UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

For the Month of May, 2011

Commission file number 0-30070

AUDIOCODES LTD.
(Translation of registrant's name into English)

1 Hayarden Street • Airport City, Lod 70151• ISRAEL
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F √ Form 40-F __

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ____

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ____

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes __ No √

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): __

On May 3, 2011, AudioCodes Ltd. (the "Registrant") issued a press release announcing financial results for the first quarter of 2011. A copy of this press release is annexed hereto as Exhibit 1.

The following document is attached hereto and incorporated by reference herein:

Exhibit 1. Press Release, dated May 3, 2011, announcing financial results for the first quarter of 2011.

The information set forth in the second, third and sixth paragraphs of, and the condensed consolidated balance sheets, condensed consolidated statements of operations and condensed consolidated statement of cash flows contained in, the press release attached as Exhibit 1 to this Report on Form 6-K are hereby incorporated by reference into (i) the Registrant's Registration Statement on Form S-8, File No. 333-11894; (ii) the Registrant's Registration Statement on Form S-8, File No. 333-13268; (iii) the Registrant's Registration Statement on Form S-8, File No. 333-13378; (iv) the Registrant's Registration Statement on Form S-8, File No. 333-105473; (v) the Registrant's Registration Statement on Form S-8, File No. 333-144825; (vi) the Registrant's Registration Statement on Form S-8, File No. 333-144823; (vii) the Registrant's Registration Statement on Form S-8, File No. 333-160330; (viii) the Registrant's Registration Statement on Form S-8, File No. 333-170676; and (ix) the Registrant's Registration Statement on Form F-3, File No. 333-172268.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AUDIOCODES LTD.
(Registrant)

By: /s/ GUY AVIDAN
Guy Avidan
Chief Financial Officer

Dated: May 3, 2011

EXHIBIT INDEX

Exhibit No.	Description
1	Press Release, dated May 3, 2011, announcing financial results for the first quarter of 2011.

Exhibit 1

AudioCodes
Connecting Networks

PRESS RELEASE

Company Contacts		**IR Agency Contact**
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VP Finance & CFO	Director, Investor Relations	Grayling
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AudioCodes Reports First Quarter 2011 Results

Lod, Israel – May 3, 2011 – **AudioCodes Ltd. (NasdaqGS: AUDC)**, a leading provider of Voice over IP (VoIP) technologies and Voice Network products, today announced financial results for the first quarter of 2011, ended March 31, 2011.

Revenues for the first quarter of 2011 were $41.0 million compared to $40.5 million for the fourth quarter of 2010 and $34.8 million for the first quarter of 2010.

Net income in accordance with U.S. generally accepted accounting principles (GAAP) was $3.0 million, or $0.07 per diluted share, for the first quarter of 2011 compared to GAAP net income of $5.4 million, or $0.13 per diluted share, for the fourth quarter of 2010, and GAAP net income of $1.7 million, or $0.04 per diluted share, for the first quarter of 2010.

Non-GAAP net income for the first quarter of 2011 was $4.1 million, or $0.10 per diluted share, compared to non-GAAP net income of $4.5 million, or $0.11 per diluted share, for the fourth quarter of 2010, and non-GAAP net income of $2.5 million, or $0.06 per diluted share, for the first quarter of 2010.

Non-GAAP net income excludes (i) stock-based compensation expenses, (ii) amortization expenses related to intangible assets and (iii) for the fourth quarter of 2010, a non-cash deferred tax benefit. A reconciliation between net income on a GAAP basis and non-GAAP net income is provided in the tables that accompany the condensed consolidated financial statements contained in this press release.

Cash and cash equivalents, short-term deposits and short-term and long-term marketable securities were $62.0 million as of March 31, 2011, compared to $64.1 million as of December 31, 2010 and $54.7 million as of March 31, 2010.

"AudioCodes continued to deliver solid sequential and year-over-year revenue growth in the first quarter of 2011 driven by the rising global demand for converged VoIP and data networks solutions," stated Shabtai Adlersberg, Chairman of the Board, President and CEO of AudioCodes. "During the quarter we successfully expanded our partnership activities with leading enterprise and unified communications market leaders such as Microsoft, Alcatel-Lucent and a leading mobile phone market player. We extended our presence in the Enterprise Mobility VoIP market with the debut of our MobilityPLUS productivity suite which extends the Microsoft LYNC 2010 enterprise collaboration solution to enable anywhere, anytime productivity and collaboration with Alcatel-Lucent in the enterprise mid-size Session Border Controllers (E-SBCs) market."

"A favorable sales mix of higher margin offerings generated strong gross margins while higher operating expense was primarily attributable to the continued investment in our global sales and marketing functions. AudioCodes stands at the center of the unified communications connectivity and mobility market and we believe we can increasingly become the preferred voice expert partner in the industry. We believe that these first quarter 2011 developments, coupled with our product portfolio strengths and growing global sales reach, set a strong foundation for continued growth and profitability in 2011," concluded Mr. Adlersberg.

Conference Call & Web Cast Information

AudioCodes will conduct a conference call at 9:00 A.M., Eastern Time today to discuss the Company's first quarter 2011 operational and financial results. The conference call will be simultaneously Web cast. Investors are invited to listen to the call live via Web cast at the AudioCodes corporate website at www.audiocodes.com

About AudioCodes

AudioCodes Ltd. designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Cable, and Enterprise networks. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Gateways, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications. AudioCodes' underlying technology, VoIPerfectHD™, relies on AudioCodes' leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user communication experience in Voice communications. For more information on AudioCodes, visit http://www.audiocodes.com

Statements concerning AudioCodes' business outlook or future economic performance; product introductions and plans and objectives related thereto; and statements concerning assumptions made or expectations as to any future events, conditions, performance or other matters, are "forward-looking statements'' as that term is defined under U.S. Federal securities laws. Forward-looking statements are subject to various risks, uncertainties and other factors that could cause actual results to differ materially from those stated in such statements. These risks, uncertainties and factors include, but are not limited to: the effect of global economic conditions in general and conditions in AudioCodes' industry and target markets in particular; shifts in supply and demand; market acceptance of new products and continuing products' demand; the impact of competitive products and pricing on AudioCodes' and its customers' products and markets; timely product and technology development/upgrades and the ability to manage changes in market conditions as needed; possible disruptions from acquisitions; the integration of acquired companies' products and operations into AudioCodes' business; and other factors detailed in AudioCodes' filings with the Securities and Exchange Commission. AudioCodes assumes no obligation to update the information in this release.

Summary financial data follows

AUDIOCODES LTD. AND ITS SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
U.S. dollars in thousands

	March 31, 2011	December 31, 2010
	Unaudited	Audited
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 24,703	$ 50,311
Short-term deposits	12,802	13,825
Short-term marketable securities and accrued interest	342	-
Trade receivables, net	27,688	25,881
Other receivables and prepaid expenses	6,794	3,646
Deferred tax assets	2,287	2,287
Inventories	17,688	18,043
Total current assets	92,304	113,993
LONG-TERM INVESTMENTS:		
Long-term marketable securities	24,151	
Investments in companies	1,060	1,317
Deferred tax assets	2,261	2,261
Severance pay funds	15,672	15,039
Total long-term investments	43,144	18,617
PROPERTY AND EQUIPMENT, NET	3,691	3,703
GOODWILL, INTANGIBLE ASSETS, DEFERRED CHARGES AND OTHER, NET	37,020	37,405
Total assets	$ 176,159	$ 173,718
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Current maturities of long-term bank loans	$ 6,000	$ 6,000
Trade payables	13,069	13,519
Other payables and accrued expenses	20,030	24,168
Deferred revenues	7,085	3,769
Total current liabilities	46,184	47,456
LONG-TERM LIABILITIES:		
Accrued severance pay	16,553	15,821
Long-term bank loans	8,250	9,750
Senior convertible notes	353	353
Deferred revenues and other liabilities	920	1,158
Total long-term liabilities	26,076	27,082
Total equity	103,899	99,180
Total liabilities and equity	$ 176,159	$ 173,718

AUDIOCODES LTD. AND ITS SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
In thousands, except per share data

	Three months ended March 31, 2011	Three months ended March 31, 2010
	Unaudited	
Revenues	$41,044	$34,804
Cost of revenues	17,022	15,571
Gross profit	24,022	19,233
Operating expenses:		
Research and development, net	8,534	7,356
Selling and marketing	10,221	8,064
General and administrative	2,132	1,968
Total operating expenses	20,887	17,388
Operating income	3,135	1,845
Financial income (expenses), net	216	(79)
Income before taxes on income	3,351	1,766
Taxes on income, net	(65)	(66)
Equity in profit (losses) of affiliated companies	(257)	4
Net income	$ 3,029	$ 1,704
Net loss attributable to the non-controlling interest	-	91
Net income attributable to AudioCodes	$ 3,029	$ 1,795
Basic net earnings per share	$ 0.07	$ 0.04
Diluted net earnings per share	$ 0.07	$ 0.04
Weighted average number of shares used in computing basic net earnings per share	41,331	40,301
Weighted average number of shares used in computing diluted net earnings per share	42,284	40,731

AUDIOCODES LTD. AND ITS SUBSIDIARIES
NON-GAAP PROFORMA STATEMENTS OF OPERATIONS
In thousands, except per share data

	Three months ended March 31,	
	2011	**2010**
	Unaudited	
Revenues	$41,044	$34,804
Cost of revenues (1) (2)	16,686	15,243
Gross profit	24,358	19,561
Operating expenses:		
Research and development, net (1)	8,407	7,252
Selling and marketing (1) (2)	9,783	7,836
General and administrative (1)	1,918	1,865
Total operating expenses	20,108	16,953
Operating income	4,250	2,608
Financial income (expenses), net	216	(79)
Income before taxes on income	4,466	2,529
Taxes on income, net	(65)	(66)
Equity in profit (losses) of affiliated companies	(257)	4
Non-GAAP net income	$ 4,144	$ 2,467
Net loss attributable to the non-controlling interest	-	91
Net income attributable to AudioCodes	$ 4,144	$ 2,558
Non-GAAP diluted net earnings per share	$ 0.10	$ 0.06
Weighted average number of shares used in computing non-GAAP diluted net earnings per share (in thousands)	42,612	40,979

(1) Excluding stock-based compensation expenses related to options and restricted stock units granted to employees and others.
(2) Excluding amortization of intangible assets related to the acquisitions of Nuera, Netrake and CTI Squared.

Note: Non-GAAP measures should be considered in addition to, and not as a substitute for, the results prepared in accordance with GAAP. The Company believes that non-GAAP information is useful because it can enhance the understanding of its ongoing economic performance and therefore uses internally this non-GAAP information to evaluate and manage its operations. The Company has chosen to provide this information to investors to enable them to perform comparisons of operating results in a manner similar to how the Company analyzes its operating results and because many comparable companies report this type of information as well.

AUDIOCODES LTD. AND ITS SUBSIDIARIES

RECONCILIATION BETWEEN GAAP NET INCOME AND NON-GAAP NET INCOME

In thousands, except per share data

	Three months ended March 31,	
	2011	**2010**
	Unaudited	
GAAP Net income	$ 3,029	$ 1,704
GAAP Diluted earnings per share	$ 0.07	$ 0.04
Cost of revenues:		
Stock-based compensation (1)	27	20
Amortization expenses (2)	309	308
	336	328
Research and development, net:		
Stock-based compensation (1)	127	104
Selling and marketing:		
Stock-based compensation (1)	362	153
Amortization expenses (2)	76	75
	438	228
General and administrative:		
Stock-based compensation (1)	214	103
Non-GAAP Net income	$ 4,144	$ 2,467
Non-GAAP Diluted earnings per share	$ 0.10	$ 0.06

(1) Stock-based compensation expenses related to options and restricted stock units granted to employees and others.
(2) Amortization of intangible assets related to the acquisitions of Nuera, Netrake and CTI Squared.

Note: Non-GAAP measures should be considered in addition to, and not as a substitute for, the results prepared in accordance with GAAP. The Company believes that non-GAAP information is useful because it can enhance the understanding of its ongoing economic performance and therefore uses internally this non-GAAP information to evaluate and manage its operations. The Company has chosen to provide this information to investors to enable them to perform comparisons of operating results in a manner similar to how the Company analyzes its operating results and because many comparable companies report this type of information.

AUDIOCODES LTD. AND ITS SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

U.S. dollars in thousands

	Three months ended March 31,	
	2011	**2010**
	Unaudited	
Cash flows from operating activities:		
Net income	$ 3,029	$ 1,704
Adjustments required to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	922	1,033
Amortization of marketable securities premiums and accretion of discounts, net	87	-
Equity in losses (profits) of affiliated companies	257	(13)
Decrease in accrued severance pay, net	99	257
Stock-based compensation expenses	1,140	380
Increase in accrued interest on loans, marketable securities, bank deposits and structured notes	(178)	-
Increase in trade receivables, net	(1,807)	(2,664)
Increase in other receivables and prepaid expenses	(3,043)	(1,591)
Decrease (increase) in inventories	355	(971)
Increase (decrease) in trade payables	(450)	4,845
Increase in deferred revenues	3,382	1,233
Decrease in other payables and accrued Expenses and other liabilities	(4,164)	(955)
Net cash provided by (used in) operating activities	(371)	3,258
Cash flows from investing activities:		
Purchase of marketable securities	(24,402)	
Short-term bank deposits, net	1,023	(2,322)
Purchase of property and equipment	(525)	(329)
Net cash used in investing activities	(23,904)	(2,651)

AUDIOCODES LTD. AND ITS SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS (Cont.)

U.S. dollars in thousands

	Three months ended March 31,	
	2011	**2010**
	Unaudited	
Cash flows from financing activities:		
Repayment of loan from bank	(1,500)	(1,500)
Payment for acquisition of NSC non controlling interest	(278)	-
Proceeds from issuance of shares upon exercise of options and employee stock purchase plan	445	385
Net cash used in financing activities	(1,333)	(1,115)
Decrease in cash and cash equivalents	(25,608)	(508)
Cash and cash equivalents at the beginning of the period	50,311	38,969
Cash and cash equivalents at the end of the period	$ 24,703	$ 38,461