

# Customer Service Note

## Protective Film for Packaged Imagers

---

### Introduction

Aptina tests and packages CMOS image sensors in a cleanroom environment. Customer manufacturing, however, is typically performed in a non-cleanroom environment. This exposure has the potential to compromise the quality and functionality of the imagers. For added glass protection, Aptina offers an optional protective film for these devices. This customer service note describes the protective film used and the recommended procedure for removing it.

### Glass Protective Film

At a minimum, the protective film covers the glass directly above the active array of packaged CMOS image sensors. The size and shape of the protective film varies by device and package type.

The protective film withstands the standard surface-mount technology (SMT) reflow maximum temperature of 260°C. It passes IPC/JEDEC J-STD-020C reflow standards and 1x and 3x reflow test experiences no adverse material issues.

The protective film is not qualified for any aqueous or chemical wash steps.

Aptina does not guarantee, after reflow conditions and removal of protective film, that the protective film adhesive will not leave a residue on the glass. In the event that some residue remains, the glass can be cleaned per the recommended process described in TN-09-174 Imager Glass Surface Cleaning Recommendations.

### Recommended Removal Procedure

The protective film should be removed prior to assembly test of the final product; if not removed, the film could skew optical test results.

Removal of the protective film should be performed using standard ESD precautions. Ionization fans are recommended.

The protective film has been produced in two different styles, with and without a pull tab. The style without a pull tab utilizes excess material for film removal. Size, shape, and location of the capture material varies by device and package type.

Because the protective film could potentially adhere to other surfaces, it should be disposed of immediately after removal.

---

## Revision History

|  |       |
|--|-------|
| <b>Rev. C</b> .....  | 5/11  |
| <ul style="list-style-type: none"><li>• Updated Glass Protective Film, page 1</li><li>• Added references to pull tab</li></ul> |       |
| <b>Rev. B</b> .....  | 11/08 |
| <ul style="list-style-type: none"><li>• Updated copyright and corporate address</li></ul>                                      |       |
| <b>Rev. A</b> .....  | 10/08 |
| <ul style="list-style-type: none"><li>• Initial release</li></ul>  |       |

10 Eunos Road 8 13-40, Singapore Post Center, Singapore 408600 prodmktg@aptina.com www.aplina.com  
Aptina, Aptina Imaging, and the Aptina logo are the property of Aptina Imaging Corporation  
All other trademarks are the property of their respective owners.