

**IGNIS**  
**AdMo-p™** for Polysilicon AMOLED  
 Mura Compensation for Mobile Displays

AMOLEDs with polysilicon backplanes typically suffer from variations in brightness called “mura”, leading to low yields and high cost. IGNIS AdMo-p™ technology is an in-pixel correction circuit that **completely eliminates mura**, increasing yields and improving the bottom line.

**Benefits**

- ▶ Mura-free, increasing yields by 30% or more
- ▶ Yields stay high (>95%) even as panel size increases
- ▶ Uses standard drivers and no custom components
- ▶ Resolutions up to 300ppi
- ▶ Eliminates artifacts caused by changes in Vt, mobility, and temperature

Polysilicon AMOLEDs with no compensation (severe mura)



Polysilicon AMOLEDs with conventional compensation (some visible mura)



Polysilicon AMOLED with IGNIS AdMo-p™ technology (mura-free)



**IGNIS**  
**AdMo™** for Amorphous Silicon AMOLED  
 Image Sticking Compensation for Mobile Displays

AMOLEDs with amorphous silicon backplanes are prone to significant “image sticking” issues that render a display unusable. A static image (such as mobile phone icons) can be burned into the display in under an hour. IGNIS Advanced Mobile (AdMo™) technology **completely eliminates image sticking and improves lifetime**, without changing materials or manufacturing methods.

**Benefits**

- ▶ Image sticking free, increasing device lifetime by 10-20 times
- ▶ Uses standard drivers and no custom components
- ▶ Better-than-LCD cost
- ▶ Resolutions up to 250ppi
- ▶ Eliminates artifacts caused by changes in Vt, mobility, and temperature



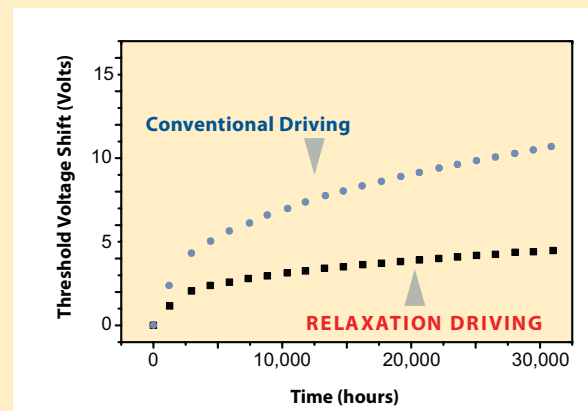
Visible image sticking with conventional amorphous silicon AMOLED



Image sticking-free with IGNIS AdMo™ technology

**Our advantage: Relaxation Driving**

IGNIS relaxation driving actually slows the degradation of the amorphous silicon backplane, delivering tomorrow’s displays with today’s materials.



**IGNIS MaxLife™ for Polysilicon Backplanes**  
Mura and OLED Compensation for Monitors & Television

AMOLED televisions require long lifetimes with superior image quality. Polysilicon-based AMOLEDs exhibit variations in brightness (“mura”) which reduce yield and performance, especially for large displays. The OLED also degrades over time, shortening the lifetime and causing “image sticking” of overlays such as stock tickers, network logos, etc.

IGNIS MaxLife™ Hybrid Drive Technology for PMOS and CMOS polysilicon backplanes delivers true-to-life imagery, **without mura or image sticking**. MaxLife™ powers TVs for 60,000hrs or longer, and significantly improves manufacturing yields. MaxLife™ delivers these advantages using today’s polysilicon & OLED materials and processing, **drastically improving the cost competitiveness and time-to-market of AMOLED as the next generation HDTV technology of choice**.

**Benefits**

- ▶ Mura-free; resulting in significantly higher manufacturing yields, even for television-sized panels
- ▶ Lifetimes of 60,000hrs or more
- ▶ Eliminates image sticking, keeping luminance uniformity to 99%
- ▶ Compensation for OLED efficiency loss

**Conventional polysilicon AMOLED televisions show mura and burned-in text and graphics**



**Polysilicon AMOLED with IGNIS MaxLife™ technology delivers crystal-clear pictures**



**IGNIS MaxLife™ for Amorphous Silicon Backplanes**  
Lifetime and Image Sticking Compensation for Monitors & Television

In AMOLED televisions with conventional amorphous silicon backplanes, both the backplane and the OLED degrade rapidly. This diminishes the user experience by reducing device lifetime and causes “image sticking” of text, network logos, etc.

IGNIS MaxLife™ Hybrid Drive technology for amorphous silicon delivers the ultimate state-of-the-art backplane for AMOLED TV. **With cutting edge performance, MaxLife™ pushes the limits of convention by using amorphous silicon for television. This enables AMOLED TV to rapidly expand into larger display sizes for lower cost.** Taking advantage of industry-standard amorphous silicon manufacturing infrastructure, MaxLife™ is the first and best choice in backplane management solutions.

**Benefits**

- ▶ Uses existing amorphous silicon processes, delivering high yields and leveraging the huge available manufacturing capacity
- ▶ Lifetimes of 60,000hrs or more
- ▶ Eliminates image sticking; luminance uniformity of 99%
- ▶ Compensation for OLED efficiency loss



**Conventional amorphous silicon AMOLED televisions show burned-in text and graphics**



**An amorphous silicon AMOLED television with IGNIS MaxLife™ technology is crisp and clear**

**Our advantage: Relaxation Driving**

IGNIS relaxation driving actually slows the degradation of the amorphous silicon backplane, delivering tomorrow’s displays with today’s materials.

