

Venture Development Corporation Mobile and Wireless Practice



A Research Note On:

LXE's ACQUISITION OF AKERSTROMS TRUX AB

Expanding Vehicle Mounted Computer and Europe Market Footprint

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This research note presents VDC's analysis and opinion of LXE's recently announced acquisition of Akrestroms Trux AB. VDC is not a shareholder or a market maker in either of the entities discussed in this Research Note.

THE DEAL

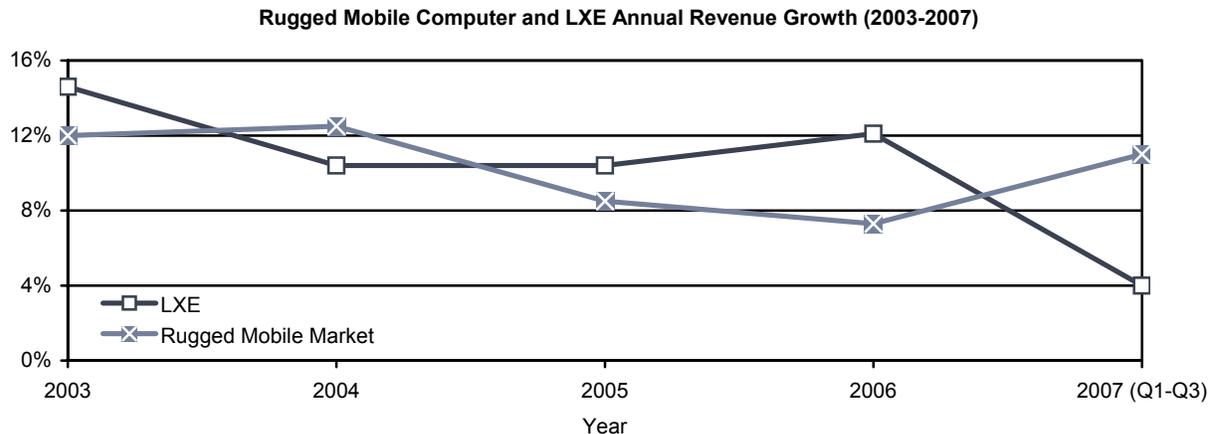
LXE, a subsidiary of EMS Technologies (NASDAQ: ELMG) recently announced the acquisition of Akerstroms Trux AB from BrainHeart Capital for approximately \$15.5 million (US). Akerstroms is a small rugged vehicle-mounted computer vendor located in Sweden. According to EMS, "the acquisition will be accretive in 2009 and 2010, and will not materially affect 2008 guidance." The transaction is complementary to LXE's current operations and will expand the company's already strong rugged vehicle-mounted computer product line and strengthen its position in Europe.

LXE: HIGHLY FOCUSED, HIGHLY CONSERVATIVE

LXE is one of the top 5 suppliers in the world of rugged handheld and vehicle-mounted mobile computers. Its solutions are used primarily within warehouse, distribution center, port facility, multimodal and other logistics environments. The company has one of the most focused market positions among its peers, a position that has served the company well over the past several years of consistent growth and profitability. Moreover, and, again much to its benefit, LXE's approach to product, market and partner development has been among the more conservative when compared against some of its direct peers.

LXE generated \$138 million in revenues in 2006. During the past five years, the company has grown slightly faster than the overall market for rugged mobile computers. However, after growing by just over 11% annually since 2002 growth slowed considerably through the first three quarters in 2007, during which LXE grew by 3.7% over 2006 (Source: EMS SEC filings) while the overall rugged mobile computer market grew by over 10%. Moreover, according to EMS Technologies' most recent SEC filings, LXE's contribution towards EMS net earnings decreased from 47% in 2006 to 24% in 2007 (for the first nine months).

It appears that LXE's focus on the warehouse, distribution center and port markets may have left the company exposed recently as these markets mature and technology adoption emphasizes replacement.



LXE GROWTH CHALLENGES AND OPPORTUNITIES

Although LXE remains well positioned to compete in its core markets it faces some fundamental growth challenges:

- **High penetration rates in many segments:** A significant share of LXE's sales are into warehouse/ distribution center and port environments, essentially logistics market segments. Because of its focus on high-end/specialized solutions, its core customers are predominantly Tier I organizations (revenues > \$500 million). LXE has been and continues to be a recognized leader in these markets. However, these markets— especially in North America among Tier I organizations – while growing, are slowing and shifting. Although VDC does project growth in the warehouse/DC market over the coming years, much will be driven by more price sensitive Tier II and Tier III organizations, segments LXE is not currently well positioned to target.
- **Rugged mobile computer growth driven by 'beyond the fence' applications.** Much of the growth in the larger rugged mobile computing market – and many logistics markets – is being driven by transportation/ distribution, field service and other 'beyond the fence' applications. These are markets where LXE participation is light. In 2007, 'beyond the fence applications' – especially in transportation/ distribution where several major deals were awarded – accounted for almost all the growth in the rugged mobile computer market. Excluding these applications, the market would have shown no growth and possibly even contracted.
- **International markets key to warehouse/ logistics segment growth.** Regionally, LXE's sales are fairly balanced, with approximately 45% coming from outside the US. This is the direct result of several years' investment, particularly in the company's EMEA channel infrastructure. With the North American market continuing to lag, the EMEA and Asia-Pacific (particularly Southeast Asia) markets are providing a necessary lift. In fact some of the largest deployments of vehicle-mounted solutions in port facilities in 2007 have been in the Middle East, Malaysia and Indonesia.

AKERSTROMS TRUX: VALUE IN ITS COMPLEMENTARY SERVED MARKETS, KEY ACCOUNTS AND REGIONAL CHANNEL PARTNERS

Akerstroms is one of several small, niche-focused rugged vehicle-mounted mobile computer vendors that have carved strong positions in target markets. However, many are feeling the challenges of scaling their business beyond their current position. Akerstroms has a leadership position in its local Nordic markets and is especially strong in the automotive sector. Core capabilities include:

- **Up-to-date product portfolio.** Akerstroms is essentially a two-product company – the Tx800 Triton and the Tx700. Both have been refreshed in the past 18 months, the Tx800 as recent as last November/December. Both are based on XP/Embedded XP, which is generally more widely deployed (vis-a-vis thin-client Windows CE) in Europe and some of Akerstroms core user markets.
- **Nordic market leadership.** VDC estimates Akerstroms' 2007 revenues at close to \$20 million, the majority of which came from clients located in the Nordic region of Europe (such as Volvo, ABB, etc.). Although the company has had some success penetrating other Europe country markets such as Germany, it is virtually an unknown entity outside of its local base.
- **Automotive logistics segment leadership.** With blue-chip clients such as Volvo, Ford and GM, Akerstroms is well entrenched in the automotive sector. Moreover, GM, one of its flagship accounts, has standardized on the Akerstroms platform for vehicle-mounted solutions worldwide. Beyond the automotive sector Akerstroms is beginning to gain some traction in the container logistics and port market – probably the fastest-growing segment of the rugged vehicle-mounted segment.

EVALUATING THE TRANSACTION

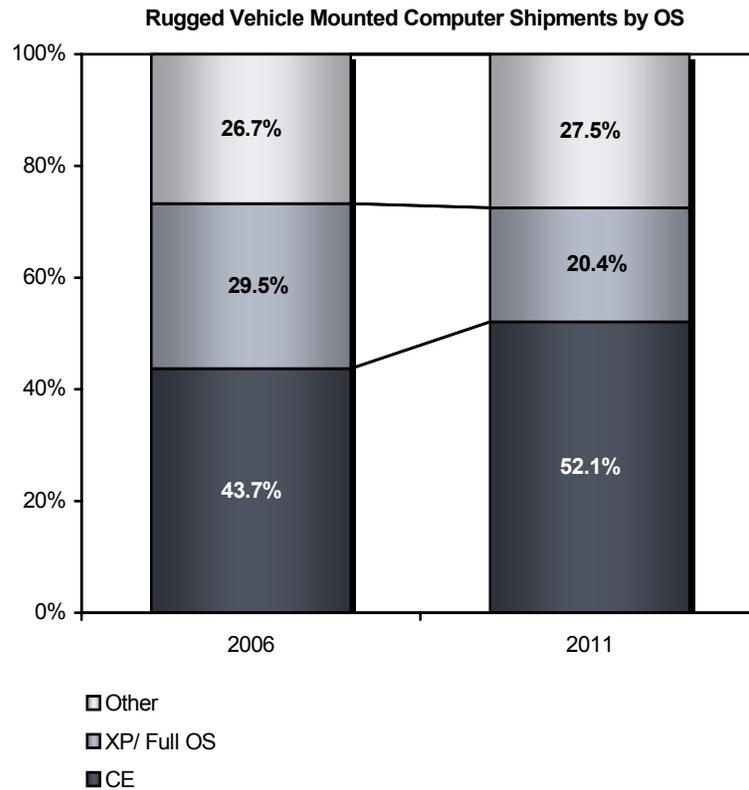
On the surface, this deal has a lot of upside to LXE – in terms of access to new technology, markets, accounts and partners – with minimal risk. However, this deal is also a good reflection of LXE's conservative approach and does little to address one of LXE's fundamental issues: lack of market diversity. From a strategic perspective, some of the leading considerations and implications involving this transaction include:

	LXE	Akerstroms	Comments
<i>Primary Offerings</i>	<ul style="list-style-type: none"> Leading rugged vehicle mounted computer vendor (focus on thin-client CE.Net solutions). 'Top five' rugged handheld mobile computer vendor. 	<ul style="list-style-type: none"> Competitive position in rugged vehicle-mounted computer market. Core position in XP-based solutions. 	<ul style="list-style-type: none"> LXE's products are generally positioned as higher-end/higher priced products. Perceived as among the most rugged in target user communities. Acquisition fills gap in LXE's aging XP-based rugged vehicle mounted segment.
<i>Core Markets</i>	<ul style="list-style-type: none"> Strong position in cold chain, manufacturing, container logistics markets. Regional market balance – 45% of revenues outside Americas. 	<ul style="list-style-type: none"> Leadership position in Nordic markets. Strong position in automotive sector. Emerging strength in container logistics/ port facilities. 	<ul style="list-style-type: none"> Acquisition enhances LXE's expanding position in Europe, especially in the Nordic region, Germany and automotive sector.
<i>Distribution Channels</i>	<ul style="list-style-type: none"> Continued high concentration of direct sales (55%). Investment in partner network, especially outside of US market. 	<ul style="list-style-type: none"> Limited partner network outside of Nordic region. 	<ul style="list-style-type: none"> Acquisition will expand LXE partner network in Europe. Conversely, US partners have access to Akerstroms product. Overall channel contribution remains low relative to peers.

Viewed from an M&A perspective, this deal is conservative. Viewed from an operational perspective, this deal might be considered a bold investment designed to meet tactical and near-term strategic market and product development goals.

The market focus of Akerstroms – EMEA automotive logistics in Tier I accounts – is a strong complement to LXE's served markets. LXE has been investing in Europe during the past few years, but not with such scale as this deal. During much of the past decade, LXE has invested in tightly focused market development strategies aimed at specific segments of the warehouse/ distribution and related transportation markets – including cold chain, automotive and pharmaceuticals. Gaining access to global Tier I accounts such as GM, Ford, Volvo and ABB cannot be understated in the current economic environment.

Akerstroms' product and solution development focus delivers more up-to-date versions of XP-based rugged vehicle-mounted computers. The vast majority (>90%) of LXE's current vehicle-mount shipments as Windows CE-based so Akerstrom's solutions are largely complementary. However, according to VDC's most recent rugged mobile computer research, the CE-segment not only represents the more attractive segment in terms of overall size, its growth outlook appears stronger. For now.



There are a number of forces at play in the rugged mobile market that might change the rates of deployment and displacement for CE and XP and other full OS offerings, including:

- Emergence of UMPC offerings – virtually all utilizing a full OS.
- Migration of more mission-critical and sensitive information from network backbones to larger form factor vehicle-mount solutions in many logistics markets.
- Enhanced security regulations in a number of logistics markets – requiring additional capability in rugged mobile computing software platforms.

Acquiring Akerstroms might be viewed as a path to accessing the emerging full OS opportunities in LXE's core and contiguous markets. It might also be viewed as a defensive tactic to protect any installed base of CE devices from possible displacement by full OS devices in the future by exhibiting a more robust full OS capability.

VDC SUMMARY OPINION

The deal is most attractive to us when viewed from the operational lens. This investment does a number of things for LXE, and very quickly, including:

- **Enhances LXE's CORE market position.** Through this acquisition, LXE is better positioned to serve the needs of its core client base with a broader and more current portfolio of rugged vehicle-mounted computers and challenge its closed competitors for market share. For LXE to maintain historical growth patterns, market share acquisition (as opposed to riding market growth) will be critical. This deal does that. However, this deal does little to expand LXE's reach, a key success requirement in VDC's opinion for the organization going forward.
- **Positions LXE to respond to XP/XPe market uncertainty.** Although VDC expects continued opportunities for XP/XPe-based vehicle mounted computers, much of the growth will be driven by CE.Net solutions. This transaction put LXE in the position to meet the demand for XP/XPe solutions with a more current product line, while also being in position to replace the XP/XPe 'sockets' should they migrate. Moreover, selling BOTH CE.Net based handhelds and XP-based vehicle-mounted computers into the same account will be a challenge.
- **Expands LXE's served market footprint.** Akerstroms will bring a deeper operational presence in EMEA, replete with local engineering, integration, service and support. It will also provide LXE with direct access to a number of Tier 1 accounts headquartered in Europe, but with global sales opportunities.

However, the deal does not gain LXE meaningful access to new vertical, installation environment or application markets. Nor does the deal materially enhance LXE's potential share of spend with served markets. We believe that one or more of these dimensions must be expanded in order for LXE to maintain, or gain share and continue to enhance EMS shareholder value.

Larger peers are placing bigger bets.

In order for LXE to keep pace, it will need to string together a number of deals similar to this, or make a number of bolder investments in expanding its solutions portfolio, or make significant investments in cultivating relationships with the largest and highest value – adding integrators serving its core and target markets.

Or some combination of all of the above.

ABOUT VDC

Venture Development Corporation (VDC) is an independent technology market research and strategy consulting firm that specializes in a number of industrial, embedded, component, retail automation, RFID, AIDC, datacom/telecom, and defense markets. VDC has been operating since 1971, when the firm was founded by graduates of the Harvard Business School and Massachusetts Institute of Technology. Today, we employ a talented collection of analysts and consultants who offer a rare combination of expertise in the market research process; experience in technology product and program management; and formal training in engineering and marketing. VDC's clients include thousands of the largest and fastest-growing technology suppliers in the world and the most successful investors participating in the markets we cover.

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