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- These solutions are used in a wide range of automotive, identification, wireless infrastructure, lighting, industrial, mobile, consumer and computing applications
- A global semiconductor company with operations in more than 25 countries, NXP posted revenue of \$4.36 billion in 2012 Over 10,000 transactions exchanged daily using GXS Trading Grid
- Over 600 B2B interfaces migrated onto single consolidated platform
- Mirrored mailbox solution from GXS provides reliable testing and parallel operations for smooth migration
- B2B costs reduced by 60%

## NXP

### Corporate Profile

NXP Semiconductors (NASDAQ: NXPI) is a leading High Performance Mixed Signal and Standard Product solutions company that leverages its leading RF, Analog Power Management, Interface, Security and Digital Processing expertise. These innovations are used in a wide range of automotive, identification, wireless infrastructure, lighting, industrial, mobile, consumer and computing applications. A global semiconductor company with operations in more than 25 countries, NXP posted revenue of \$4.36 billion in 2012. In the past four quarters, NXP has outgrown the industry and is on pace to continue growing at a rate of 50% greater than the industry. NXP's strategy continues to be focused on providing unique and differentiated product solutions to enable its customer's success, which over the longer term should allow NXP to outpace the cyclical growth of the overall semiconductor market.

The company is the global market leader in areas as diverse as automotive chips for in-vehicle networking; passive keyless and immobilization; silicon tuners for TV and set-top boxes; and contactless transport and access management; and eGovernment applications such as ePassports. Its 10 largest OEM customers are: Apple, Bosch, Continental, Delphi, Gemalto, Giesecke/Devrient, Huawei, NSN, Panasonic and Samsung.

Formed in 2006 from the semiconductor business of Philips with 50+ years of experience in semiconductors, NXP has a history of innovation: it invested \$628 million in R&D in 2012, has 3,500 employees in Research & Development, and has about 10,000 issued and pending patents and design engineering teams in 19 locations.

Over 30 years ago, NXP invented the I<sup>2</sup>C interface now widely used in computing products worldwide. More recently, the company co-invented Near Field Communications (NFC) technology with Sony. The company is global market leader in both technology areas.

### Business Challenge

The high-tech sector is one of the fastest moving markets whose trends are notoriously difficult to predict. NXP's approach to the challenge is to build strong long term relationships with its customers to enable the company to be closely involved from an early stage of their product development lifecycles. This approach is allied to the development efforts of its Advanced Systems Labs that deliver innovative solutions to the component requirements and system architect challenges of its target markets.

The company uses a high degree of business efficiency and cost-effective provision to ensure it delivers outstanding customer satisfaction. NXP understands that to achieve its business goals it has to align its internal and external system interfaces to gain end-to-end control and visibility of business processes and provide a single face to its customers regardless of where they are in the world.

NXP introduced EDI into the business in 2000 when the US operations began to trade electronically with key customers. In 2004, the European operations implemented SAP so decided to roll-out electronic trading to their customers at this time. The implementation highlighted a challenge for NXP. Whereas the US primarily used the ANSI X12 standard, European customers preferred to use EDIFACT. This was further complicated when NXP implemented EDI in Asia where RosettaNet was popular.

The company chose to automate the entire spectrum of business processes from pre-ordering and ordering all the way through to distribution and billing. This meant that NXP was faced with a vast array of different standards, protocols and document types to implement. Maik Bastiaens, Integration Team Leader at NXP says: “The diversity of ways processes are implemented is huge. We found that within something like an order processing message there could be a number of different standards, each of our business partners implemented the standard in a slightly different way. We want to work as our customers prefer to work, so that means supporting various business and industry standards as well, for example, the German Automotive industry has its own VDA (Verband der Automobil Industrie) standard. In addition, as we moved beyond EDI to embrace full B2B ecommerce, we found that we needed to react each time a new standard and communication protocol emerges, such as AS2.”

In 2007, NXP decided to consolidate the number of EDI networks it used. The company selected GXS as its preferred supplier, because the GXS Trading Grid® Messaging Service (TGMS) delivered the best global connectivity fit for NXP’s business needs. GXS represented a global partner that could deliver a reliable service, and one that continually extended its service portfolio so NXP could be confident that GXS would be ready to support NXP’s future business direction. GXS thus enables NXP to trade with partners anywhere in the world using the document types and B2B standards the partners prefer.

As well as EDI network services; GXS was able to deliver AS2 services that enabled NXP to offer direct point-to-point connectivity with customers that requested it. Maik Bastiaens explains: “AS2 expanded our EDI portfolio. It allowed us to do a cost calculation on whether it is better trade directly or through the EDI network. AS2 would have placed greater operational requirements on our team but the GXS AS2 service enabled us to select the correct trading method for our partners with the confidence of knowing that we have a single global supplier handling our B2B needs.”

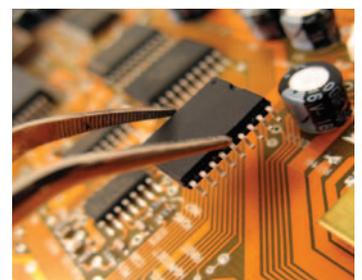
Today, NXP trades electronically with almost 85% of its customers, with TGMS handling over 10,000 transactions for NXP every day. However, providing a single face to customers is only part of the NXP strategy. The company also wanted to align its internal and external systems to get end-to-end control of its business processes.

NXP were managing the middleware that controlled their internal systems themselves, but had outsourced their B2B system, and in 2012 decided that if they consolidated both to one single platform they would be able to retain a higher degree of control and also improve IT efficiency by consolidating IT to one single team.

As a result, NXP has been able to reduce B2B integration costs by 60%.

“With GXS, our B2B business partner network has reduced our capital commitment and improved inventory management while enabling us to react more quickly to customer enquiries.”

– MAIK BASTIAENS  
INTEGRATION TEAM LEADER  
NXP



## The Solution

Consolidating onto a single middleware platform has been a significant challenge for NXP, requiring the migration of over 600 B2B interfaces, both B2B sender and B2B receivers exchanging information across a range of message types, message versions and B2B standards. According to Maik Bastiaens, GXS has played an extremely important role in this process. He says: “GXS has been able to provide us with a very reliable mirrored mailbox solution so that we can thoroughly test and run our systems in parallel as we go through the migration process with each of our customers. By taking a stage approach, we have been able to roll-out the new service in a timely manner while achieving the highest levels of quality we require.”

“Partnering with GXS has enabled us to on-board new partners, make changes to B2B arrangements with existing customers and extend our B2B service to different offices and operations of customers worldwide quickly and easily. It has taken the complexity out of AS2 implementation for us while providing a clear and highly predictable cost structure. With GXS managing our B2B business partner network, we have been able to reduce our capital commitment and improve inventory management while enabling us to react more quickly to customer enquiries. For example, EDI has enabled the possibility to keep stock levels to a minimum. Forecast messages can also include orders so that we hit two birds with one stone. Planning and order data in the same message simplifies and speeds the process.” he says.

However, NXP’s integration plans are more ambitious, consolidating its middleware platforms is just a step to the next goal. The company is working to introduce a single canonical XML message format on its integration layer. The canonical data message format is independent of any application so that all applications can communicate in a common format. This approach will enable NXP to avoid the range and volume of message translations and point-to-point communications that are part of any B2B business partner network.

This new canonical approach is the one that the company will roll-out its B2B network to its suppliers and sub-contractors. Maik Bastiaens explains: “B2B is critical to enable business process in the supply chain. We want an end-to-end process where standard data flows through all the relevant internal and external systems so that we can have full visibility and control. With GXS, we know that we have a partner that can facilitate the process and ensure that we can always effectively exchange business documents with our business partners regardless of the B2B formats or standards.”

“In addition, GXS will allow us to easily move towards a Managed Service approach to our B2B systems if this becomes our business strategy in the future,” he concludes.



### About GXS

GXS is a leading B2B integration services provider and operates the world's largest integration cloud, GXS Trading Grid®. Our software and services help more than 550,000 businesses, including 22 of the top 25 supply chains, extend their partner networks, automate receiving processes, manage electronic payments, and improve supply chain visibility. GXS Managed Services, our unique approach to improving B2B integration operations, combines GXS Trading Grid® with our process orchestration services and global team to manage a company's multi-enterprise processes. Based in Gaithersburg, Maryland, GXS has direct operations in 20 countries, employing more than 2,800 professionals. To learn more, see <http://www.gxs.com>, read our blog at <http://www.gxsblogs.com> and follow us on Twitter at <http://twitter.com/gxs>. You can also access our public filings with the Securities and Exchange Commission at <http://www.sec.gov/edgar.shtml>.

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