Drive Product Strategy for Future Mobile Imaging
- Kah-Ong Tan, Vice President

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Safe harbor statement

Except for historical information, the matters discussed in this presentation may contain forward-looking statements that are subject to risks and uncertainties. These risks and uncertainties could cause the forward-looking statements and OmniVision's actual results to differ materially. In evaluating these forward-looking statements, you should specifically consider various factors, including the factors listed in the "Risk Factors" section of the Company's most recent annual report filed on Form 10-K and most recent quarterly reports filed on Form 10-Q. These factors may cause the Company's results to differ materially from any forward-looking statement. Forward-looking statements are only estimates and actual events or results may differ materially.

OmniVision disclaims any obligation to update information contained in any forward-looking statement.
Agenda:

- Corp update
- Technology leadership - PureCel® Plus
- Introducing 1.0um 16MP sensor – OV16880
- Product lineup
- CPHY – high speed MIPI interface advantage
- Future of mobile imaging
At a glance

Leading CMOS image solutions provider

- Founded on innovation in 1995; listed on NASDAQ as OVTI*
- Sustained technology leadership
- Broad line of CMOS sensors and imaging solutions
- Continued market success in Mobile, Automotive, Security, Machine Vision, Medical and other emerging imaging applications
- Comprehensive product support to world wide customers & partners
- Over 5.9 billion sensors shipped
- Revenues: $1.379 billion (Fiscal 2015, ended April 30, 2015)

* Since July, 2000
At a glance
Omnivision global presence
Introducing PureCel® Plus

Technology advantage drives performance

FSI

PureCel®

OmniBSI-2™

OmniBSI™

PureCel® Plus
What is PureCel® Plus?

- Incident light travels to neighbor pixel leading to pixel and color crosstalk

- Introducing BCFA to help better angular response for low F # with larger CRA

- Introducing DTI structure to reduce crosstalk
Benefit of PureCell® Plus

- SNR10 improvement
- Peak QE improvement
- Crosstalk reduction
- Angular response improvement

SNR10 improvement with PureCell Plus

1.0 um sensor achieves same level of SNR10 as 1.12um sensor

Significant improvement on SNR10
Introducing OV16880
Mainstream 1.0um 16MP with PureCel® Plus technology

Spec & Performance
- Resolution: 4672 x 3504 (16MP)
- SNR 10: 85 lux
- Interface: 4 Lane MIPI
- Power: <280mW

Speed
- 16MP full res: 30 fps
- 4K2K full FOV: 30fps
- 1080p HD full FOV: 90 fps
- 720p HD full FOV: 120 fps

Features
- Phase Detection AF (PD AF)
- Fast contrast AF
- HDR timing support
- 2D NR
- Built-in temperature sensor
- Dynamic DPC, Lens Shading Correction
- 2 x 2 binning
- Automatic BLC
OV16880 advantage
OV16880 (1.0µm) pixel image data

PureCel® Plus 1.0µm (OV16880) vs Competitor 1.12µm BSI

under 20lux, 100% crop
Mainstream smart phone sensor lineup
Better performance & higher resolution
Cost effective PDAF solution-OV13853
Prepared for the RMB1000 smart phone

**Camera Spec**
- Higher Resolution: 13 Million Pixel
- HD Video: 4K2K @ 30fps
- Fast Auto Focus: PDAF + Contrast AF
- Slim Module: 4.2mm ~ 4.8mm
- Low Power Consumption: 200mW
Future of mobile imaging

*Develop the features for still & video capturing*

**Performance (pixel / resolution)**
- 13MP … 16MP…
- 1.0um small pixel
- PureCel® Plus
- RGBC

**DSLR Features**
- Fast AF, OIS
- HDR
- Long exposure
- Zoom

**High Speed Video**
- 4k2K @60fps
- 1080p @240fps
- 720p @240fps
- Ultra low power

**Multi Camera**
- Depth
- IQ enhancement
- Zoom
- Ultra low power
C-PHY interface
High speed Omnivision sensors

- Highest data rate
- Best power efficiency
- Minimum PADs or wires

<table>
<thead>
<tr>
<th>Omnivision Product</th>
<th>Full Resolution (X * Y)</th>
<th>Full Resolution (FPS)</th>
<th>4K2K (FPS)</th>
<th>1080p (FPS)</th>
<th>720p (FPS)</th>
<th>4K2K¹ (FPS)</th>
<th>1080p² (FPS)</th>
<th>720p³ (FPS)</th>
<th>Fastest frame rate (crop)</th>
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<tbody>
<tr>
<td>OV16880</td>
<td>4672 x 3504 (16MP)</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>60</td>
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<td>90</td>
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<td>4K2K: 3840 x 2160</td>
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<td>OV16860</td>
<td>4608 x 3456 (16MP)</td>
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<td>70</td>
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<td>1080p: 1920 x 1080</td>
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<tr>
<td>OV21840</td>
<td>5344 x 4016 (21MP)</td>
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<td>90</td>
<td>120</td>
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<td>90</td>
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<td>720p: 1280 x 720</td>
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<tr>
<td>OV23850</td>
<td>5632 x 4224 (23MP)</td>
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Fastest frame rate FOV (crop)
1. 4K2K: 3840 x 2160
2. 1080p: 1920 x 1080
3. 720p: 1280 x 720

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<th>D-PHY 1.1</th>
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<th>C-PHY</th>
<th>Lanes or Trios</th>
<th>PADs (wires)</th>
<th>Max Data Rate</th>
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Omnivision Product
- OV16880: 4672 x 3504 (16MP)
- OV16860: 4608 x 3456 (16MP)
- OV21840: 5344 x 4016 (21MP)
- OV23850: 5632 x 4224 (23MP)
OV2281
Monochrome sensor customized for IRIS recognition

Secure IRIS Recognition Solution
Advance imaging technologies
Target Dual Cam, 3D, AR/VR, IoT, Biometric Authentication, Wearable, Machine Vision…

RGBIr

Global Shutter

IR sensor
Thank You