

While the media are full of incessant talk about security issues related to social media and the Internet, security in packaging and documents is equally important. Virtually any manufactured product—regardless of brand name or value—is vulnerable to counterfeiting. High-ticket luxury packaging and documents such as loyalty cards need security simply because copiers and software make many more people potential counterfeiters. And while the foremost goal of package design is to create a unique and winning design that will stand out on the shelf among the available brands, package security is an important secondary goal. Regardless of brand name or value, someone will likely try to pass off a fake item to an unsuspecting consumer.

Counterfeiting goods is often made easier when consumer brands use spot colors to create their artwork. Using a spectrophotometer, a would-be counterfeiter can easily and accurately measure any nonmetallic color on a printed item. With the measurement in hand, all the counterfeiter then needs to do is scan the printed item and recreate the artwork. This is the way many branded products are easily copied.



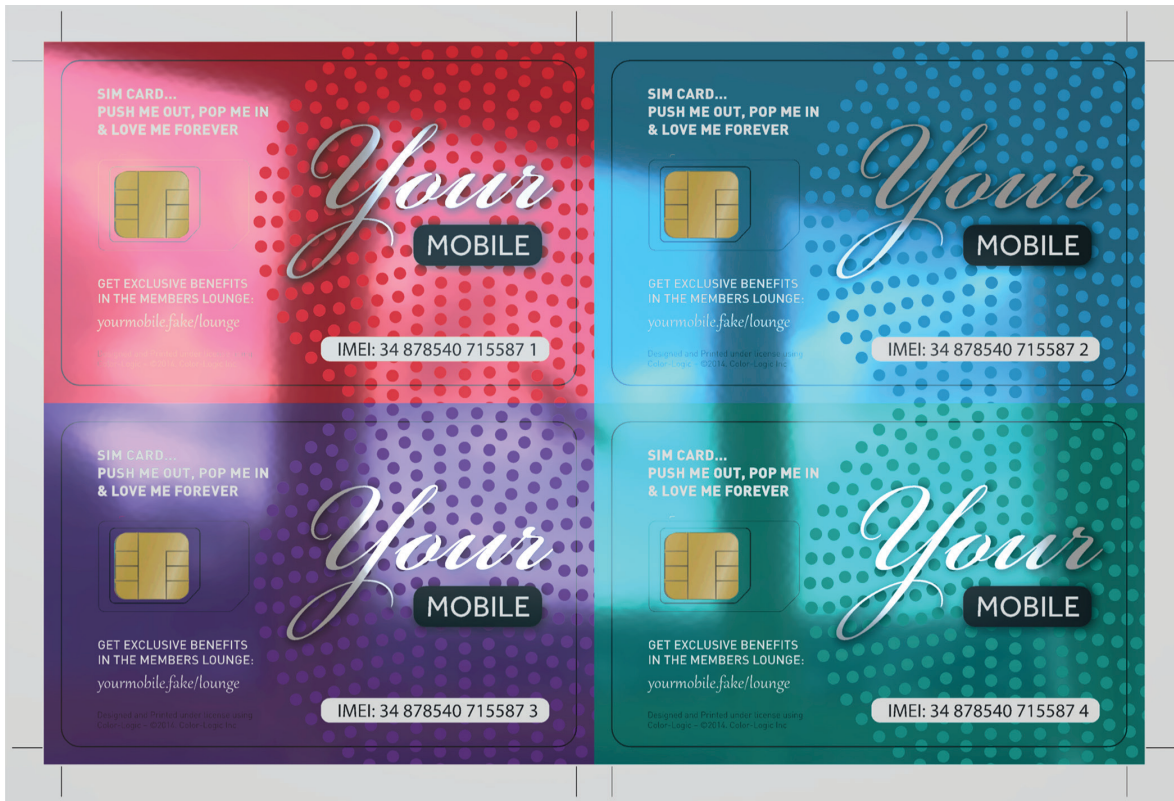
**Gift Card:** Designed using Silver and Gold foil areas

The Process Metallic Color System by Color-Logic provides a unique solution which enables any designer with the Color-Logic Design Suite and FX-Viewer™ to implement a diverse range of special effects as a first line of defense against counterfeiting. The basic Color-Logic effects may be visualized on the computer screen using FX-Viewer, before going out to proof or print.

Using the Color-Logic software, designers can incorporate dynamic effects that react to light as the printed piece is moved or rotated. Subtle watermarks can be embedded within metallic areas on a package design. These watermarks may be used as an almost subliminal logo branding in the background of a label or package. More advanced designers may use the Color-Logic software to create extremely complex security features such as colored and gradated metallic guilloches, or invisible ink separations generated from photographic images. Whether the graphic designer chooses to design overtly or covertly, the Color-Logic system can add shine and security to product packaging that is limited only by the designer's creativity.

## Solid Metallic Colors

Using metallic colors is an excellent way to add a relatively simple level of security to a design. The inherent nature of metallic inks makes photographing or color copying almost impossible, because light is reflected by the metallic particles in the ink, causing the appearance to change as the print is moved. This, in turn, makes accurately scanning or color copying a metallic ink virtually impossible.



### Example: SIM Cards

Each card can be printed with a unique metallic color chosen from the Color-Logic palette. This not only makes it harder to counterfeit, but also allows the brand to target different consumer groups by offering varied color schemes...For example, a phone provider may offer different colored models of a phone – the SIM cards shipped with that phone could be produced to match the color of the phone.

Metallics, however, are more costly and require additional printing plates on the press. With the Color-Logic system, those limitations are dramatically reduced, since a fully chromatic palette of 250 lustrous metallic colors can be created inline using just one spot ink in addition to the primary colors used on press.

To learn more about the special anti-counterfeiting features in the Color-Logic system, see Part 2 of this series.