

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 11-K

**FOR ANNUAL REPORTS OF EMPLOYEE STOCK
PURCHASE, SAVINGS AND SIMILAR PLANS
PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

(Mark one)

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

For the fiscal year ended December 31, 2017

OR

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

For the transition period from _____ to _____

Commission File Number 000-00121

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

**KULICKE AND SOFFA INDUSTRIES, INC. INCENTIVE SAVINGS PLAN
1005 Virginia Drive
Fort Washington, PA 19034**

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Kulicke and Soffa Industries, Inc.
23A Serangoon North Avenue 5, #01-01 K&S Corporate Headquarters, Singapore 554369
(Address of principal executive offices and Zip Code)

KULICKE AND SOFFA INDUSTRIES, INC. INCENTIVE SAVINGS PLAN
Financial Statements and Supplemental Schedule
For the years ended December 31, 2017 and 2016

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Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of
Kulicke and Soffa Industries, Inc. Incentive Savings Plan

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits (modified cash basis) of the Kulicke and Soffa Industries, Inc. Incentive Savings Plan (the "Plan") as of December 31, 2017 and 2016, the related statements of changes in net assets available for benefits (modified cash basis) for the years then ended, and the related notes (collectively, the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the years ended December 31, 2017 and 2016, in conformity with the modified cash basis of accounting described in Note 2.

Basis for Opinion

These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on the Plan's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting 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.

Our audits included performing procedures to assess the risk of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by the Plan's management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 2, these financial statements and supplemental schedule were prepared on a modified cash basis of accounting, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

Supplemental Information

The supplemental information in the accompanying Schedule H, Line 4i - schedule of assets (held at end of year) (modified cash basis) as of December 31, 2017, has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ Kronick Kalada Berdy & Co., P.C.
We have served as the Plan's auditor since 2005
Kingston, Pennsylvania
June 26, 2018

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Statements of Net Assets Available for Benefits (Modified Cash Basis)
December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Assets:		
Investments, at fair value	\$ 103,345,717	\$ 81,542,514
Separate investment account at contract value	6,498,032	6,096,677
Total investments	109,843,749	87,639,191
Receivables:		
Notes receivable from participants	695,399	404,138
Net assets available for benefits	<u>\$ 110,539,148</u>	<u>\$ 88,043,329</u>

The accompanying notes are an integral part of these financial statements.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Statements of Changes in Net Assets Available for Benefits (Modified Cash Basis)
For the years ended December 31, 2017 and 2016

	2017	2016
ADDITIONS:		
Investment income:		
Interest and dividends	\$ 2,073,701	\$ 1,422,494
Net appreciation on fair value of investments	16,029,066	4,312,956
	<u>18,102,768</u>	<u>5,735,450</u>
Contributions:		
Employee	3,366,839	2,733,466
Employer cash	1,736,885	1,360,414
Rollover	22,549	26,847
	<u>5,126,273</u>	<u>4,120,727</u>
Asset transfers in from Assembleon America Inc. 401(K) Plan	2,978,348	—
Total additions	<u>26,207,389</u>	<u>9,856,177</u>
DEDUCTIONS:		
Benefit payments	3,560,506	5,011,276
Corrective Distribution	8,860	—
Administrative and other fees	142,204	121,329
Total deductions	<u>3,711,570</u>	<u>5,132,605</u>
NET INCREASE IN NET ASSETS AVAILABLE FOR BENEFITS	22,495,819	4,723,572
Net assets available for benefits:		
Beginning of year	88,043,329	83,319,757
End of year	<u>\$ 110,539,148</u>	<u>\$ 88,043,329</u>

The accompanying notes are an integral part of these financial statements.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Notes to Financial Statements (Modified Cash Basis)
December 31, 2017 and 2016 (continued)

1. DESCRIPTION OF THE PLAN

The following description of the Kulicke and Soffa Industries, Inc. (the “Company”) Incentive Savings Plan (the “Plan”) provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan established on January 1, 1987 and has been periodically amended and restated with the latest restatement on January 1, 2017. Full-time employees that are at least 18 years old are eligible to participate in the Plan. Part-time or Temporary Employees that are at least 18 years old are eligible to participate after 12 months of service with the Company. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

Contributions

The Plan allows for employee contributions and matching Company contributions in varying percentages. The Plan allows participants to make before tax and after tax Roth contributions of up to 85% of their compensation subject to Internal Revenue Service (“IRS”) limitations. In addition, participants who have attained the age of 50 before the end of the Plan year are eligible to make “catch-up” contributions. Participants may also contribute amounts representing distributions from other qualified plans. Participants direct the investment of their contributions into various investment options offered by the Plan.

The Company matches contributions of 100% of the employee contribution up to 4% of eligible compensation each payroll period. If the employee has 15 years or more of vesting service prior to January 1, 2011, the Company matches contributions of 100% of the employee contribution up to 6% of eligible compensation each payroll period. Eligible “catch-up” contributions made by participants who have attained the age of 50 before the end of the Plan year are not matched.

Participant Accounts

Each participant's account is credited with the participant's contribution, allocation of the Company's contribution and Plan earnings, and charged with an allocation of Plan losses, if any, and administrative and other fees paid by the Plan. Allocations are based upon participant earnings, account balances, or specific participant transactions, as defined. Participants are entitled to their vested account.

Vesting

Participants are vested immediately in their contributions plus actual earnings. Vesting in the Company's matching contribution to the participant's account is based upon years of service. The participants are 50% vested after one year of service and 100% vested after two years of service. If a participant satisfies retirement requirements, dies, or becomes disabled while actively working for the Company, the participant's account becomes 100% vested.

Payment of Benefits

Upon termination of service, a participant or beneficiary is entitled to receive a lump-sum amount equal to the vested value of his or her account. Distributions are subject to the applicable provisions of the Plan agreement.

Expenses

Certain expenses incurred maintaining the Plan are paid directly by the Company and are excluded from these financial statements. Investment-related expenses are included in net appreciation or depreciation of fair value of investments.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Notes to Financial Statements (Modified Cash Basis)
December 31, 2017 and 2016 (continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The accompanying financial statements are prepared on the modified cash basis of accounting, which is a comprehensive basis of accounting other than U.S. generally accepted accounting principles ("GAAP"), and is an acceptable method of reporting under Department of Labor Regulations. The modified cash basis of accounting utilizes the cash basis of accounting while carrying investments at fair value and recording investment income on the accrual basis.

Use of Estimates

The preparation of financial statements requires the Plan's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Payment of Benefits

Benefits are recorded when paid by the Plan.

Valuation and Description of Investments

Mutual funds and the Company's common stock are stated at fair value based on quoted market prices. Funds are also held in self directed brokerage accounts, at the direction of the participant, which consist of mutual funds, common stock and money market accounts which are stated at fair value based on quoted market prices. The Company also offers participants a separate investment account, the MassMutual Diversified SAGIC II.

The MassMutual Diversified SAGIC II (also known as the MassMutual Diversified Bond Separate Account Guaranteed Interest Contract II), is a market value separate investment account ("SIA") of MassMutual managed by Barings LLC ("Barings") and offered under a MassMutual group annuity contract that provides a MassMutual general account guarantee to pay a stated rate of return. This guaranteed rate of return smooths out the daily fluctuations in the bond market. The SIA offers these stable value features: guarantee of principal backed by MassMutual and a fixed crediting rate periodically reset from the SIA's investment experience and plan level cash flow and fees; full liquidity at book value for participant-directed benefit payments and transfers to "non-competing investments" (defined as certain fixed-income investments and self-directed brokerage accounts); smooths impact of market fluctuations on participant account balance through fixed crediting rate process; An additional level of security - assets in the SIA are insulated from the general obligations of MassMutual. The SIA invests in a diversified portfolio of primarily investment-grade fixed income securities (with a potential of up to 25% of assets in below investment-grade debt securities) including but not limited to corporate, U.S. government and agency, foreign issuer and private placement bonds, and mortgage-backed and other asset-backed securities. The credit quality of the portfolio has historically averaged "A," and the average credit quality of the portfolio will not be less than A-/A3. The crediting rate is determined for each individual plan contract based on anticipated market returns in the SIA and the book value account and market value account differential, in addition to any plan-specific contract charges. All bona-fide participant-initiated withdrawals, including benefit payments, loans and transfers to other non-competing investment options, are paid at book value. Transfers to competing fixed income investments are not allowed. Employer-initiated events, such as layoffs, sale of a business unit, or company merger are considered market value events and are subject to contract discontinuance provisions. The SAGIC crediting rate was 3.93% for the year ended December 31, 2017.

Contract value, as reported to the Plan by the fund managers, represents contributions made under the contracts, plus earnings, less participant withdrawals and administrative expenses.

Certain events limit the ability of the Plan to transact at contract value with the issuers. Such events include the following: (1) amendments to the Plan documents (including complete or partial plan termination or merger with another plan), (2) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan sponsor or other events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan, or (4) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The Plan administrator does not believe that the occurrence of any such value event that would limit the Plan's ability to transact at contract value with participants is probable.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Notes to Financial Statements (Modified Cash Basis)
December 31, 2017 and 2016 (continued)

Contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan.

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 or depreciation in fair value of investments includes the change in the fair value of assets from one period to the next and realized gains and losses.

The preceding methods described may produce a value calculation that may not be indicative of net realizable value or reflective of future values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the value of certain financial instruments could result in a different fair value measurement at the reporting date.

Subsequent Events

The Plan has evaluated the effects of events that have occurred subsequent to December 31, 2017, through the filing date of this Form 11-K and have identified no subsequent events.

3. INVESTMENTS

In accordance with the accounting guidance for Accounting Standards Codification (“ASC”) 820, *Fair Value Measurements* (“ASC 820”), except for investments carried at contract value, the Plan values the financial assets based on market-based measurements at the measurement date determined by a fair value hierarchy. The fair value measurements guidance emphasizes that fair value is a market-based measurement, not an entity-specific measurement. The hierarchy distinguishes between assumptions based on market data obtained from independent sources and those based on an entity's own assumptions and prioritizes the inputs to fair value measurement into three levels:

Basis of Fair Value Measurement

Level 1	Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
Level 2	Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, excluding those included in Level 1, either directly or indirectly;
Level 3	Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Notes to Financial Statements (Modified Cash Basis)
December 31, 2017 and 2016 (continued)

The following tables reflect the Plan's investment assets at fair value, by level within the fair value hierarchy, as of December 31, 2017 and 2016:

Fair Value Of Investments as of December 31, 2017				
	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 94,990,224	\$ —	\$ —	\$ 94,990,224
Kulicke and Soffa Industries, Inc. common stock	4,882,860	—	—	4,882,860
Self directed brokerage accounts	3,472,633	—	—	3,472,633
Total investment assets at fair value	\$ 103,345,717	\$ —	\$ —	\$ 103,345,717

Fair Value Of Investments as of December 31, 2016				
	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 75,091,363	\$ —	\$ —	\$ 75,091,363
Kulicke and Soffa Industries, Inc. common stock	3,668,193	—	—	3,668,193
Self directed brokerage accounts	2,782,958	—	—	2,782,958
Total investment assets at fair value	\$ 81,542,514	\$ —	\$ —	\$ 81,542,514

4. NOTES RECEIVABLE

Under the terms of the Plan, participants may borrow from their accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balance. Borrowings are secured by the balance in the participant's vested account and bear interest at rates commensurate with prevailing market rates for similar loans. Participants may only have one loan outstanding at any time. Principal and interest is repaid ratably through payroll deductions. Participants pay a \$50 loan initiation fee for each borrowing.

Notes receivable are measured at their unpaid principal balances plus any accrued but unpaid interest. Delinquent loans are reclassified as distributions based upon terms of the Plan document.

5. PLAN TERMINATION

Although it has not expressed any intent to do so, the Company 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, participants would become 100% vested in their accounts.

6. TAX STATUS

The IRS has determined and informed the Company by a letter dated March 31, 2014, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code ("IRC"). The Plan administrator believes the Plan is currently being operated in compliance with the applicable requirements of the IRC. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2014.

7. FORFEITURES

Employer contributions forfeited remain in the Plan and are available to offset future employer contributions or to pay Plan expenses. As of December 31, 2017 and 2016, forfeited non-vested accounts totaled \$260,154 and \$231,369, respectively. For the years ended December 31, 2017 and 2016, \$48,000 and \$50,923, respectively, was used from the forfeiture account to pay Plan expenses.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
Notes to Financial Statements (Modified Cash Basis)
December 31, 2017 and 2016 (continued)

8. RELATED PARTIES

Certain Plan assets are managed by Vanguard Fiduciary Trust Co. as the trustee of the Plan. Prior to January 2, 2011, the Plan sponsor issued the shares of the Company's common stock. Therefore, transactions in these investments qualify as party-in-interest transactions.

9. RISKS AND UNCERTAINTIES

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the future and that such changes could materially affect participants' account balances and the amounts reported in the statement of net assets available for benefits.

Kulicke and Soffa Industries, Inc. Incentive Savings Plan
EIN 23-1498399 Plan 002
Schedule H, Line 4i – Schedule of Assets (Held at End of Year) (Modified Cash Basis)
As of December 31, 2017

Description of Investment	Current Value	% Of Assets
* Vanguard Institutional Index Fund	\$ 16,383,851	14.82%
T. Rowe Price Institutional Large Cap Core Growth Fund	15,918,040	14.40%
* Vanguard Institutional Target Retirement 2020 Fund	8,905,188	8.06%
* Vanguard Total Bond Market Index Fund Admiral Shares	7,552,809	6.83%
** MassMutual Diversified SAGIC II	6,498,032	5.88%
Metropolitan West Total Return Bond Fund; P Class	5,879,752	5.32%
* Vanguard Institutional Target Retirement 2030 Fund	5,233,507	4.73%
* Kulicke & Soffa Stock Fund	4,882,860	4.42%
* Vanguard Developed Markets Index Fund Admiral Shares	4,796,262	4.34%
* Vanguard Small-Cap Index Fund Admiral Shares	4,666,244	4.22%
* Vanguard Mid-Cap Index Fund Admiral Shares	4,520,659	4.09%
American Funds EuroPacific Growth Fund; Class R-6	3,865,400	3.50%
* Vanguard brokerage option	3,472,633	3.14%
* Vanguard Institutional Target Retirement 2040 Fund	3,450,924	3.12%
Principal MidCap Fund; Institutional Class	2,970,685	2.69%
JPMorgan Equity Income Fund; Class R6	2,502,737	2.27%
* Vanguard Institutional Target Retirement 2050 Fund	2,147,677	1.94%
American Beacon Mid Cap Value Fund; Institutional Class	2,093,683	1.89%
* Vanguard Institutional Target Retirement 2015 Fund	1,013,734	0.92%
American Funds New Perspective Fund; Class R-6	931,884	0.84%
Invesco Small Cap Value Fund; Class Y	718,399	0.65%
* Vanguard Institutional Target Retirement Income Fund	508,340	0.46%
T. Rowe Price Diversified Small Cap Growth Fund; Investor Class	410,665	0.37%
Western Asset Inflation Indexed Plus Bond Fund; Class IS	302,048	0.27%
* Vanguard Institutional Target Retirement 2060 Fund	120,976	0.11%
* Vanguard Prime Money Market Fund	96,760	0.09%
* Notes receivable from participants,, interest rates from (3.25% to 4.25%), maturity dates vary through 2032, secured by account balances	695,399	0.63%
	<u>\$ 110,539,148</u>	<u>100%</u>

* A party-in-interest as defined by ERISA

** At contract value

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan's Administrator has duly caused this annual report to be signed on its behalf by the undersigned, hereunto duly authorized.

KULICKE and SOFFA INDUSTRIES, INC. INCENTIVE SAVINGS PLAN

Date: June 26, 2018

By: /s/ Kerri Brechbiel
Kerri Brechbiel
Chairman, Plan Administrator Committee
Kulicke and Soffa Industries, Inc.

INDEX TO EXHIBITS

Exhibit Number

23.1

Description

[Consent of Independent Registered Public Accounting Firm](#)

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (333-69441) of Kulicke and Soffa Industries, Inc. of our report dated June 26, 2018 relating to the financial statements and supplemental schedule of the Kulicke and Soffa Industries, Inc. Incentive Savings Plan which appear in this Form 11-K for the year ended December 31, 2017.

/s/ Kronick Kalada Berdy & Co., P.C.

Kingston, Pennsylvania
June 26, 2018