

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q/A

AMENDMENT NO. 1

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 1995

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 0 - 18032

LATTICE SEMICONDUCTOR CORPORATION

(Exact name of Registrant as specified in its charter)

STATE OF DELAWARE 93-0835214

(State or other jurisdiction (I.R.S. Employer
of incorporation or organization) Identification No.)

5555 N.E. MOORE COURT, HILLSBORO, OREGON 97124-6421

(Address of principal executive offices) (Zip Code)

(503) 681-0118

(Registrant's telephone number, including area code)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

At September 30, 1995 there were 19,502,914 shares of the Registrant's common stock, \$.01 par value, outstanding.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

REVENUE

Revenue was \$48.6 million in the second quarter of fiscal 1996, an increase of 41% over the second quarter of fiscal 1995. Revenue for the six months ended September 30, 1995 was \$93.6 million as compared to \$67.5 million for the first six months of 1995. Substantially all of the Company's revenue is derived from sales of programmable logic devices (PLDs). The majority of the Company's revenue for the periods presented was derived from sales of GAL-Registered Trademark- (Generic Array Logic) products, which address the low-density segment of the CMOS programmable logic market. The majority of the Company's revenue growth for the periods presented resulted from the sales of new products, primarily in the high-density segment of the PLD market. The Company entered the high-density segment of the PLD market in fiscal 1993 with its pLSI-Registered Trademark- and ispLSI-Registered Trademark- product families.

Revenue from international sales increased as a percentage of total revenue in the second fiscal 1996 quarter compared to the second fiscal 1995 quarter, from 45 percent to 49 percent, and increased from 44 percent to 49 percent between the two six-month periods. The Company expects export sales to continue to represent a significant portion of revenue.

Overall average selling prices, while remaining relatively constant between the 1995 and 1996 six-month fiscal periods, increased slightly in the fiscal 1996 second quarter as compared to the same fiscal 1995 quarter. This was due to an overall stronger market for the Company's products and a higher proportion of high-density products included in revenue. Although selling prices of mature products generally decline over time, this decline is at times offset by higher selling prices of new products. The Company's ability to maintain its recent trend of revenue growth and market penetration is in large part dependent on the continued development, introduction and market acceptance of new products.

GROSS MARGIN

The Company's gross margin as a percentage of revenue was 58.5% in the second quarter of fiscal 1996 as compared to 59.5% for the same quarter of fiscal 1995. For the 1996 six-month period, the gross margin was 58.4%, down from 59.4% in the previous year. These decreases in gross margin percentage were primarily due to higher

period costs associated with increased production of high-density products offsetting improved capacity utilization and other reductions in the Company's manufacturing costs. Profit margins on older products generally tend to decrease over time as selling prices decline, but the Company's strategy has been to offset these decreases by continuously introducing new products with higher margins.

RESEARCH AND DEVELOPMENT

Research and development expense increased by approximately \$1.1 million, or 20%, from the second quarter of fiscal 1995 to the second quarter of fiscal 1996, and increased \$2.2 million, or 20%, between the two fiscal six-month periods. Such expense represented 14% of revenue in the fiscal 1996 periods as compared to 16% in the fiscal 1995 periods. The spending increases were related primarily to the development of new technologies and new products, including the Company's high-density product families and their related software development tools. The Company believes that a continued commitment to research and development is essential in order to maintain product leadership, and therefore expects to continue to make significant investments in research and development in the future.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSE

Selling, general and administrative expense increased by approximately \$1.6 million, or 27%, between the second quarter of fiscal 1995 and the fiscal 1996 second quarter, and increased \$3.2 million, or 27%, between the two six-month fiscal periods. This increase was primarily due to expansion of the Company's sales force, the addition of field application engineers to provide enhanced customer assistance, and higher sales commissions associated with the higher revenue levels. Selling, general and administrative expense as a percentage of revenue decreased slightly from approximately 17.5% in the fiscal 1995 periods to just over 16% in the fiscal 1996 periods.

INTEREST AND OTHER INCOME

Interest and other income (net of expense), while remaining relatively constant as a percentage of revenue, increased by approximately \$530,000, or 38%, from the fiscal 1995 periods to the fiscal 1996 periods. This was due primarily to higher interest rates in the fiscal 1996 periods.

PROVISION FOR INCOME TAXES

The Company's effective tax rate was 34.5% for the fiscal 1996 periods presented as compared to 33.7% recorded in the fiscal 1995 periods. This increase occurred primarily because of the utilization of the Company's remaining tax credit carry forwards during fiscal 1995.

Deferred tax asset valuation allowances are recorded to offset deferred tax assets that can only be realized by earning taxable income in distant future years. Management established the valuation allowances because it cannot determine if it is more likely than not that such income will be earned.

FACTORS AFFECTING FUTURE RESULTS

The Company does not manufacture finished silicon wafers. Its products, however, require wafers manufactured with state-of-the-art fabrication equipment and techniques. Accordingly, the Company's strategy has been to maintain relationships with large semiconductor manufacturers for the production of its wafers. All of its silicon wafers are currently manufactured by Seiko Epson Corporation ("Seiko Epson") in Japan and sold to the Company, through Seiko Epson's affiliated U.S. distributor, S MOS Systems Inc. ("S MOS"). In connection with a series of agreements recently entered into with United Microelectronics Corporation ("UMC") providing for the formation of a separate Taiwanese company for the purpose of building and operating an advanced semiconductor manufacturing facility in Taiwan, Republic of China, UMC committed to supply the Company with sub-micron wafers beginning in the first calendar quarter of 1996 and continuing with phased increases for several years. A significant interruption in supply from Seiko Epson through S MOS or from UMC would have a material adverse effect on the Company's business.

Worldwide manufacturing capacity for silicon wafers is limited and inelastic. Therefore, significant increases in demand or interruptions in supply could adversely affect the Company. Through fiscal 1995, the Company has been successful in obtaining adequate wafer capacity commitments and has not experienced any material difficulties or delays in the supply of wafers. Presently, demand on wafer suppliers for silicon wafers is growing and existing capacity commitments may not be sufficient to permit the Company to satisfy all of its customers' demand in future periods. The Company negotiates wafer prices and certain wafer supply commitments with Seiko Epson and S MOS on an annual basis, and, in some cases, as frequently as semiannually. Moreover, wafer prices and commitments are subject to continuing review and revision by the parties. Although current commitments are

anticipated to be adequate through fiscal 1996, Seiko Epson and S MOS advised the Company in July 1995 that, due to high levels of demand and limited manufacturing capacity, there were significant uncertainties as to whether they would be able to supply wafers to the Company for the Company's fiscal 1997 at increased levels relative to fiscal 1996 or even at historical levels. More recently, however, the Company received indications from Seiko Epson and S MOS that they believe they will be able to supply wafers to the Company in fiscal 1997 at levels moderately higher than in fiscal 1996. In addition, the Company recently obtained a commitment from UMC to supply the Company with sub-micron wafers beginning in the first calendar quarter of 1996 and continuing with phased increases for several years. Wafer prices and other purchase terms are expected to be negotiated prior to initiating wafer production and will be subject to periodic adjustment. The availability of wafers from UMC will depend on, among other things, UMC successfully achieving volume production. There can be no assurance that UMC will successfully achieve volume production of Company wafers or that Seiko Epson, S MOS or UMC will not reduce their allocations of wafers or increase prices to the Company in future periods or that any such reduction in supply could be offset pursuant to arrangements with alternate sources of supply. If any substantial reduction of supply or substantial price increase were to occur, the Company's operating results would be materially adversely affected. The Company's future revenue growth will depend in part on improving yields of die per wafer through reductions in the die size of its products, shifting capacity to a higher revenue per wafer product mix, successfully achieving production volumes at UMC, increasing its wafer allocations from its suppliers or obtaining additional wafer allocations from other suppliers. There can be no assurance that the Company will be successful in improving yields, enhancing product mix, achieving volume production at UMC or otherwise increasing wafer supply.

The Company's wafer purchases from Seiko Epson are denominated in Japanese yen. During the first two calendar quarters of 1995, the dollar lost substantial value with respect to the yen. Such loss was regained in the third calendar quarter of 1995. There is no assurance that the value of the dollar with respect to the yen will not again experience substantial deterioration or that any such deterioration will not continue in the future. Any substantial continued deterioration of dollar-yen exchange rates could have a material adverse effect on the Company's results of operations.

The Company depends upon wafer suppliers to produce wafers with acceptable yields and to deliver them to the Company in a timely manner. Substantially all of the Company's revenues are derived from products based on E2CMOS process technology. Successful implementation of the Company's proprietary E2CMOS process

technology, UltraMOS, requires a high degree of coordination between the Company and its wafer supplier. Therefore, significant lead time is required to reach volume production at a new wafer supply location such as UMC. Accordingly, there can be no assurance that volume production at UMC will be achieved in the near term or at all. The manufacture of high performance E2CMOS semiconductor wafers is a complex process that requires a high degree of technical skill, state-of-the-art equipment and effective cooperation between the wafer supplier and the circuit designer to produce acceptable yields. Minute impurities, errors in any step of the fabrication process, defects in the masks used to print circuits on a wafer and other factors can cause a substantial percentage of wafers to be rejected or numerous die on each wafer to be non-functional. As is common in the semiconductor industry, the Company has from time to time experienced in the past and expects that it will experience in the future production yield problems and delivery delays. Any prolonged inability to obtain adequate yields or deliveries could adversely affect the Company's operating results.

The Company expects that, as is customary in the semiconductor business, it will in the future seek to convert its fabrication process technology to larger wafer sizes, to smaller device geometries or to new or additional suppliers in order to maintain or enhance its competitive position. Such conversions entail inherent technological risks that could adversely affect yields and delivery times and could have a material adverse impact on the Company's operating results. To a considerable extent, the Company's ability to execute its strategies will depend upon its ability to maintain and enhance its advanced process technologies. As the Company does not presently operate its own wafer fabrication or process development facility, the Company depends upon silicon wafer manufacturers to provide the facilities and support for its process development. In light of this dependency and the intensely competitive nature of the semiconductor industry, there is no assurance that either process technology development or timely product introduction can be sustained in the future.

In addition, other unanticipated changes in or disruptions of the Company's wafer supply arrangements could reduce product availability, increase cost or impair product quality and reliability. Many of the factors that could result in such changes are beyond the Company's control. For example, a disruption of operations at Seiko Epson's or UMC's manufacturing facilities as a result of a work stoppage, fire, earthquake or other natural disaster, would cause delays in shipments of the Company's products and could have a material adverse effect on the Company's operating results.

The Company's finished silicon wafers are assembled and packaged by independent subcontractors located in the Philippines and South Korea. Although the Company has not yet experienced significant problems or interruptions in supply from its assembly contractors, any prolonged work stoppages or other failure of these contractors to supply finished products would have a material adverse effect on the Company's operating results.

The Company believes that its future operating results will be subject to quarterly variations based upon a wide variety of factors, including the cyclical nature of both the semiconductor industry and the markets addressed by the Company's products, the timing of new product introductions, price erosion, product obsolescence, substantial adverse currency exchange rate movements, variations in product mix, scheduling, rescheduling and cancellation of large orders, competitive factors, the availability of manufacturing capacity and wafer supply, the ability to achieve volume production at UMC, the ability to develop and implement new process technologies, fluctuations in manufacturing yields, changes in effective tax rates and litigation expenses. Due to these and other factors, the Company's past results are a less useful predictor of future results than is the case in more mature and less dynamic industries. The Company has increased its level of operating expenses and investment in manufacturing capacity in anticipation of future growth in revenues, primarily from increased sales of its high-density products. To the extent that this revenue growth does not materialize, the Company's operating results would be adversely affected.

Because of the rapid rate of technological change in the semiconductor industry, the Company's success will ultimately depend in large part on its ability to introduce new products on a timely basis that meet a market need at a competitive price and with acceptable margins as well as enhancing the performance of its existing products. The success of new products, including the Company's high-density product families, depends on a variety of factors, including product selection, timely and efficient completion of product design, timely and efficient implementation of manufacturing and assembly processes, product performance, quality and reliability in the field and effective sales and marketing. Because new product development commitments must be made well in advance of sales, new product decisions must anticipate both future demand and the technology that will be available to supply that demand. New and enhanced products are continually being introduced into the Company's markets by others, and these products can be expected to affect the competitive environment in the markets in which they are introduced. There is no assurance that the Company will be successful in enhancing its

existing products or in selecting, developing, manufacturing, marketing and selling new products.

The majority of the Company's revenue and gross margin percentage over the past three fiscal years was due to revenues from low-density GAL products, many of which are second sourced by other suppliers. Future revenue growth will be largely dependent on market acceptance of the Company's new and proprietary products, including its high-density product families, and market acceptance of the Company's proprietary software development tools. There can be no assurance that the Company's product and process development efforts will be successful or that new products, including the Company's high-density products, will continue to achieve market acceptance. If the Company were unable to successfully define, develop and introduce competitive new products in a timely manner, its future operating results would be adversely affected.

The semiconductor industry is intensely competitive and is characterized by rapid technological change, sudden price fluctuations, general price erosion, rapid rates of product obsolescence, periodic shortages of materials and manufacturing capacity and variations in manufacturing costs and yields. The Company's competitive position is affected by all of these factors and by industry competition for effective sales and distribution channels. The Company's existing and potential competitors range from established major domestic and international semiconductor companies to emerging companies. Many of the Company's competitors have substantially greater financial, technological, manufacturing, marketing and sales resources than the Company. The Company faces direct competition from companies that have developed or licensed similar technology and from licensees of the Company's products and technology. The Company also faces indirect competition from a wide variety of semiconductor companies offering products and solutions based on alternative technologies. Although to date the Company has not experienced significant competition from companies located outside the United States, such companies may become a more significant competitive factor in the future. As the Company and its current competitors seek to expand their markets, competition may increase, which could have an adverse effect on the Company's operating results. Development of new technologies that have price/performance characteristics superior to the Company's technologies could adversely affect the Company's results of operations. There can be no assurance that the Company will be able to develop and market new products successfully or that the products introduced by others will not render the Company's products or technologies non-competitive or obsolete. The Company expects that its markets will become more competitive in the future.

The semiconductor industry is highly cyclical and has been subject to significant downturns at various times that have been characterized by diminished product demand, production overcapacity and accelerated erosion of average selling prices. The Company's rate of growth in recent periods has been positively impacted by recent trends in the semiconductor industry. Any material imbalance in industry-wide production capacity relative to demand, shift in industry capacity toward products competitive with the Company's products, reduced demand or reduced growth in demand or other factors could result in a rapid decline in product pricing and have a material adverse effect on the Company's operating results.

In an effort to secure additional wafer supply, the Company may from time to time consider various arrangements, including joint ventures with, minority investments in, advanced purchase payments to, loans to or similar arrangements with independent wafer manufacturers in exchange for committed production capacity. Such arrangements are becoming common within the industry as independent wafer manufacturers increasingly seek to require their customers to share a portion of the cost of capital intensive wafer fabrication facilities. The Company entered into an advanced production payment arrangement with Seiko Epson in 1994 pursuant to which it advanced a total of \$42 million to Seiko Epson. In September 1995, the Company entered into an agreement with UMC to invest \$60 million for a 10% equity interest in a separate Taiwanese company providing for the formation of a joint venture with UMC and several other companies for the purpose of building and operating an advanced semiconductor manufacturing facility. To the extent the Company pursues any other such transactions with Seiko Epson, UMC or any other wafer manufacturers, such transactions could entail even greater levels of investment requiring the Company to seek additional equity or debt financing to fund such activities. There can be no assurance that any such additional funding could be obtained when needed or, if available, on terms acceptable to the Company.

The Company's success depends in part on its proprietary technology. While the Company attempts to protect its proprietary technology through patents, copyrights and trade secrets, it believes that its success will depend more upon technological expertise, continued development of new products, and successful market penetration of its silicon and software products. There can be no assurance that the Company will be able to protect its technology or that competitors will not be able to develop similar technology independently. The Company currently has a number of United States and foreign patents and patent applications. There can be no assurance that the claims allowed on any patents held by the Company will be sufficiently broad to protect the Company's

technology, or that any patents will issue from any application pending or filed by the Company. In addition, there can be no assurance that any patents issued to the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to the Company.

The semiconductor industry is generally characterized by vigorous protection and pursuit of intellectual property rights and positions, which have on occasion resulted in protracted litigation that utilizes cash and management resources, which can have a significant adverse effect on operating results. The Company has received a letter from a semiconductor manufacturer stating that it believes a number of its patents, related to product packaging, cover certain products sold by the Company. While the manufacturer has offered to license certain of such patents to the Company, there can be no assurance, on this or any other claim which may be made against the Company, that the Company could obtain a license on terms or under conditions that would be favorable to the Company. In addition, there can be no assurance that other intellectual property claims will not be made against the Company in the future or that the Company will not be prohibited from using the technologies subject to such claims or be required to obtain licenses and make corresponding royalty payments for past or future use.

International revenues accounted for 47% and 49% of the Company's revenues for the first six months of fiscal 1995 and fiscal 1996, respectively. The Company believes that international revenues will continue to represent a significant percentage of revenues. International revenues and operations may be adversely affected by the imposition of governmental controls, export license requirements, restrictions on the export of technology, political instability, trade restrictions, changes in tariffs and difficulties in staffing and managing international operations.

The future success of the Company is dependent, in part, on its ability to attract and retain highly qualified technical and management personnel, particularly highly skilled engineers involved in new product, both silicon and software, and process technology development. Competition for such personnel is intense. There can be no assurance that the Company will be able to retain its existing key technical and management personnel or attract additional qualified employees in the future. The loss of key technical or management personnel could delay product development cycles or otherwise have a material adverse effect on the Company's business.

The Company currently depends on Seiko Epson, a Japanese company, for the manufacture of all of its finished silicon wafers, and

anticipates depending on UMC, a Taiwanese company, and a joint venture formed with UMC and other semiconductor companies for the manufacture of a portion of its finished silicon wafers. In addition, after wafer manufacturing is completed and each wafer is tested, products are assembled by subcontractors in South Korea and the Philippines. Although the Company's subcontractors have not recently experienced any serious work stoppages, the social and political situations in these countries can be volatile, and any prolonged work stoppages or other disruptions in the Company's ability to manufacture and assemble its products would have a material adverse effect on the Company's results of operations. Furthermore, economic risks, such as changes in currency exchange rates, tax laws, tariffs, or freight rates, or interruptions in air transportation, could have a material adverse effect on the Company's results of operations.

The market price of the Company's Common Stock could be subject to significant fluctuations in response to variations in quarterly operating results, shortfalls in revenues or earnings from levels expected by securities analysts and other factors such as announcements of technological innovations or new products by the Company or by the Company's competitors, government regulations, developments in patent or other proprietary rights, and developments in the Company's relationships with parties to collaborative agreements. In addition, the stock market has recently experienced significant price fluctuations. These fluctuations often have been unrelated to the operating performance of the specific companies whose stocks are traded. Broad market fluctuations, as well as economic conditions generally and in the semiconductor industry specifically, may adversely affect the market price of the Company's Common Stock.

LIQUIDITY AND CAPITAL RESOURCES

As of September 30, 1995, the Company's principal source of liquidity was \$112.6 million of cash and short-term investments, an increase of \$23.8 million from the balance of \$88.8 million at April 1, 1995. This increase was primarily the result of cash generated from operations. The Company also has available an unsecured \$10 million demand bank credit facility with interest due on outstanding balances at a money market rate. This facility has not been used.

Accounts receivable and deferred income on sales to distributors increased 14% and 22%, respectively, as compared to the balances at April 1, 1995. These increases were primarily due to the higher revenue level in the fiscal 1996 second quarter and the timing of billings to end customers and distributors. Inventories increased by 49% versus amounts recorded at April 1,

1995 due to increased production in response to higher revenue levels and the timing of silicon wafer receipts. Accounts payable and accrued expenses increased 25% as compared to the balance at April 1, 1995 due to the higher level of wafer receipts, increased expense activity associated with the higher revenue levels and timing of payments. The wafer supply advance decreased by 27% as compared to the balance at April 1, 1995 due to the receipt of wafers under the advance production payment agreement with Seiko Epson and a \$1.8 million reclassification to "Prepaid expenses and other current assets" as an increase in management's estimate of wafers to be received under this agreement in the next twelve months.

The decrease in income taxes payable of \$2.4 million between April 1, 1995 and September 30, 1995 is primarily attributable to the timing of quarterly tax payments.

Substantially all of the Company's silicon wafer purchases are currently denominated in Japanese yen. The Company maintains yen-denominated bank accounts and bills its Japanese customers in yen. The yen bank deposits utilized to hedge yen-denominated wafer purchases are accounted for as identifiable hedges against specific and firm wafer purchases.

The Company entered into a series of agreements with UMC in September 1995 pursuant to which the Company has agreed to join UMC and several other companies to form a separate Taiwanese company for the purpose of building and operating an advanced semiconductor manufacturing facility in Taiwan, Republic of China. Under the terms of the agreements, the Company will invest \$60 million, payable in three installments over the next two and one-half years, for a 10% equity interest in the corporation and the right to receive a percentage of the facility's wafer production at market prices. The timing of the payments is related to certain milestones in the development of the advanced semiconductor manufacturing facility. The first payment, in the amount of \$15 million, is expected to be required during the quarter ending December 30, 1995, the second payment, in the amount of \$30 million, is anticipated to be required during the three months ending February 1997, and the final payment, in the amount of \$15 million, is anticipated to be required within the six months ending March 1998. The Company expects to finance these payments from existing sources of liquidity, funds generated from operations and, if consummated, the proceeds of a proposed public offering of common stock by the Company. As a result of these payments, the Company's working capital will be reduced by an aggregate of \$60 million over the time period of the payments.

The Company filed a registration statement on Form S-3 with the Securities and Exchange Commission on October 17, 1995 relating to a proposed public offering of up to 2,875,000 shares of common stock (including an over-allotment option to purchase 375,000 shares in favor of the underwriters). The Company intends to use the proceeds of this proposed offering primarily for expansion and maintenance of its wafer supply and assembly capacity, including funding the joint venture with UMC, and other general corporate purposes, including procurement of additional capital equipment and facilities to expand the Company's internal manufacturing capacity, development of new products, and potential acquisitions of businesses, products, or technologies that would complement the Company's businesses. Successful consummation of this offering will depend on market conditions and other factors. There is no assurance that the proposed offering will be completed.

The Company believes its existing sources of liquidity (whether or not the proposed offering is consummated) and funds expected to be generated from operations will provide adequate cash to fund the Company's anticipated cash needs for the next twelve months, including the anticipated required payment to UMC during this period.

In an effort to secure additional wafer supply, the Company may from time to time consider various financial arrangements including joint ventures with, minority investments in, advance purchase payments to, loans to, or similar arrangements with independent wafer manufacturers in exchange for committed wafer capacity. To the extent the Company pursues any such additional financial arrangements, additional debt or equity financing may be required. There can be no assurance that any such additional funding could be obtained when needed or, if available, on terms acceptable to the Company.

SIGNATURES

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

LATTICE SEMICONDUCTOR CORPORATION

Date: November 6, 1995

/s/ Rodney F. Sloss

By: Rodney F. Sloss
Vice President, Finance
(Principal Financial and
Accounting Officer)