

Future Electronics FIRST Supply Chain Solutions

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2010 was a year of allocation, stock-outs, price inflation and scrambling for components, but not at Future Electronics. Future's Global Supply Chain Solution really works and helped keep customer's production lines running on schedule. While companies talk about having solid supply chain programs, in 2010 many learned that their supply base was unable to support their needs. When lead times expanded and product allocation became commonplace, their material pipelines dried up.

As customers continue to look for ways to reduce their Total Cost of Acquisition, enhanced supply chain processes become critical. Too much inventory adds to the cost of doing business. Not enough inventory results in missed shipments and lost revenue. The role of Future (the distributor) is to provide a seamless Supply Chain Solution utilizing their inventory to be the buffer in the supply chain process.

With the ever changing market conditions in the electronics industry, issues arise that requires electronics OEMs and Contract Manufacturers to find ways to constantly shore up their supply chain. Lead time volatility hampers production schedules, requiring supply chain managers to find ways to ensure product availability. Their goal is to guarantee supply chain integrity at the lowest total cost of acquisition. In today's market, seemingly overnight lead times expanded from 4-8 weeks to 26-52 weeks. This resulted in major disruption to supply chains along with inflated material prices. Supply chain managers have been forced to make decisions that adversely affect production schedules, inventory turns and PPV.

While the market conditions of 2010 are on the extreme side, supply chain issues are nothing new. Supply chain managers have always faced daily opportunities revolving around the need to keep their production lines fed, while keeping cost in line with expectations. This requires having the right mix of inventory. Material shortages, regardless of the value of the missing component, delay production and ultimately shipment to the customer. Millions of dollars in revenue can be lost due to the delay of a simple resistor. But, too much inventory can result in reduced turns ratios, potential excess or, (even worse) obsolete inventory. In reality, there is typically too much of some inventory and not enough of some others. The results can be missed shipments *and* excess inventory.

So, what is the primary goal of any good supply chain? Having the right material, at the right place at the right time (supply chain 101). This sounds simple, but even during "normal" times this can be a difficult task. With world wide cost pressures, the supply chain manager must also accomplish this task in the most efficient manner possible.

A critical element in supporting a global supply chain process is real time global data availability. Future Electronics has grown organically, using one IT platform to support business globally.

Future Electronics' **FIRST** Supply Chain Solutions team utilizes this capability to supply a seamless, global supply chain supporting structure.

In 2010 Tektronix (www.tektronix.com) was looking for a distribution partner to support their global supply chain needs. Future Electronics was chosen to support their process in Asia. Jon Carpenter, Vice President, Worldwide Operations stated that "Tektronix chose Future **FIRST** to support its Asia factory network because the single IT platform facilitates real time access to all worldwide inventory by all stakeholders. The single IT platform allowed Future the flexibility to tailor a supply chain solution specific to our requirements."

Like Tektronix, many electronics manufacturers have realized the benefits that electronic component distribution plays in the supply chain process. The leader in distribution supply chain programs is Future Electronics. Since being founded by Robert G. Miller in 1968, Future Electronics has strived to differentiate itself by being unique and delighting the customer. This approach has proven very successful, enabling Future Electronics to grow to be the #3 distributor in the world as well as the worlds largest privately held electronic components distributor.

As distribution has evolved over the years, Future Electronics has maintained its primary focus: **commitment to inventory**. Being a privately held entity, Future is a true inventory bonding distributor. For years, the inventory turns ratio at Future has remained constant at 2 – 3 turns per year. Future's Bonded Inventory Management (BIM) program is unique in the world of distribution, providing the customer with the assurance that up to 90 days worth of material is electronically bonded in one of their global Distribution Centers. With this strong inventory position, along with a commitment to delighting the customer, Future Electronics has long been viewed as the leader in inventory availability.

In 1993, Future Electronics started the **FIRST** program. **FIRST** is an acronym for Future's Inventory Replenishment System Technology. **FIRST** started as a software program which allowed customers to utilize the Internet to electronically place purchase orders. The process proved simple and seamless. **FIRST** was, and still is, provided to customers free of charge. **FIRST** has evolved into a global group of supply chain specialists that work on site with the customer, to establish the best solution possible. Each member of the **FIRST** team has spent numerous years in the manufacturing sector before coming to Future Electronics. Some of the current team members have extensive technical knowledge along with their supply chain background. This brings technical support, and the ability to seamlessly integrate programs, on site to the customer's facility

Providing customers with a supply chain solution designed specifically for them, requires extensive knowledge and experience. The Future **FIRST** team brings a keen understanding of process improvement and an extensive "tool box" to pull from. Future's supply chain support is based around Future's BIM program. With the inventory ready to fulfill demand at a moments notice, the **FIRST** team works with the customer to evaluate their needs as well as their capabilities. They work together to uncover the best solution, working over time to monitor and tweak the process to ensure optimum performance.

Supply chain support can be local, in one market place, or grow globally. Stoneridge (<http://www.stoneridge.com/>) is an example of this type of program. In 1995, their facility in

Juarez, MX (at the time this facility was known as Pollak) was looking for a solution. Their opportunities included border crossing of material for a high mix, low volume process with volatile demand. Future Electronics worked with Pollak to establish and implement a customer specific program. Over the years, Future's **FIRST** team has worked with the Pollak (later purchased by Stoneridge) team to continuously improve the process. When Stoneridge purchased Pollak, they evaluated the supply chain program that was in place and were so impressed that today, Future Electronics supports Stoneridge on a world wide basis. Today, at the Juarez facility, inventory turns on the Future supplied material average 45 turns. Mark Tervalon, President said "working with Future has been an incredible benefit for Stoneridge. As we understand how to use each other's expertise and have each company focus on what they do best, Stoneridge has been able to reduce the cost of managing the supply chain in an inherently cyclical industry. Our partnership with Future helps us to achieve greater levels of satisfaction for both our shareholders and our customers."

Technology and automation are key elements in Future's supply chain support. When the customer creates an order through any e-commerce process, the order enters Future's e-commerce gateway. Fully automated, the process verifies the data is accurate, confirming key elements of the order. Once verified, the order is electronically forwarded to the appropriate distribution center (in North America that is Future's Memphis Area Distribution Center – MADC; in Europe: Future's brand new automated warehouse in Leipzig, Germany; in Asia/Pac: Singapore Regional Distribution Center). Future's distribution centers are fully computerized and automated.

MRP forecast sharing is a tool that is utilized to ensure that Future has visibility to the customer's demand. Future's MRP share process utilizes the inbound forecast data and automatically establishes the BIM bonding levels. With the knowledge that the material supply chain is solidly in place, the customer can then reduce the lead time in their MRP system to be equal to the freight transit time. This helps minimize the customer's inventory levels and can eliminate managing long term scheduled purchase orders.

Future also provides the customer with visibility to their BIM and Forecast data through the Visual Stock Status (VSS) screen on their **FIRSTLINK** web based solution. **FIRSTLINK** and **FIRSTLINK Plus** also give Future Electronics' customers the ability to see their supply chain relationship in real time. Material can be released, monitored and even maintained (**FIRSTLINK Plus**).

The **FIRSTLINK** family of products has brought an affordable e-commerce solution to potentially every Future Electronics' customer. All that is needed is a web browser and an internet connection. The customer can log on, see their open order status in real time; reschedule open orders; release bonded inventory; check stock, obtain technical data sheets or create purchase orders on any of Future's 120,000 line items. **FIRSTLINK** has the functionality to support point of use and/or KanBan processes. The new version will include a built in KanBan calculator which will utilize historical and/or forecast data to suggest KanBan bin sizes.

Future's **FIRST** team is routinely monitoring technology and offerings and looking for ways to improve. In 2011, Future will release **FIRSTLINK** version 7, the latest in state of the art e-Commerce support.

When the **FIRST** team initially works with a customer to evaluate their needs, training is often part of the solution. World class supply chain includes understanding 5-S/6-S and Lean Principles. The Future **FIRST** team has developed a Fundamentals of Lean Processing (Phase I & Phase II) training workshop. These workshops are offered free of charge to Future's key customers. Over the past 5 years, nearly 200 customers in North America have taken advantage of this training.

Sometimes, Future's Lean Training is used to enhance or confirm the training that the customer has already established. An example of this is Javad (<http://www.javad.com/ems/index.html>), an EMS provider in the San Jose, CA area. Javad recently opened a state of the art facility and wanted to ensure their processes were as state of the art as their facility. Gary Walker, Vice President, felt that Future's **FIRST** team could help support his Lean vision. Even though the relationship between Javad and Future was relatively new, Future spent two days on site with the Javad team to help with their lean initiatives. As Mr. Walker stated "Working with the Future folks allowed us to have another set of eyes and viewpoint in looking at how we were evaluating some existing projects for improvement. The net result of the Lean workshop was an improved thought and execution process and as such we feel a more robust and efficient approach to tackling these projects which are critical to our efficiency improvement targets for 2011."

2010 was a very challenging year in the Semiconductor Business, but **FIRSTLINK** proved to be a very effective tool for our Customers to continue their business as usual. More and more customers look to Future Electronics to be that buffer as well as a tool to help them achieve their goal in developing a world class supply chain process.

As we move into 2011, many customers will look back on the issues that disrupted their supply chain in 2010 (and still continue) and try to discover solutions. Future Electronics **FIRST** supply chain team is available to help your organization evaluate your specific issues and work with you to optimize your supply chain process. Whether it is a simple solution such as Future's BIM bonding program or working with your Lean champion to establish a Lean Training Workshop, all the way to establishing a point-of-use replenishment process, give Future a call. For information on how Future Electronics can best help your organization grow to the next level in 2011 and beyond, please contact us at www.FutureElectronics.com or email john.cronk@futureelectronics.com.

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