



תמצית הדוח – Ceragon Networks

*** ממשיכים עם המלצת תשואת שוק * התחזית שלנו בטווח הקצר לתחום הציוד לרשתות סלולריות שלילית ומדכאת * התוכניות לבניית רשתות דור שלישי (3G) נגנזות * אנו צופים שמכירות ציוד GSM/2G יצנחו השנה בכ- 20% * להערכתנו, הצלחתה של סרגון תלויה ישירות בהצלחתם של שירותי GPRS/MMS, בפרט באירופה, אשר יושקו באופן מסחרי נרחב בשני הרבעונים הקרובים * סרגון כבר הוכיחה את יכולותיה לזכות במכרזים יוקרתיים, השאלה היא האם חוזי המסגרת הרב שנתיים עם ספקיות הסלולר יתורגמו להזמנות משמעותיות?**

אנו מעריכים כי השוק האירופי הינו החשוב ביותר לסרגון. לפיכך, במהלך ביצוע המחקר הרבעוני סקרנו את ביצועיהן (KPI–Key Performance Indicators) ודוחותיהם הכספיים של ספקיות שירותי הסלולר החשובות באירופה (mmO2, Orange, Swisscom, Telenor, Telia-Sonera, Vodafone, T-mobile, Mobilecom, ו-Hutchison-Whmpoa) ושל צרניות הציוד המובילות (Nokia, Siemens, ו-Ericsson). להלן מסקנותינו:

- הקמת רשתות סלולריות מדור שלישי נדחית באופן גורף עד לשנת 2004 במקרה הטוב. אנו סבורים כי עיקר הפרסומים על פריסת רשתות ושירותי 3G בתקופה הקרובה יהיה הצהרתי ותדמיתי בעיקר ובכל מקרה יהווה טיפה בים במונחים כספיים או תפעוליים (מספר משתמשים וכו'). הערכות אלה נתמכות על ידי גל ההודעות של עיכובים/ביטולים של הקמת רשתות 3G על ידי Telefonica Moviles (גרמניה, אוסטרליה, שוויץ ואיטליה), Orange (שוודיה), Vodafone, Sonera (גרמניה), Swisscom, Mobilecom, ו-Nokia. התפתחויות אלו וכן שיחות הועידה שנערכו על ידי Nokia ו-Siemens מובילות אותנו למסקנה שציוד לרשתות 3G לא יהווה מקור הכנסות משמעותי עבור סרגון עד 2005.
- אנו מעריכים כי עקב רוויה בשוק וסיום בניית רשתות ברחבי אירופה צפוי שוק מוצרי התשתית לרשתות ה-2G/GSM לצנוח בכ- 20% השנה.
- קצב אימוץ שירותי GPRS/2.5G הוא הנעלם הגדול בתעשיית הסלולר כיום והוא יהווה את התשובה לשאלה האם תצליח סרגון בדרכה החדשה. סרגון כבר הוכיחה את יכולותיה לזכות במכרזים יוקרתיים, השאלה היא האם חוזי המסגרת יתורגמו להזמנות משמעותיות. בפן החיובי, בעיות טכנולוגיות הקשורות למכשירים סלולריים נפתרו ככל הנראה וקעת מתבצעת השקה של מכשירי GPRS רבים כגון T681 של Sony/Ericsson, GX-1 של Sharp ומכשיר המשולב עם מצלמה של Nokia. רובם מתומחרים בסביבות ה- 200 עד 270 דולר. הרבעון השלישי והרביעי של שנת 2002 (ובמיוחד עונת חג המולד) יספקו חלק מהתשובות כאשר החברות הגדולות ישיקו את שירותי ה-GPRS והמכשירים החדשים באופן מסחרי ואגרסיבי. עם זאת, אנו מבחינים במספר גורמים העשויים להשפיע באופן שלילי כגון התמחור הגבוה של מכשירי ושירותי GPRS כפי שנחשף עד כה על ידי הספקיות (סדר גודל של 650-800 דולר לשנה הראשונה, כולל מכשיר אך אינו כולל חשבון שירותי קול קיים); עד כה ספקיות השירות אינן מראות נכונות לסבסד באופן משמעותי מכשירי GPRS; תקציבי ה-IT של מגזר הארגונים הגדולים, אשר סומנו מראש כמשתמשים פוטנציאלים כבדים של שירותי GPRS, אינם מתאוששים; בנוסף, החוב הכבד הרובץ על ספקיות השירות מפחית את הצונם לפרוש רשתות ושירותים חדשים עד לקבלת מושג ברור על רמות הביקוש מצד הצרכנים.

כללי

הדוח המצורף כולל עבודת עדכון לחברת סרגון. העבודה כוללת ניתוח תוצאות הפעילות והמאזן ברבעון השני של שנת 2002 וכן ניתוח ההתפתחויות העסקיות בחברה ובשוק בו היא פועלת.

להבהרות ושאלות ניתן לפנות לתומר כהן בטלפון 03-5674971 או בדואר אלקטרוני tcohen@pcm.co.il.



Equity Research

September 1, 2002

Tomer Cohen
Telecommunication Equipment
(972) 3-5674971, tcohen@pcm.co.il

Ceragon (NASDAQ - CRNT - \$1.5)
Company Update

Market Perform

Company Data

Price (September 1, 2002)	\$1.5
Target Price	-
12 Month High / Low	\$4.8-\$1.2
Market Cap (September 1, 2002)	\$33MM
Shares Outstanding	22 MM
Float	13MM
Daily Volume (3-month avg.)	30K
P / E	NA
P / Revenue (2001A)	1.3x
P / Revenue (2002E)	1.8x
Net Cash 6/ 2002	\$48MM
Net Cash per share 6/ 2002	\$2.1
Book Value per share 6/ 2002	\$2.4

Financials

\$ mill	2002E	1-6/2002	2001
Revenue	18.0	7.3	24.9
YoY Growth	(28%)	(60%)	(15)%
Gross Profit	5.3	2.0	8.4
%	29.5%	27.4%	33.7%
R&D	7.4	3.7	10.3
SG&A	11.0	5.6	15.1
Operating	(13.1)	(7.3)	(17.0)
%	(72%)	(100%)	(68%)
Others	-	(0.8)	(39.8)
Taxes	0.0	0.0	0.0
Net	(13.1)	(8.1)	(56.8)
%	72%	(111%)	(676%)
EPS	(\$0.58)	(\$0.37)	(\$2.69)

Stock Price History



Investment Summary

✳ **Reiterating a Market Perform ✳ Short-term outlook for the industry is downright depressing ✳ 3G plans have been shelved ✳ 2G/GSM sales are plunging (down 15%-20% YoY) ✳ CRNT's success will be tightly linked to the adoption rate of 2.5G/GPRS services, to be unveiled in 3Q-4Q02**

- CRNT's PTP product lines are used to backhaul traffic flows in cellular operator networks. Being so, CRNT's potential market is tightly linked to the amount of traffic flowing in these networks, e.g. an increase in traffic will translate into a growing need for fatter wireless pipes provided by CRNT. As part of CRNT's quarterly update we have analyzed the recent trends in the European operator networks as we consider the European market to be CRNT's largest potential revenue source. Our research has included a review of the Key Performance Indicators (KPI) and financial reports published by important mobile operators (**mmO2, Orange, Swisscom, Telia-Sonera, Telenor, Vodafone, T-Mobile and Hutchison Whampoa**) as well as in-depth analysis of leading mobile equipment vendors (**Nokia, Siemens and Ericsson**). Our conclusions are as follows:
- Broadly speaking, the short-term outlook for mobile network infrastructure vendors is downright depressing with 2G/GSM equipment revenues seeing downward momentum, 3G has failed to blossom (excluding Japan) and a big question mark is hovering above the 2.5G/GPRS market. Carriers are reluctant to upgrade their networks due to the already high levels of debt and as of yet, no sign of rebound.
- 3G network build-outs will be pushed off to 2004 at the earliest. In other words, the term '3G' can be removed from the telecom dictionary for the coming 18-24 months. We believe that most of the 3G-related announcements in the coming year will be declarative in essence or represent a drop in the mobile industry bucket in terms of financial scope. These estimates are supported by the recent wave of 3G deployment pullbacks and pullouts by Telefonica Moviles (Germany, Austria, Switzerland and Italy) Orange (Sweden) Vodafone, Sonera (Germany), Swisscom and KPN Mobile. Comments made by Nokia and Siemens executives lead us to project that 3G network build-outs will not account for substantial revenues for Ceragon before 2005.
- We estimate that worldwide 2G equipment revenues will continue to decrease in the coming quarters, down about 15%-20% YoY.
- The adoption rate in the coming year of GPRS services and MMS (multi-media services) in particular, is the industry's million-dollar question. On a positive note, handset technological problems appear to be solved with the looming availability of Sony/Ericsson's T681, Sharp's GX-1 and Nokia's camera phone, all priced in the range of \$200-\$270. 3Q02 will be an important quarter in this regard as many carriers will introduce their MMS services and new GPRS phones. In addition, we expect to see the result of the coming Christmas season, at which massive promotion campaigns for new phones will take place. That said, at present we discern several issues that hinder mass adoption including: high rates for MMS services and GPRS phone packages as introduced recently by several carriers (approximately \$650-\$800 for the first year, regardless of voice-related charges); carriers so far shun the thought of subsidizing GPRS phones; debt issues will force carriers to upgrade capacity only when the mobile data business model proves economically viable; and dwindling IT budgets in the enterprise industry that were initially conceived as a potential heavy user of mobile data services.

Quarter Review

For 2Q02 CRNT reported revenues of \$4.0m, a gross profit of \$1.1m, an operational loss of \$4.3m and a net loss of \$3.8m.

In 2Q02, the company continued to shift its business focus to the cellular backhauling market. More than 50% of the revenues in 2Q02 came from the cellular backhaul business. The new multi-year contract with Cellcom is already bearing fruits. So far, CRNT has 7 cellular wins under its belt and management indicates that they expect to add 3 new contracts by year-end. Management's confidence is growing as backlog is forming and visibility is improving.

Revenues will continue to grow about 25% per Q in the coming 2 quarters. Gross margins are improving (from 24.6% in 1Q02 to 29% in this Q) as revenues grow. The breakeven point, estimated at \$10m with 40% gross margins, is not expected before 2003 and we believe that given current market conditions it could be pushed off into 2004.

We feel CRNT's management is very attuned to market needs. R&D efforts are constantly aimed at preserving the competitive edge by introducing new desired features and products, e.g. built-in ADM and Encryptair.

CRNT's wins with Svenka, Sonofon and Cellcom are indicative of its technological superiority but do not guarantee revenue flow. Actual orders will come in massive levels only when carriers perceive that mobile data services are gaining ground. Our research indicates that carriers are reluctant to invest in deploying expensive large-scale GPRS services until they are certain that demand for these services is firm.

Many carriers are planing to launch the MMS services in 3Q-4Q02 with the introduction of new multimedia phones and new pricing structures. Subscriber reaction is still a mystery as carriers so far have been getting mixed signals from their subscribers. We are currently skeptical about the chances of MMS becoming as popular a service as SMS due to the high pricing schemes for both services and handsets that are currently offered by carriers. We believe carriers will be forced to subsidize handsets and be more aggressive in their initial pricing structures.

CRNT's cash position is firm with \$48m (\$2.15 per share) as of the end of 2Q. Management expects cash burn of approximately \$2.0-\$2.5m per Q. We estimate that by the time a BE point is achieved cash per share will decrease to around \$1.6 per share.

Valuation

Based on a 3-year DCF model we assess CRNT's fair value at \$37m. We use a capitalization rate of 15%.

Company Description

Ceragon develops, manufactures, and sells broadband fixed wireless (BFW) point-to-point solutions that enable communications service providers and enterprises to deliver cellular backhaul, internet access and integrated data, video, and voice transmission through ultra-high capacity broadband networks

Ceragon advanced solutions in terms of transmission speeds and efficiency. Ceragon's products support a wide range of frequencies (7 to 38 GHz) and interface with current and next-generation communications standards (ATM, SONET/SDH and IP/Fast Ethernet/GBE).

This document is intended for information purposes only. This document is not to be quoted in any other document, without the express written approval, in advance, of Poalim Capital Markets – Investment Bank Ltd (“PCM”). The information and figures appearing herein are based exclusively on freely available information at the time of writing. PCM have reasonable grounds to assume that the information is reliable, although there is no certainty - and no independent examination was carried out to ascertain - that the information is complete, up-to-date and accurate and it should not be relied upon as such. This document does not constitute verification of these data or of their completeness or reliability. The information contained in this document makes no claim as to encompass all the information necessary for a potential investor in considering an investment in the company, and does not replace independent judgment or the receipt of professional consulting. The corporation that is the subject of this paper and its securities may not be suitable for all types of investors. This document is based on assumptions and subjective estimates, among other factors. Any changes in the underlying infrastructure that served as a basis for these assumptions may serve to crucially alter the conclusions of this document. The opinions and conclusions outlined in this document are subject to change with no prior notice being provided to the holders of this document.

PCM, and/or related or affiliated companies, may on occasion possess holdings in securities or financial instruments associated with the corporation that is the subject of this paper. Furthermore, any of these entities may have business engagements with the corporation that is the subject of this paper, regarding the provision of investment banking services of any kind.

This document does in no way constitute an offer or solicitation to invest, buy, sell, or hold securities or financial instruments related to the corporation that is the subject of this paper.

This document was written and published in Israel.

© 2002 All rights reserved to Poalim Capital Markets – Investment Bank Ltd.