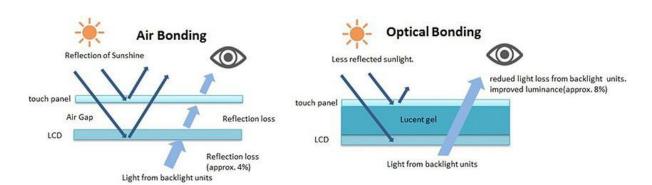
# Optical Bonding Service



AMT provides in-house optical bonding service. Our optical bonding uses our own Lucent Gel solid optically clear adhesive (SOCA). The base material is silicone, which has excellent weather resistance, yellowing resistance, UV resistance, and impact resistance. It can improve the reliability of LCD displays, and meet a wide range of application requirements such as industrial, medical, outdoor, marine, vehicle...etc. AMT optical bonding is produced in high-quality, in-house, can be quickly bonded, shortens time to market and lead times, reduces shipping costs, and provides customers one stop service with comprehensive technical support. AMT can also source LCD models to bond to an AMT touch screen, further reducing the hassle of sourcing individual components from multiple vendors.

Optical bonding can completely laminate the touch panel and the LCD panel so that there is no air gap between the touch panel and the LCD. This can reduce parallax, decrease the reflection of external light sources, and improve the penetration rate of the backlight. These all contribute to an even better optical solution for LCD monitors.



### **AMT Optical Bonding Features**

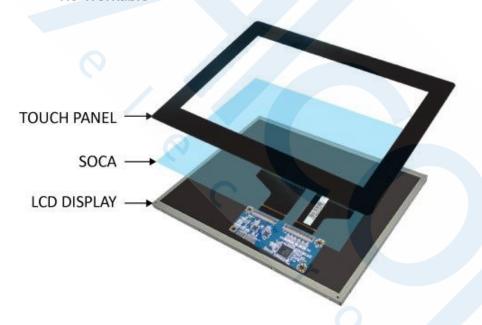
- Uses our own Lucent Gel solid optically clear adhesive (SOCA)
- SOCA has no curing process and is not prone to stress Mura
- No curing process required, no stress Mura
- Fixture & Vacuum lamination technology



- Low bonding and defoaming pressure. Suitable for displays that are not resistant to high pressure (such as OLED, EPD, Open Cell).
- Suitable for 3D (lamination surface 2D, appearance 3D) or plastic parts lamination.
- Multi-fixture lamination

#### **Lucent Gel Features**

- Silicon based solid OCA
- Pass Q-UV ASTM G154 Cycle 1, 1500 HR
- Pass Q-Sun 1000 HR
- Pass -40°C / 95°C / 60°C, 90% RH 1000 HR
- Pass -40°C / 95°C / 60°C, 90% RH 1000HR, △E<1.5
- Re-workable



## **AMT Optical Bonding Support**

For optical bonding, AMT can provide Lucent Gel in different thicknesses, including 0.5mm, 0.8mm, 1.0mm, 1.2mm, and 1.5mm. Based on the structure and size of the touch panel and LCD panel, AMT will choose the most suitable thickness of SOCA for lamination. If a thicker SOCA is required, we will discuss closely with the customers to fit their needs.

Currently, AMT optically bonded LCD sizes are as follows:

• LCD panel with metal frame: ≤ 27"

LCD panel without metal frame: ≤ 15.6"

Open Cell LCD panel: ≤ 27"

AMT supports all types of bonding:

• Touch panel, Cover glass, Plastic housing

Bezel LCD, Cell Tape LCD, Open Cell, OLED, EPD



# Unique Optical Bonding Technology

Some LCD panels on the market tend to have a narrow frame design. When the frame of the LCD panel is very narrow with a thicker SOCA, after optical bonding, a bright line at the edge of the active area might be seen when looking at the LCD panel sideways. AMT uses a special process and optical bonding technology to remove the bright line when you look at it sideways.

