UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

(Mark One)

☑ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2004

OR

 TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ______ to _____

Commission File Number: 333-43447

Ingram Micro 401(k) Investment Savings Plan

(Full title of the plan and the address of the plan if different from that of the issuer named below)

Ingram Micro Inc. 1600 E. St. Andrew Place Santa Ana, CA 92705

(Name of issuer of the securities held pursuant to the plan and the address of its principal executive office)

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees have duly caused this annual report to be signed on its behalf by the undersigned, hereunto duly authorized.

INGRAM MICRO 401(k) INVESTMENT SAVINGS PLAN

By: /s/ Matthew Sauer

Name: Matthew Sauer Member of the Ingram Micro Benefits Administrative Committee

June 28, 2005

Financial Statements and Supplemental Schedule As of December 31, 2004 and 2003 and for the Year Ended December 31, 2004

INGRAM MICRO 401(k) INVESTMENT SAVINGS PLAN

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Note: Schedules other than that listed above have been omitted because they are not applicable or are not required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, as amended.

Report of Independent Registered Public Accounting Firm

To the Ingram Micro Inc. Benefits Administrative Committee

We have audited the accompanying statements of net assets available for plan benefits of the Ingram Micro 401(k) Investment Savings Plan (the Plan) as of December 31, 2004 and 2003, and the related statement of changes in net assets available for plan benefits for the year ended December 31, 2004. These financial statements and the supplemental schedule referred to below are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal controls over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for plan benefits of the Plan as of December 31, 2004 and 2003, and the changes in net assets available for plan benefits for the year ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America.

Our audit was performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2004 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

BDO Seidman, LLP Los Angeles, California June 24, 2005

Statements of Net Assets Available for Plan Benefits As of December 31, 2004 and 2003

	2004	2003
Investments, at fair value	\$139,813,507	\$122,021,821
Plan receivables:		
Employer contributions	115	787
Participant contributions	222	2,570
Total receivables	337	3,357
Net assets available for plan benefits	\$139,813,844	\$122,025,178
	ing notes to financial statements	

See accompanying notes to financial statements

Statement of Changes in Net Assets Available for Plan Benefits For the Year Ended December 31, 2004

Additions to net assets attributed to:	
Contributions:	
Employer contributions	\$ 4,266,822
Participant contributions	10,231,144
Participant rollovers	226,261
Total contributions	14,724,227
Investment income:	
Dividends	2,093,188
Participant loan interest	262,627
Net appreciation in fair value of registered investment companies	8,294,110
Net appreciation in fair value of common stock	2,870,478
Net appreciation in fair value of common collective trusts	1,636,038
Total investment income	15,156,441
Total additions	29,880,668
Deductions from net assets attributed to:	
Benefits paid to participants	12,067,131
Administrative expenses	24,871
Total deductions	12,092,002
Net increase	17,788,666
Net assets available for plan benefits — beginning of year	122,025,178
Net assets available for plan benefits — end of year	\$139,813,844
See accompanying notes to financial statements	

See accompanying notes to financial statements

Notes to Financial Statements

NOTE 1 — DESCRIPTION OF PLAN

The following description of the Ingram Micro 401(k) Investment Savings Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General - The Plan is a defined contribution plan covering substantially all of the United States employees of Ingram Micro Inc., (the Company) who have completed three months of eligibility service. The Plan is designed to comply with Section 401(a) of the Internal Revenue Code as a defined contribution plan and its incorporated Trust is intended to qualify as a tax-exempt trust under Section 501(a) of the Internal Revenue Code. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974. Effective January 1, 2000, the Plan adopted various Internal Revenue Service (IRS) mandated and optional provisions of the Economic Growth and Tax Relief Reconciliation Act (EGTRRA). The Plan is administered by the Company and advised by the Benefits Administrative Committee appointed by the Human Resources Committee of the Company's Board of Directors. The assets of the Plan are held and invested by Putnam Fiduciary Trust Company (Putnam or the Trustee), acting as trustee, custodian and recordkeeper.

Contributions - Contributions are made to the Plan by means of a salary deferral agreement under which the participant is entitled to defer pre-tax and aftertax compensation up to the lesser of 15 percent of eligible compensation for non highly compensated participants, and 5 percent for highly compensated participants, or a fixed amount determined annually by the IRS. The Company matches from 50 percent to 100 percent of participant contributions up to the first 5 percent of eligible compensation depending upon the participant's years of service. The Benefits Administrative Committee may change the Company's matching contribution in future years. For the year ended December 31, 2004, the Company made a matching contribution of \$4,266,822.

Participant Accounts - Each participant account is credited with the participant's contribution and an allocation of (a) the Company's matching contribution and (b) Plan net earnings which include an allocation of certain administrative expenses. Allocations of matching contributions are based on participant contributions, as defined. Allocations of Plan net earnings and administrative expenses, when applicable, are based on participant account balances. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested interest in their account balance.

Notes to Financial Statements (Continued)

NOTE 1 — DESCRIPTION OF PLAN (Continued)

Participant Loans - Participants may borrow 50 percent of their vested account balance up to \$50,000 at an interest rate of prime rate plus 1 percent with payment of principal and interest made through payroll deductions. A general loan will have a term of five years or less, and up to 15 years will be allowed for a primary residence loan. The loans are secured by the balance in the participant's account. Participant loans are stated at the unpaid principal value, which is estimated to approximate fair value and bear interest at rates that range from 5.00 percent to 10.50 percent.

Management determines the collectibility of participant loans on a periodic basis. This determination is made based on the terms of the Plan document and the related Plan policies and procedures. Those participant loans that are deemed to be uncollectible are written off and included as benefits paid to participants in the financial statements and the Form 5500 for financial reporting purposes in the year the determination is made.

Eligibility - Employees other than those that are employed under a collective bargaining agreement, leased, expatriate employees covered by a nonqualified plan provided such expatriate employees have no United States income source, or employed on a temporary basis are eligible to enter the Plan following the completion of the third month of employment with the Company.

Vesting - Participants are vested in their contributions plus net earnings, immediately. Vesting in the Company's matching contribution is based on years of service. A year of vesting service is defined as any period in which a participant completes 365 days of service. The following schedule describes the vesting percentages for participants.

Years of Service	Vested Benefit Percentage
1 year but less than 2	20%
2 years but less than 3	40%
3 years but less than 4	60%
4 years but less than 5	80%
5 years or more	100%

Payment of Benefits - Upon termination of service before the normal retirement age of 65, a participant with benefits of over \$5,000 may elect to defer distribution until normal retirement age or receive a lump sum payment equal to the vested share of the participant's account.

Upon termination of service at the normal retirement age of 65, a participant may elect to receive a lump sum payment equal to the vested value of his or her account. Benefits may also be accessed in the event of disability or death.

Notes to Financial Statements (Continued)

NOTE 1 — DESCRIPTION OF PLAN (Continued)

Payment of Benefits (Continued) - The Plan allows participants to make early withdrawals for certain financial hardships. The Plan also allows in-service withdrawals by participants after they reach age 59¹/₂. Participants taking in-service withdrawals will be required to pay all applicable taxes on the withdrawals but will not be subject to penalty taxes for early withdrawals.

Forfeitures - Forfeitures of nonvested Plan assets are used to reduce the Company's matching contributions and costs of administering the Plan. Total forfeited nonvested accounts were \$136,032 and \$153,997 at December 31, 2004 and 2003, respectively, and will be used to reduce future employer contributions. Employer contributions were reduced by forfeited nonvested accounts totaling \$208,920 for the year ended December 31, 2004.

Administrative Expenses - The Plan Sponsor or the Plan may pay the cost of administering the plan, including fees and expenses of the Trustee and the record keeper. For the year ended December 31, 2004 all administrative expenses, other than loan fees paid by the Plan participants, were paid by the Company and were not material to the financial statements taken as a whole.

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The financial statements of the Plan are prepared under the accrual basis of accounting. Administrative and other expenses are recorded as incurred. Benefits are reported when paid.

Basis of Presentation - The financial statements have been prepared in compliance with the Department of Labor's Rules and Regulations for reporting and disclosure under ERISA.

Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could materially differ from those estimates.

Risks and Uncertainties – The Plan's investment in Ingram Micro Inc. common stock amounted to \$11,736,775 and \$10,520,499 as of December 31, 2004 and 2003, respectively. Such investments represented 8.39% and 8.62% of the Plan's total net assets available for Plan benefits as of December 31, 2004 and 2003, respectively. For risks and uncertainties regarding Ingram Micro Inc., participants should refer to the January 1, 2005, Form 10-K and the April 3, 2004, July 3, 2004, October 2, 2004, and April 2, 2005 Forms 10-Q of Ingram Micro Inc.

Notes to Financial Statements (Continued)

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Risks and Uncertainties (Continued) — The Plan provides for various funds that hold investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is reasonably possible that changes in risk in the near term could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Plan Benefits and the Statement of Changes in Net Assets Available for Plan Benefits.

The Plan invests in various investment options that invest in securities of foreign companies, which involve special risks and considerations not typically associated with investing in U.S. companies. These risks include devaluation of currencies, less reliable information about issuers, different securities transaction clearance and settlement practices, and possible adverse political and economic developments. Moreover, securities of many foreign companies and their markets may be less liquid and their prices more volatile than securities of comparable U.S. companies.

Investment Valuation and Income Recognition – The Plan's investments are stated at fair value or estimated fair value. Investments in registered investment companies are valued at quoted market prices. Investments in the common collective trusts are valued at net asset value of shares held by the Plan at year end. The Company's common stock is valued at quoted market price. Participant loans are valued at cost, which approximates fair value. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Net Appreciation (Depreciation) in Fair Value of Investments – Realized and unrealized appreciation (depreciation) in the fair value of investments is based on the difference between the fair value of the assets at the beginning of the year, or at the time of purchase for assets purchased during the year, and the related fair value on the day investments are sold with respect to realized appreciation (depreciation), or on the last day of the year for unrealized appreciation (depreciation).

NOTE 3 — INVESTMENT ELECTIONS

The Trustee invests contributions in accordance with participant instructions. Participants may elect changes to their investment mix effective each business day. Participants may effect changes to their deferral percentages and deferral investment elections coincident with their pay frequency.

Notes to Financial Statements (Continued)

NOTE 4 — INVESTMENTS

The following table presents the fair value of investments. Investments greater than 5 percent of the Plan's net assets as of December 31, 2004 and 2003, are separately identified as follows:

			2004	 2003
nvestments Valued at Fair Value as Deter	rmined by Quoted Market Prices:			
Registered Investment Companies:				
idelity Management Trust Co.	Fidelity Spartan International Index Fund, 389,687 and 349,602 units, respectively	\$	12,477,792	\$ 9,530,145
Putnam Fiduciary Trust Co.	The Putnam Fund for Growth and Income, 1,388,838 and 1,455,799 units, respectively		26,943,455	25,767,649
Putnam Fiduciary Trust Co.	Putnam New Opportunities Fund, 514,386 and 541,486 units, respectively		21,362,436	20,424,870
Dther – Registered Investment Companies less than 5%)			29,667,109	 20,449,441
Total Registered Investment Companies		<u> </u>	90,450,792	 76,172,105
Common Stock:				
ngram Micro Inc.	Ingram Micro Inc. Stock,			
	564,268 and 661,667 units, respectively		11,736,775	 10,520,499
		\$	102,187,567	\$ 86,692,604
nvestments Valued at Estimated Fair Val Common Collective Trusts:	ue:			
Sommon Concerve music.				
Putnam Fiduciary Trust Co.	Putnam S&P 500 Index Fund, 551,634 and 548,016 units, respectively	\$	16,951,699	\$ 15,223,872
Putnam Fiduciary Trust Co.	Putnam Stable Value Fund, 16,483,944 and 16,373,274 units, respectively		16,483,944	 16,373,274
otal Common Collective Trusts			33,435,643	 31,597,146
Other — Participant loans (less than 5%)			4,190,297	 3,732,071
			37,625,940	 35,329,217
Total Investments		\$	139,813,507	\$ 122,021,821
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Notes to Financial Statements (Continued)

NOTE 4 – INVESTMENTS (Continued)

During 2004, the Plan's investments (including gains and losses on investments bought and sold as well as held during the year) appreciated in value by \$12,800,626 as follows:

Net Change in Fair Value:

Investments Valued at Fair Value as Determined by Quoted Market Prices:	
Registered Investment Companies	\$ 8,294,110
Ingram Micro Inc. Stock	2,870,478
	11,164,588
Investments Valued at Estimated Fair Value:	
Common Collective Trusts	1,636,038
Net Appreciation in Fair Value	\$12,800,626

NOTE 5 — EMPLOYER STOCK

Participants may not invest more than 50 percent of their contributions into Ingram Micro Inc. Stock and are not permitted to transfer funds from the Plan's other investment options into Ingram Micro Inc. Stock. Participants may, however, transfer funds out of Ingram Micro Inc. Stock into any of the Plan's other funds.

NOTE 6 — PARTY-IN-INTEREST

Certain Plan investments are managed by Putnam. Putnam is the trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. Fees paid to Putnam for the year ended December 31, 2004 were not material.

NOTE 7 — PLAN TERMINATION

Although the Company has not expressed any intent to do so, it has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, the net assets of the Plan will be allocated as prescribed by ERISA and its related regulations, so that each participant receives 100 percent of his or her account balance as of the date of the termination.

Notes to Financial Statements (Continued)

NOTE 8 — TAX STATUS

The trust established under the Plan to hold the Plan's assets is designed to qualify pursuant to Section 501(a) of the Internal Revenue Code, and, accordingly, the trust's net investment income is exempt from income taxes. The Plan has received a favorable determination letter of its tax-exempt status from the IRS by a letter dated November 12, 1998. Although the Plan has been amended since receiving the determination letter, the Plan Administrator and the Plan's counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the Internal Revenue Code.

The Plan is undergoing an audit by the IRS for the Plan years ended December 31, 2001, 2002, and 2003. The IRS audit has not been completed as of the date of the report of the Independent Registered Public Accounting Firm. Management has indicated that, based on the fact that there has been no demand or assessment by the IRS, that there have been no matters of significance raised with respect to the Plan. Management, in consultation with legal counsel, does not believe that as of the date of the report of the Independent Registered Public Accounting Firm the IRS audit will have a material adverse affect on the Plan.

NOTE 9 - SUBSEQUENT EVENTS

Effective April 2005, the trustee changed from Putnam Fiduciary Trust Company to Fidelity Management Trust Company.

Effective April 1, 2005, the Plan was amended. Under the fourth amendment, the definition of eligible compensation was changed to include amounts paid under the Long-Term Executive Cash Incentive Award Program and to exclude voluntary or involuntary cashouts under the Paid Time Off (PTO) Program, and to limit eligible compensation to \$210,000 in accordance with IRS Code Section 401(a)(17)(B). Also, under the amendment, the maximum employee contribution for non-highly compensated employees was increased to 50 percent of eligible compensation, and a provision for catch-up contributions was established. Any eligible new hires are able to participate in the Plan on their first day of employment. Finally, the employer matching contribution was changed to 50 percent of the employees' first 5 percent of contributions for all employees, regardless of years of service.

Schedule I: Form 5500 – Schedule H — Part IV – Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2004 EIN: 62-1644402 Plan Number: 002

		Description of Investment Including Maturity Date,		
	Identity of Issuer, Borrower, Lessor, or Similar Party	Rate of interest, Collateral, Par or Maturity Value	Cost**	Current Value
P	Registered Investment Companies			
V	<i>V</i> anguard	Vanguard Small Cap Growth, 184,524 units		\$ 2,797,382
A	Artisan Funds	Artisan Small Cap Value, 293,275 units		5,164,573
A	Artisan Funds	Artisan Mid Cap Fund, 170,952 units		5,053,337
A	American Funds Group	Growth Fund of America, 165,971 units		4,544,275
Р	Pacific Investment Management Company	PIMCO Total Return Fund, 479,074 units		5,111,717
* P	Putnam Fiduciary Trust Company	The Putnam Fund for Growth and Income, 1,388,838 units		26,943,455
F	Fidelity Management Trust Company	Fidelity Spartan International Index Fund, 389,687 units		12,477,792
* P	Putnam Fiduciary Trust Company	Putnam New Opportunities Fund, 514,386 units		21,362,436
* P	Putnam Fiduciary Trust Company	Putnam Asset Allocation - Growth Portfolio, 219,248 units		2,435,850
* P	Putnam Fiduciary Trust Company	Putnam Asset Allocation - Balanced Portfolio, 353,003 units		3,745,361
* P	Putnam Fiduciary Trust Company	Putnam Asset Allocation - Conservative Portfolio, 89,023 units		814,561
* P	Putnam Fiduciary Trust Company	Pending Account		53
Г	Fotal Registered Investment Companies			\$ <u>90,450,792</u>
C	Common Collective Trusts			
* P	Putnam Fiduciary Trust Company	Putnam S&P 500 Index Fund, 551,634 units		\$ 16,951,699
* P	Putnam Fiduciary Trust Company	Putnam Stable Value Fund, 16,483,944 units		16,483,944
Т	Fotal Common Collective Trusts			\$ <u>33,435,643</u>
C	Common Stock			
* Iı	ngram Micro Inc.	Ingram Micro Inc. Stock, 564,268 units		\$ 11,736,775
* P	Participant Loans	Loans with maturities varying from 1 to 5 years (or up to 15 years for primary residence loans) and interest rates of 5.00% to 10.50%		¢ 4 100 207
	FOTAL INVESTMENTS	Tates 01 5.00% to 10.50%		\$ <u>4,190,297</u> \$139,813,507

^{*} These investments represent parties-in-interest to the Plan.

** Cost information is not required under ERISA as the investment options are participant directed.

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8, as listed below, of Ingram Micro Inc., of our report dated June 24, 2005, of the Ingram Micro 401(k) Investment Savings Plan:

Registration Form Form S-8 File No. 333-43447

Effective Date December 30, 1997

BDO Seidman, LLP Los Angeles, California June 24, 2005