

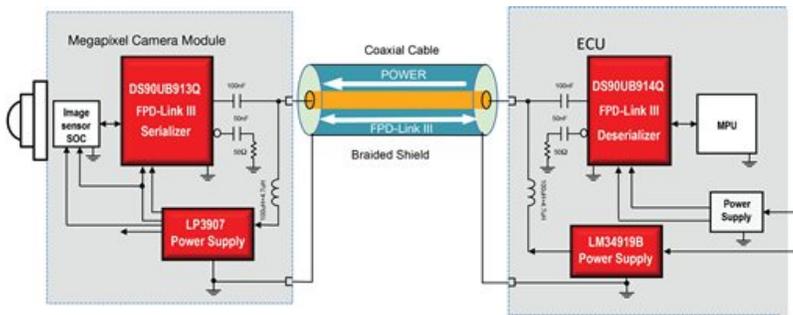


Hagop Kozanian Jun 07 2013 13:00 PM [Q](#)

Our lives are surrounded by [analog](#) everywhere we go. That's not news to the Analog Wire audience, but it may surprise some that in this age of digital electronics, analog technology is more pervasive and impactful than ever. In everything from power tools to a runner's [heart-rate monitor](#) to the factory robot, analog chips are managing batteries or power from the wall, converting and conditioning signals, and providing the system interface. Technology has made and will continue to make an impact on the way we live, learn, work and play.

Just take a look at the advancements our customers have introduced recently or are on the horizon in the [automotive](#) and [industrial](#) markets, from cars that correct driver errors to avoid accidents to a factory production line that diagnoses itself to avoid shutdowns. One example that excites me is the [automotive camera system](#). These megapixel camera systems serve as an important safety feature by allowing the driver to see what's behind the car when in reverse, as well as around the vehicle in other types of driver assistance systems.

With TI's FPD-Link III products the customer can connect all those cameras with only a single coaxial cable, instead of commonly used shielded twisted quad (STQ) or similar wiring. The impact is significant! The complexity of the car wiring harness is reduced by reducing the number of cables and connectors, which reduces the OEM's manufacturing cost. Also, the driver benefits as the reduced weight (half that of a STQ), which translates directly into lower fuel consumption. Here's a block diagram that details the system.



**Common low impedance GND for all components (no GND shifts)**

Analog and embedded processing technologies are the backbone of many of these inventions. And, because we see innovation through the lens of our 100,000+ customers who are changing the world right now, we have a unique vantage point.

Every few years, an undercurrent of technology drives the creation of products that change our lives. Just a couple of decades ago mobile phones enabled us to talk to anyone on the move. The Internet opened up the world's knowledge base to anyone with a connection. Now we can access virtually any information, regardless of where we are, in real time on a host of different devices. Countless new uses have spawned from these advances, such as crowd sourcing, social media, [cloud computing](#) and many others. The possibilities are endless!

# ANALOG: TECHNOLOGY FOR THE FUTURE

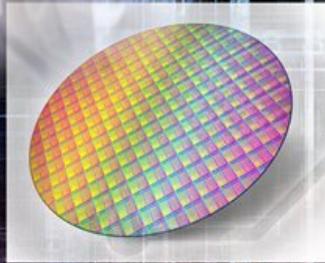
## FUN FACTS...

**Analog** links real-world senses like hearing, touching and seeing to the digital world

A typical electronic design can have 15-20 **analog** chips for every embedded processor

An estimated 96 billion **analog** ICs will be sold in 2013\*

\* Source: Databeans



Futurists may be able to predict where the next wave will go. In our 83 years as a company, we at TI have learned to focus on what we do best. We provide the tools in the form of analog and embedded processing semiconductors and applications support that help our customers create the next big idea.

In my next post, we'll discuss some of the innovations we are seeing in industrial automation, health technology, automotive and smart energy and ask you to be the judge of which applications will change our world in the coming decade.

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