | Technology/<br>Application  | Targeted Market/ <b>Development</b>   |  |
|--|--|---|---|--|
| 1-Metal<br>Subtractive<br>(Etching)  | <ul><li>Fast production and high efficiency.</li><li>Independent technical ability and stable production yield.</li></ul>  | *Copper thickness #~8um *Pitch >=20um Pitch *Pin count =<1440 Channel/48mm                            | @ LCD TV<br>@ OLED TV<br>@ <b>Dual Cell LCD</b>                                 |  |
| 1-Metal<br>Semi-<br>Additive<br>(Plating)  | <ul> <li>High precision size controlled<br/>COF products, and can<br/>improve the assembly of the<br/>panel module rate; help<br/>customers to lower total cost.</li> <li>High production yield and<br/>good quality stability; absolute<br/>competitive advantage in<br/>production costs.</li> </ul> | *Copper thickness #~12um *Pitch >=18/16/14um Pitch *Pin count =<1900 Channel/48mm =<3000 Channel/70mm | <ul><li>@ High-end smartphone</li><li>@ wearable device</li><li>@ FoD</li></ul> |  |
| <ul> <li>New process technology development capabilities.</li> <li>Equipment design capability.</li> <li>Good cost control.</li> </ul> |  | *Thin Film IC Substrate *LED IC Substrate *Pin count =<2500 Channel/48mm =<4000 Channel/70mm          | @ NAND Flash @ Mini/Micro LEDetc.   |  |



## 4.Industry Outlook - Driver IC Supply Chain

#### IC Design House provides total solution.



#### Five COF suppliers have mass production capacity currently, and JMC is just one of the two vendors in Taiwan.

| Process Technology |              | logy           | 1-Metal<br>Subtractive(Etching) | 1-Metal<br>Semi-Additive(Plating) | 2-Metal         |
|--------------------|--------------|----------------|---------------------------------|-----------------------------------|-----------------|
|                    | Channel/48mm |                | =<1400 /48mm                    | 1400~1900 /48mm                   | 1900~2500 /48mm |
| Application Cha    |              | el/70mm        | =<2000 /70mm                    | 2000~3000 /70mm                   | 3000~4000 /70mm |
|                    |              | S社             | 90~100KK                        | ?KK(2-Metal→1-Metal)              | 7-10KK          |
|                    | Korea        | L社             | 120~130KK                       | ?KK(2-Metal→1-Metal)              | 5-7KK           |
| Canacity           | Japan        | F社             | 20KK                            | Х                                 | 2KK             |
|                    |              | C社             | 70~90KK                         | Х                                 | Х               |
|                    | Taiwan       | JMC            | 20KK+20KK (Restarting)          | 40KK                              | 5KK(Installing) |
|                    | China        | ESWIN<br>Aplus | ?                               | ?<br>?                            | ?               |



# Q&A

