

## Want Quality Hardware: Use a “Bill of Process”

Folks,

When companies search for a new vendor, pricing for a part, sub-assembly, engineered material or long term supply relationship with a contract manufacturer, we all tend to focus on price.

Understanding the factors that define the supplier's quotation and cost basis is indeed important. Asking for a quotation that splits out the cost of key components and materials, labor, testing and overhead has become SOP in the consumer electronics segment.

One portion of this exercise is the back-and-forth trading of the Bill of Materials. Pinning down the final BOM after the supplier localizes supply of components and ancillary hardware (and the associated sharing of data sheets and qualification of higher risk parts) consumes a lot of time and is critical in sourcing.

We've found that an additional exercise is needed to minimize supply risk and guarantee a quality product and good sourcing relationship. That's the “**BOP**” or **Bill of Process**.

A BOP is similar to a BOM in that it chronicles important information about how the product will be fabricated. Rather than listing components and materials, a BOP lists key process steps, machine settings, variables and the methods used to make your device. It's a document that the supplier and customer share that helps keep everyone on the same page and provides a useful reference to guide future process audits or help to diagnose a discrepant product.

Acknowledging that not every supplier will happily provide the details of their production process, the effort to identify vendors who are open to the concept and extracting the details will pay dividends for you.

To see an example of a simple BOP for a machined 4130 stainless steel part that we use at EastBridge, click here:

[http://](#)

I'm not a big fan of adding new acronyms (I remember the advent of the poorly imagined “BAT” or Best Available Technology in the early 90s...).

So, no to BATs, but yes to BOPs for strong and long lasting customer/vendor relationships and quality hardware.

Cheers,

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