SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 10-Q

(Mark One)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended July 29, 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 No. 1-7819

Analog Devices, Inc.
(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation or organization)	04-2348234 (I.R.S. Employer Identification No.)
One Technology Way, Norwood, MA (Address of principal executive offices)	02062-9106 (Zip Code)

(617) 329-4700
(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 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 X NO

The number of shares outstanding of each of the issuer's classes of Common Stock as of August 31, 1995 was 76,206,201 shares of Common Stock.

PART I
FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)
(thousands except per share amounts)

	Three Months Ended	
	July 29, 1995	July 30, 1994
Net sales	$246,301	$197,058
Cost of sales	121,183	99,890
Gross margin	125,118	97,168
Operating expenses:		
Research and development	35,035	27,205
Selling, marketing, general and administrative	47,374	43,333
	82,409	70,538
Operating income	42,709	26,630
Nonoperating expenses (income):		
Interest expense	938	1,796
Interest income	(1,721)	(1,535)
Other	562	644
	(221)	905
Income before income taxes	42,930	25,725
Provision for income taxes	11,149	6,046
Net income	$ 31,781	$ 19,679
Shares used to compute earnings per share	79,851	77,485
Earnings per share of common stock	$0.40	$0.25

See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)
(thousands except per share amounts)

	Nine Months Ended	
	July 29, 1995	July 30, 1994
Net sales	$684,352	$570,173
Cost of sales	337,980	292,991
Gross margin	346,372	277,182
Operating expenses:		
Research and development	98,551	77,821
Selling, marketing, general and administrative	136,637	126,534
	235,188	204,355
Operating income	111,184	72,827
Nonoperating expenses (income):		
Interest expense	3,242	5,455
Interest income	(5,903)	(3,059)
Other	2,026	2,037
	(635)	4,433
Income before income taxes	111,819	68,394
Provision for income taxes	27,683	15,571
Net income	$ 84,136	$ 52,823
Shares used to compute earnings per share	79,064	77,004
Earnings per share of common stock	$1.06	$0.68

See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(thousands except share amounts)

Assets	July 29, 1995	October 29, 1994	July 30, 1994
Cash and cash equivalents	$ 62,268	$109,113	$121,336
Short-term investments	66,233	72,652	36,424
Accounts receivable, net	185,700	162,337	154,316
Inventories:			
Finished goods	37,479	45,678	47,854
Work in process	74,383	69,771	70,346
Raw materials	23,928	15,277	15,870
	135,790	130,726	134,070
Prepaid income taxes	27,780	25,587	23,455
Prepaid expenses	8,373	5,042	6,071
Total current assets	486,144	505,457	475,672
Property, plant and equipment, at cost:			
Land and buildings	130,328	111,857	87,790
Machinery and equipment	585,823	477,339	461,177
Office equipment	39,613	36,613	37,039
Leasehold improvements	40,802	33,070	32,010
	796,566	658,879	618,016
Less accumulated depreciation and amortization	412,985	377,064	370,105
Net property, plant and equipment	383,581	281,815	247,911
Intangible assets, net	17,738	19,262	19,770
Deferred charges and other assets	24,073	9,337	8,779
Total other assets	41,811	28,599	28,549
	$911,536	$815,871	$752,132

See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(thousands except share amounts)

Liabilities and Stockholders' Equity	July 29, 1995	October 29, 1994	July 30, 1994
Short-term borrowings and current portion of long-term debt	$ 2,155	$ 22,917	$ 22,246
Obligations under capital leases	96	236	307
Accounts payable	67,682	74,506	52,176
Deferred income on shipments to domestic distributors	25,787	18,881	19,598
Income taxes payable	39,857	29,425	19,207
Accrued liabilities	65,997	60,221	49,340
Total current liabilities	201,574	206,186	162,874
Long-term debt	80,000	80,000	80,000
Noncurrent obligations under capital leases	-	61	75
Deferred income taxes	4,000	3,225	8,000
Other noncurrent liabilities	6,315	4,484	4,647
Total noncurrent liabilities	90,315	87,770	92,722
Commitments and Contingencies			
Stockholders' equity:			
Preferred stock, $1.00 par value, 500,000 shares authorized, none outstanding	-	-	-
Common stock, $.16 2/3 par value, 300,000,000 shares authorized, 76,214,980 shares issued (75,252,112 in October 1994, 51,287,792 in July 1994)	12,703	12,542	8,548
Capital in excess of par value	154,700	141,159	151,336
Retained earnings	446,330	362,194	340,521
Cumulative translation adjustment	5,999	6,020	5,763
	619,732	521,915	506,168
Less 2,777 shares in treasury, at cost (none in October 1994 and 1,231,610 in July 1994)	85	-	9,632
Total stockholders' equity	619,647	521,915	496,536
	$911,536	$815,871	$752,132

See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(thousands)	Nine Months Ended	
	July 29, 1995	July 30, 1994
OPERATIONS		
Cash flows from operations:		
Net income	$ 84,136	$ 52,823
Adjustments to reconcile net income to net cash provided by operations:		
Depreciation and amortization	47,047	46,068
Deferred income taxes	700	(595)
Other noncash expenses	529	2,052
Changes in operating assets and liabilities	(12,154)	14,606
Total adjustments	36,122	62,131
Net cash provided by operations	120,258	114,954
INVESTMENTS		
Cash flows from investments:		
Additions to property, plant and equipment, net	(145,838)	(42,783)
Maturities of short-term investments	111,659	-
Purchase of short-term investments	(105,240)	(36,424)
Increase in other assets	(14,308)	(2,920)
Net cash used for investments	(153,727)	(82,127)
FINANCING ACTIVITIES		
Cash flows from financing activities:		
Payments on fixed rate borrowings	(20,000)	-
Proceeds from employee stock plans	9,095	8,987
Net (decrease) in variable rate borrowings	(970)	(66)
Payments on capital lease obligations	(201)	(250)
Net cash provided by (used for) financing activities	(12,076)	8,671
Effect of exchange rate changes on cash	(1,300)	(830)
Net increase (decrease) in cash and cash equivalents	(46,845)	40,668
Cash and cash equivalents at beginning of period	109,113	80,668
Cash and cash equivalents at end of period	$ 62,268	$121,336
SUPPLEMENTAL INFORMATION		
Cash paid during the period for:		
Income taxes	$ 17,196	$ 10,127
Interest	$ 3,614	$ 3,973

See accompanying notes.

Analog Devices, Inc.
Notes to Condensed Consolidated Financial Statements
July 29, 1995

Note 1 - In the opinion of management, the information furnished in the accompanying financial statements reflects all adjustments, consisting only of normal recurring adjustments, which are necessary to a fair statement of the results for this interim period and should be read in conjunction with the most recent Annual Report to Stockholders.

Note 2 - Certain amounts reported in the previous year have been reclassified to conform to the 1995 presentation.

Note 3 - Commitments and Contingencies

As previously reported in the Company's Annual Report on Form 10-K for the fiscal year ended October 29, 1994 and as set forth in Item 1, "Legal Proceedings" in the Company's Forms 10-Q for the fiscal quarters ended January 28, 1995 and April 29, 1995, the Company has been engaged in patent infringement litigation with Texas Instruments, Inc. ("TI") and a related enforcement proceeding brought by the International Trade Commission ("ITC"), and antitrust litigation with Maxim Integrated Products, Inc. ("Maxim").

The Company was a defendant in two lawsuits brought in Texas by TI, alleging patent infringement, including patent infringement arising from certain plastic encapsulation processes, and seeking an injunction and unspecified damages against the Company. The alleged infringement of one of these patents is also the subject matter of a proceeding brought by TI against the Company before the ITC. On January 10, 1994, the ITC brought an enforcement proceeding against the Company alleging that the Company had violated the ITC's cease and desist order of February 1992 (as modified in July 1993), and seeking substantial penalties against the Company for these alleged violations. In addition, in June 1992, the Company commenced a lawsuit against TI in Massachusetts alleging certain TI digital signal processors infringed one of the Company's patents.

Effective April 1, 1995, the Company and TI settled both Texas lawsuits and the Massachusetts lawsuit principally by means of a royalty-free cross license of certain of the Company's and TI's patents. On April 24, 1995, the Company filed with the ITC a motion to terminate the ITC enforcement proceeding on the grounds that further action by the ITC is unnecessary in light of the Company's settlement with TI. On May 8, 1995, an Administrative Law Judge issued a recommended determination to the ITC to grant the Company's motion to terminate, and that motion is pending before the ITC.

The Company is a defendant in a lawsuit brought by Maxim seeking an injunction against, and claiming damages for, alleged antitrust violations and unfair competition in connection with distribution arrangements between the Company and certain distributors. Maxim alleged that certain distributors ceased doing business with Maxim as a result of the distribution arrangements between the distributors and the Company, resulting in improper restrictions to Maxim's access to channels by which it distributes its products. Maxim asserted actual and consequential damages in the amount of $14.1 million and claimed restitution and punitive damages in an unspecified amount. Under applicable law, Maxim would receive three times the amount of any actual damages suffered as a result of any antitrust violation. On September 7, 1994, Maxim's claim was dismissed for lack of evidence. Maxim has appealed this ruling and briefing of the appeal was concluded in March 1995. No hearing on this appeal has yet been scheduled.

Although the Company believes it should prevail in these matters, the Company is unable to determine their ultimate outcome or estimate the ultimate amount of liability, if any, at this time. An adverse resolution of these matters could have a material adverse effect on the Company's consolidated financial position or on its consolidated results of operations or cash flows in the period in which the matters are resolved.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Third Quarter of Fiscal 1995 Compared to the Third Quarter of Fiscal 1994

Net sales of $246.3 million for the third quarter of fiscal 1995 grew $49.2 million or 25.0% from net sales of $197.1 million for the third quarter of fiscal 1994. Third quarter sales growth was principally attributable to significant increases in sales volumes of both standard linear IC and system-level IC products as worldwide demand for precision integrated circuits exceeded the industry's expectations and capacity. Sales of the Company's standard linear IC products, the largest and most profitable part of the Company's business, was up more than 35% from last year's third quarter. With the exception of hard disk drive products, revenues from system-level IC products, including both general-purpose digital signal processing and mixed signal ICs, grew approximately 46% year over year. Revenues from disk drive manufacturers declined $13.1 million compared to the third quarter of fiscal 1994 as the market continues to move rapidly to digital PRML channels. Assembled product sales decreased approximately 9% from the third quarter of fiscal 1994.

Demand for the Company's standard linear IC and system-level IC products was broad based across all served application markets and geographies with the strongest end user market growth in computers, wireless communications, high speed digital communications, automatic test equipment and other industrial-market applications. The distributor channel continued to have a very positive effect on sales growth, particularly for standard linear IC products, as worldwide sales through distribution increased approximately 67% from the same period last year to comprise approximately 44% of total sales in the third quarter of fiscal 1995. Distribution has become the fastest growing channel for the Company's standard linear IC products.

Geographically, the largest year-over-year sales gains were registered in North American distribution, Europe and Japan with a weaker average dollar exchange rate contributing to a portion of the international sales increase.

Assuming continued increases in demand, further increases in sales will be constrained in the near term by the Company's manufacturing capacity. See "Liquidity and Capital Resources" below for a discussion of the Company's efforts to address its capacity issues.

Gross margin increased to 50.8% of sales from 49.3% in the third quarter of fiscal 1994, driven by a shift in the mix of products sold towards higher-margin standard linear IC products. Gross margin on all IC products, which include both standard linear and system-level ICs, was approximately 55% of sales compared to 51% for the year ago quarter.

R&D expenses for the third quarter of fiscal 1995 increased 28.8% over the same quarter last year to 14.2% of sales as the Company continued to fund the most promising initiatives in new product and process development. Selling, marketing, general and administrative expense (SMG&A) growth was held to 9.3% over the amount in the third quarter of fiscal 1994 despite a weaker dollar, as the Company continued to constrain spending growth to a rate significantly below sales growth. As a result, the SMG&A-to-sales ratio decreased to 19.2% from 22.0% in the third quarter of fiscal 1994.

Operating profit rose 60.4% to 17.3% of sales compared to 13.5% of sales in fiscal 1994's third quarter reflecting the combination of accelerated demand for the Company's products, improved gross margin and continuing commitment to growing expenses more slowly than sales.

Nonoperating expenses decreased $1.1 million in total, aided in large part by a decrease in interest expense and an increase in interest income. The decrease in interest expense related primarily to the maturity of a $20 million term loan in the first quarter of fiscal 1995 while the increased interest income reflected an increase in investment rates.

The effective income tax rate increased from 23.5% for the year ago quarter to 26.0% for the third quarter of fiscal 1995 due to a shift in the mix of worldwide income to higher tax rate jurisdictions.

The growth in sales and improved operating performance yielded a 61.5% increase in net income which rose from $19.7 million or $0.25 per share for the year-earlier period to $31.8 million or $0.40 per share for the third quarter of fiscal 1995.

Third Quarter of Fiscal 1995 Compared to the Second Quarter of Fiscal 1995

Net sales rose from $230.0 million for the second quarter of fiscal 1995 to $246.3 million for the third quarter of fiscal 1995, an increase of $16.3 million or 7.1% as the strong order rate experienced during the second quarter continued into the third quarter. The sales increase resulted largely from increased sales volumes of standard linear IC products, which grew 12% from the prior quarter, as the use of high performance standard linear IC components in faster growing segments of the industrial, computer, communications and consumer markets has become more pervasive. This trend together with the Company's broader participation in the distributor channel and a strong demand environment have accelerated the growth of the Company's standard linear IC products. Sales were strong throughout all geographic regions including North America, both in the Company's distributor and OEM businesses, Europe and Japan.

The increased mix of standard linear IC sales had a beneficial impact on gross margin which improved slightly from 50.6% in the second quarter to 50.8% in the third quarter. R&D expenses for the third quarter rose $1.8 million from the second quarter but as a percentage of sales decreased from 14.5% for the second quarter of fiscal 1995 to 14.2% for the third quarter of fiscal 1995. SMG&A expenses declined as a percentage of sales to 19.2% from 19.8% for the second quarter of fiscal 1995. Higher sales, improved gross margin and further reduction in total operating expenses as a percentage of sales generated a sequential gain in operating income of 13.8% with operating income reaching 17.3% of sales compared to 16.3% in the preceding quarter.

Interest income was reduced from $2.0 million for the second quarter to $1.7 million for the third quarter of fiscal 1995 due to a lower average amount of cash and cash equivalents. The effective tax rate increased to 26.0% compared to 24.0% for the prior quarter, reflecting a change in the mix of worldwide income. The improved operating performance led to a sequential improvement in net income of 10.7% to $31.8 million or $0.40 per share compared to $28.7 million or $0.36 per share for last quarter.

First Nine Months of Fiscal 1995 Compared to the First Nine Months of Fiscal 1994

Net sales of $684.4 million increased $114.2 million or approximately 20% from the same period of fiscal 1994. Worldwide market demand in the semiconductor industry increased throughout fiscal 1995 with the Company benefiting from this demand both in its standard linear IC and system-level IC product areas. The sales increase was primarily volume-based and was widespread across all product lines, markets and geographies. Sales of standard linear ICs increased approximately 28% while sales of system-level IC products, excluding hard disk drive products, increased approximately 41%. Sales of hard disk drive products decreased $27.3 million year over year. Total IC sales, representing both standard linear and system-level ICs constituted approximately 91% of total sales for the first nine months of fiscal 1995, continuing the long-term trend of IC sales becoming a larger portion of the Company's revenues.
Sales of assembled products declined approximately 10% compared to the same period last year.

The highest growth for both the Company's standard linear IC and system-level IC products was in applications targeted for fast growing sectors of the communications and computer markets. Sales growth for the Company's core standard linear products was also very strong for the first nine months of fiscal 1995 in the Company's traditional industrial and instrumentation markets for such products as high-performance op amps and converters and pin electronics for automatic test equipment.

Sales to North American and international customers increased 16% and 23%, respectively, over the same period last year with the translation of local currency sales to a weaker average U.S. dollar accounting for some of this improvement. The distributor channel was a major contributor to sales growth in North America as well as in Europe and Japan, especially for standard linear products, as worldwide sales through distribution increased 53% compared to the year ago period. For the first nine months of fiscal 1995, approximately 42% of the Company's sales were derived from sales through distributors.

Gross margin increased two points from 48.6% for the first nine months of fiscal 1994 to 50.6% of sales for the first nine months of fiscal 1995. This increase resulted primarily from significantly stronger sales of higher-margin standard linear IC products.

R&D expenses increased $20.7 million or 26.6% over the prior year reflecting continued investment in high growth initiatives in the computer, communications, consumer and automotive markets. As a percentage of sales, R&D increased from 13.6% last year to 14.4% for the first nine months of fiscal 1995. SMG&A expense growth was held to 8.0% over these periods, leading to a reduction in SMG&A as a percentage of sales from 22.2% for the first nine months of fiscal 1994 to 20.0% for the first nine months of fiscal 1995 consistent with the Company's focus on maintaining tight control on operating expenses in order to provide additional operating profit leverage as revenues grow.

Operating profit reached $111.2 million or 16.2% of sales for the first nine months of fiscal 1995, an increase of 52.7% from $72.8 million or 12.8% of sales for the first nine months of fiscal 1994. This performance gain reflected growth in sales, improvement in gross margin and a slower rate of SMG&A expense growth versus sales.

Nonoperating expenses decreased $5.1 million year-to-year due in large part to increased interest income on a higher average level of cash investments and a higher weighted average investment rate. A reduction in interest expense from $5.5 million to $3.2 million related primarily to the maturity of a $20 million term loan early in the first quarter of fiscal 1995 also contributed to the decrease in nonoperating expenses. The effective income tax rate increased to 24.8% from 22.8% for the year ago period due to a change in the mix of worldwide profits.

Net income grew 59.3% to $84.1 million or $1.06 per share compared to $52.8 million or $0.68 per share for the first nine months of fiscal 1994. As a percentage of sales, net income improved to 12.3% from 9.3% for the year-earlier period.

Liquidity and Capital Resources

At July 29, 1995, cash and cash equivalents and short-term investments totaled $128.5 million, compared to $181.8 million and $157.8 million at the end of the fourth and third quarters of fiscal 1994, respectively. The $53.3 million decrease in cash, cash equivalents and short-term investments from the end of the fourth quarter of fiscal 1994 resulted from cash used to fund a portion of capital expenditures, the maturity of the Company's $20.0 million term loan in the first quarter of fiscal 1995, and an investment made in an external wafer foundry in the second quarter of fiscal 1995 as discussed below. Cash, cash equivalents and short-term investments, in the aggregate, decreased $29.3 million compared to the third quarter of fiscal 1994 as the continued generation of cash flow from operations was more than offset by a significant increase in additions to property, plant and equipment associated with capacity expansion.

For the first nine months of fiscal 1995, the Company generated cash flow from operations of $120.3 million or 17.6% of sales compared to $115.0 million or 20.2% of sales for the same period of fiscal 1994. The change in operating cash flow compared to the first nine months of fiscal 1994 principally reflected higher net income offset in large part by an increase in working capital requirements including increases in accounts receivable and inventories. Cash flow from operations generated for the third quarter of fiscal 1995 was $31.6 million or 12.8% of sales versus $38.6 million or 16.8% of sales for the prior quarter and $39.6 million or 20.1% of sales for the third quarter of fiscal 1994. The decrease in operating cash flows compared to both of these quarters was mainly attributable to higher net working capital requirements in the third quarter of fiscal 1995, as increased net income was more than offset by growth in accounts receivable.

Accounts receivable of $185.7 million increased $7.4 million or 4.2%, $23.4 million or 14.4% and $31.4 million or 20.3% from the end of the second quarter of 1995, the fourth quarter of 1994 and the third quarter of 1994, respectively. The increase in accounts receivable in the third quarter of fiscal 1995 compared to the fourth and third quarters of fiscal 1994 reflected the higher sales levels combined with the translation of local currency denominated receivables to a weaker U.S. dollar, particularly in Japan. The increase in accounts receivable from the second quarter to the third quarter of fiscal 1995 was attributable to the rise in sales. As a percentage of annualized quarterly sales, however, accounts receivable was reduced to 18.8% from 19.4%, 20.0% and 19.6% for the previous quarter and the fourth and third quarters of 1994, respectively.

Inventories rose $5.1 million during the first nine months of 1995 as a result of heightened customer demand and the need to improve response times for incoming orders. Inventories at the end of the third quarter of fiscal 1995 were relatively flat to the second quarter of fiscal 1995 as well as to the year ago quarter. As a percentage of annualized quarterly sales, inventories decreased to 13.8% from 14.6% for the prior quarter, 16.1% for the fourth quarter of 1994 and 17.0% for the year-earlier quarter.

As previously discussed above and in the Company's "Management Discussion and Analysis of Financial Condition and Results of Operations" contained in its Form 10-Q for the fiscal quarter ended April 29, 1995, the Company's revenue and order growth has been capacity constrained. The Company has several capacity expansion programs under way that should provide the Company substantially greater capacity during fiscal 1996.

Cash flow from operations together with cash on hand for both the third quarter and first nine months of fiscal 1995 were used largely to fund net additions to property, plant and equipment of $43.4 million and $145.8 million, respectively. Capital expenditures were significantly higher than the comparable periods of 1994 with the majority of these expenditures related to capacity expansion including the new 6-inch, 0.6-micron wafer module at the Company's wafer fabrication facility in Limerick, Ireland, primarily for advanced mixed-signal products, and the ongoing conversion of the Company's Wilmington, Massachusetts fab to provide new six-inch capability, primarily for high-speed linear products. The module in Limerick, which has been supported in part by grants from the Irish government, is currently expected to be on line in early 1996 while the module in Wilmington is currently expected to be on line during the second half of 1996. In addition, during the third quarter of fiscal 1995, the Company completed the purchase of assets of an existing six-inch wafer fab from Performance Semiconductor Corporation in Sunnyvale, California. This facility is now undergoing rehabilitation and conversion to advanced linear technology.

In addition to the ongoing capital expansions in Ireland, Massachusetts and California, the Company has also shifted production of disk drive IC products from its facility in Ireland to external foundries in order to free up internal capacity. These actions in total, which principally support the production of higher margin linear IC products, are expected to provide upside capacity in fiscal 1996 that could accommodate the higher growth the Company is currently experiencing in its core linear products, if such growth continues. Other programs aimed at providing additional internal capacity include an expansion of the Company's assembly and test facilities in the Philippines and a building expansion program at the Company's facility in North Carolina to provide capability to produce newer hybrids and multi-chip modules for communications and other high growth applications.

The Company's programs to address capacity shortages related to its external wafer supply, particularly for system-level and digital signal processing ICs for products in the computer and communications sectors, include its expanded relationship with Taiwan Semiconductor Manufacturing Company (TSMC), the Company's primary wafer foundry, to provide higher capacity over the 1996-1999 time frame. Under the agreement with TSMC, the Company will make option fees aggregating $22.4 million to secure this additional capacity which are payable over the period through 1999. Also, to secure access to additional external wafer capacity, the Company invested $14 million in the second quarter of fiscal 1995 in an external foundry, Chartered Semiconductor in Singapore. The Company anticipates investing an additional $6 million in Chartered Semiconductor in fiscal 1996. This supply agreement is scheduled to begin providing access to eight-inch, 0.5-micron wafer capacity in 1996. The TSMC option fees and Chartered Semiconductor investment described above will be amortized over the related wafer output periods.

Despite these measures, which together are expected to provide increased capacity in 1996, the Company currently expects that demand, based on recent growth levels, will continue to exceed available supply for the balance of 1995 and into early 1996. The Company believes its current capacity is sufficient to grow revenues by approximately 20-25% for the fourth quarter of fiscal 1995, compared to the same period last year, assuming demand continues strong during this period.

The Company currently anticipates that capital spending, including expenditures related to the new wafer modules in Limerick and in Wilmington and the Company's other internal capacity expansion programs, will be approximately $190 million in fiscal 1995 and approximately the same level in fiscal 1996. As a result of internal expansion, depreciation expense is expected to be incrementally higher in fiscal 1996 as these planned additions begin to ramp up.

At July 29, 1995, substantially all of the Company's lines of credit were unused, including its four-year, $60 million credit facility.

The Company believes that its strong financial condition, existing sources of liquidity, available capital resources and cash expected to be generated from operations leave it well positioned to obtain the funds required to finance its capital expenditure plan and to meet its current and future business requirements.

Litigation

As set forth in Note 3 to the Condensed Consolidated Financial Statements contained in this Form 10-Q for the fiscal quarter ended July 29, 1995, the Company is engaged in an enforcement proceeding brought by the International Trade Commission related to patent infringement litigation with Texas Instruments, Inc., and antitrust litigation with Maxim Integrated Products, Inc.

Although the Company believes it should prevail in these matters, the Company is unable to determine their ultimate outcome or estimate the ultimate amount of liability, if any, at this time. An adverse resolution of these matters could have a material adverse effect on the Company's consolidated financial position or on its consolidated results of operations or cash flows in the period in which the matters are resolved.

PART II - OTHER INFORMATION
ANALOG DEVICES, INC.

Item 6. Exhibits and reports on Form 8-K

(a) See Exhibit Index.
(b) There were no reports on Form 8-K filed for the three months ended July 29, 1995.

SIGNATURES

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.

Analog Devices, Inc.

(Registrant)

Date: September 12, 1995

By: /s/ Ray Stata

Ray Stata
Chairman of the Board and
Chief Executive Officer
(Principal Executive Officer)

Date: September 12, 1995

By: /s/ Joseph E. McDonough

Joseph E. McDonough
Vice President-Finance
and Chief Financial Officer
(Principal Financial and
Accounting Officer)

EXHIBIT INDEX
Analog Devices, Inc.

Item

*10 (a) Option Agreement dated as of May 16, 1995 between Analog Devices, B.V. and Taiwan Semiconductor Manufacturing Company, Ltd.

*10 (b) Wafer Production Agreement dated as of May 16, 1995 between Taiwan Semiconductor Manufacturing Company, Ltd. and Analog Devices, B.V.

27 Financial Data Schedule

* Confidential treatment has been requested as to certain portions of these exhibits.

EXHIBIT 10(a)

CONFIDENTIAL MATERIALS OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION. ASTERISKS DENOTE SUCH OMMISSIONS.

OPTION AGREEMENT

Between

Analog Devices B.V.

And

Taiwan Semiconductor Manufacturing Co., Ltd.

Date: May 16, 1995

OPTION AGREEMENT

THIS AGREEMENT is made and becomes effective as of May 16, 1995 (the "Effective Date") by Taiwan Semiconductor Manufacturing Co., Ltd. ("TSMC"), a company organized under the laws of the Republic of China with its registered address at No. 121, Park Ave. 3, Science-Based Industrial Park, Hsinchu, Taiwan, and Analog Devices B.V., a company organized under the laws of the Netherlands, with its registered address at Beneluxweg 27, 4904 SJ Oosterhout, the Netherlands ("Analog").

RECITALS

WHEREAS, TSMC currently supplies Analog and its affiliates with wafers and Analog wishes to increase the volume of wafers to be purchased from TSMC;

WHEREAS, in order to increase its output, TSMC must accelerate its ramp up in Fab 3 and advance the start of Fab 4;

WHEREAS, as a condition to TSMC's acceleration of these facilities, TSMC has asked that Analog make a capacity commitment and advance payment for the right to buy additional capacity, and Analog is willing to do so:

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DEFINITIONS

(a) "Affiliate" used in this Agreement shall mean Analog Devices, Inc. ("ADI") and any direct subsidiary of ADI, in addition to Analog.

(b) "Analog Committed Capacity" used in this Agreement shall mean the sum of the X% Base Capacity and the Option Capacity to be provided to Analog by TSMC pursuant to this Agreement, and is set forth in Exhibit A.

(c) "Base Capacity" used in this Agreement shall mean the capacity commitment provided to Analog by TSMC set forth in Exhibit A.

(d) "Option Capacity" used in this Agreement shall mean the firm capacity commitment provided to Analog by TSMC pursuant to this Agreement, for which capacity Analog agrees to pay the Option Fee as defined in this Section 1(e) below, and is set forth in Exhibit A.

(e) "Option Fee" used in this Agreement shall mean the deposit that Analog agrees to place with TSMC as the advance payment for the Option Capacity.

(f) "TSMC Committed Capacity" used in this Agreement shall mean the sum of the Base Capacity and the Option Capacity to be provided by TSMC to Analog pursuant to this Agreement, and is set forth in Exhibit A.

(g) "Wafer Equivalent" used in this Agreement shall mean the number of wafers based on the Capacity Factor for 1995 Base Capacity. For details of the Capacity Factor, please refer to Exhibit B. Any and all of the capacity commitments referred to in this Agreement shall be measured in Wafer Equivalent.

(h) "X% Base Capacity" used in this Agreement shall mean the Base Capacity reduced by the agreed percentage set forth in Exhibit A.

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2. VOLUME COMMITMENT

(a) Subject to the payment of the Option Fee by Analog under Section 5 below, TSMC agrees to provide to Analog the TSMC Committed Capacity. In any calendar year, the orders placed by Analog shall first apply to fulfill the X% Base Capacity portion of the Analog Committed Capacity, and then the Option Capacity portion.

(b) Each month, Analog agrees to provide to TSMC a ********* rolling forecast of the number of wafers that Analog will purchase, with the volume for the first ********** being frozen (i.e. Analog must purchase all of the quantity forecast for the delivery in the first ********** of the forecast). The forecast must be based on wafers out or deliveries expected to be made by TSMC.

(c) TSMC will use its reasonable effort to cause its fabs to be capable of producing wafers of more advanced specifications, as set forth in the TSMC Technology Road Map attached as Exhibit C.

3. WAFER PRICE

(a) The wafer prices for the Option Capacity shall be not more than ********** or ********** for the same technology in the same fab. In the event that the wafer prices for the Option Capacity do not comply with the preceding sentence, TSMC will make proper price changes for the unfilled orders, upon Analog's notice in writing.

(b) The parties shall negotiate in good faith each year the wafer prices for the Option Capacity of the following year, and if no agreement may be reached by the parties before October each year, the parties agree to submit the dispute to the binding arbitration in California under the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed in accordance with such rules, and under such circumstances, ********** shall have the right to terminate this Agreement under Section 8 below.

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4. OTHER PURCHASE TERMS AND CONDITIONS

The Analog/TSMC Agreement for Wafer Production entered into concurrently with this Agreement will apply to all purchases of wafers by Analog From TSMC, except that the provisions of this Agreement will supersede the above Agreement for Wafer Production with respect to the subject matter hereof.

5. OBLIGATION TO PAY OPTION FEE FOR OPTION CAPACITY

Analog agrees to pay to TSMC the Option Fee in the amount of ****** per Wafer Equivalent for the right to purchase the Option Capacity pursuant to this Agreement. The Option Fee is set forth in Exhibit D, and it shall be paid in cash by no later than every June 30 during the term of this Agreement for the Option Capacity of the following year. Subject to Sections 7 and 8 below, the Option Fee for any given year, once paid, shall be non-refundable for any cause, and will be credited at the rate of ****** per Wafer Equivalent against the prices of wafers purchased by Analog from TSMC when purchased from the Option Capacity provided by TSMC for that given year under this Agreement.

6. Analog further agrees to deliver to TSMC, within ********** following the Effective Date, four (4) promissory notes each in an amount of the Option Fee due every year, and payable to TSMC on each June 30, which promissory notes are in the form of Exhibit E. The promissory notes shall be returned by TSMC to Analog within ********** upon receipt of the corresponding Option Fee by TSMC.

7. FAILURE TO PURCHASE THE OPTION CAPACITY; FIRST RIGHT OF REFUSAL

(a) If in any calendar year, for any reason, Analog is not able to use or purchase all or a portion of the Analog Committed Capacity of that year, or any other year(s) during the term of this Agreement, Analog shall promptly notify TSMC of such in writing and first offer TSMC such Capacity for sales to any third parties. TSMC may, at its option,

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accept such offer, in whole or in part, within thirty (30) days following Analog's notification, and if TSMC so accepts, the corresponding Option Fee, if paid, will be returned without interest and, if not paid, will be cancelled and the corresponding Promissory Note(s) returned to Analog. In the event that TSMC decides not to accept such offer, Analog may assign this Agreement (including the right to purchase the Analog Committed Capacity for the remaining term of this Agreement) to any third parties acceptable to TSMC, within two months upon TSMC's written notice that it will not accept such offer, and if Analog fails to do so, Analog shall be liable for the Option Fee for the remaining term of this Agreement under Section 5 above, and TSMC is entitled to sell or use any such unused capacity thereafter.

(b) Any of Analog's right or obligation set forth in this Section 7(a) shall not affect its obligation to pay the Option Fee pursuant to Section 5 above, except that if this Agreement is assigned to any third parties acceptable to TSMC pursuant to this Section 7(a) above, such third parties shall pay the Option Fee and abide by the terms and conditions of this Agreement.

(c) Notwithstanding the foregoing, if in any calendar year, for any reason, Analog does not purchase the Wafer Equivalent of the X% Base Capacity for that year, then the Base Capacity and X% Base Capacity for each following year of this Agreement shall be reduced by a percentage equal to the ********** **********.

8. TERM AND TERMINATION

(a) The term of this Agreement shall commence on the Effective Date, and continue until December 31, 1999.

(b) TERMINATION BY TSMC FOR ANALOG's FAILURE TO PAY THE OPTION FEE

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TSMC may terminate this Agreement if Analog fails to pay the Option Fee pursuant to Section 5 above, and does not cure or remedy such breach within ********** of receiving written notice of such breach.

(c) TERMINATION FOR OTHER BREACH OR FOR BANKRUPTCY

Either party may terminate this Agreement if the other party breaches any material provisions of this Agreement, and does not cure or remedy such breach within ********** of receiving written notice of such breach, or (ii) becomes the subject of a voluntary or involuntary petition in bankruptcy or any proceeding relating to insolvency, receivership or liquidation, if such petition or proceeding is not dismissed with prejudice within sixty (60) days after filing.

(d) EFFECT OF TERMINATION

Both parties shall remain liable to the other party for any outstanding and matured rights and obligations at the time of termination, including all outstanding payments of the Option Fee and for the wafers already ordered and/or shipped to Analog. In addition, if this Agreement is terminated by Analog due to a breach by TSMC, then TSMC shall refund to Analog any portion of the Option Fee already paid by Analog to TSMC but not yet credited to the purchase prices of wafers in accordance with Section 5 above.

9. BOARD APPROVAL

Analog shall obtain the approval by its board of director of this Agreement, and submit to TSMC, at the time of executing this Agreement, an authentic copy of its board resolution authorizing the representative designated below to execute this Agreement.

10. LIMITATION OF LIABILITY

(a) In no event shall TSMC be liable for any indirect, special, incidental or consequential damages (including loss of profits and loss of use)

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resulting From, arising out of or in connection with TSMC's performance or failure to perform under this Agreement, or resulting from, arising out of or in connection with TSMC's producing, supplying, and/or sale of the wafers, whether due to a breach of contract, breach of warranty, tort, or negligence of TSMC, or otherwise.

(b) TSMC's liability under this Agreement and the Analog/TSMC Agreement for Wafer Production shall be ********** the ********** **********.

11. NOTICE

All notices required or permitted to be sent by either party to the other party under this Agreement shall be sent by registered air mail postage prepaid, or by personal delivery, or by fax. Any notice given by fax shall be followed by a confirmation copy within ten (10) days. Unless changed by written notice given by either party to the other, the addresses and fax numbers of the respective parties shall be as follows:

To TSMC:

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY,
LTD.
No. 121, Park Avenue 3
Science-Based Industrial Park
Hsinchu, Taiwan
Republic of China
Fax: 35-781546
Attn: Legal Counsel

To Analog:

Analog Devices B.V.
Bay F-1

Raheen Ind. Estate
Limerick, Ireland
Fax: 353-613-08448
Attn: Managing Director

With copy to:

Analog Devices, Inc.
One Technology Way
P.O. Box 9105
Norwood, MA 02062-9106
USA
Fax: 617-461-4100
Attn: Vice President & General Manager

12. ENTIRE AGREEMENT

This Agreement, including Exhibits A-E, constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes and replaces all prior or contemporaneous understanding, agreements, dealings and negotiations, oral or written, regarding the subject matter hereof. No modification, alteration or amendment of this Agreement shall be effective unless in writing and signed by both parties. No waiver of any breach or failure by either party to enforce any provision of this Agreement shall be deemed a waiver of any other or subsequent breach, or a waiver of future enforcement of that or any other provision.

13. GOVERNING LAW

This Agreement will be governed by and interpreted in accordance with the laws of the State of California, U.S.A. Litigation concerning this Agreement shall be brought in and adjudicated by appropriate Courts of law located in the State of California, U.S.A. which shall have exclusive jurisdiction over the subject matter.

14. PURCHASE FOR AFFILIATES AND THIRD PARTIES

Notwithstanding the foregoing, Analog shall be permitted to make purchases of wafers from TSMC under this Agreement on behalf of Affiliates or third parties designated by Analog and reasonably acceptable to TSMC, and all such purchases shall be considered purchases by Analog for purposes of this Agreement. Analog will remain responsible for those purchases made by Analog for its Affiliates and third parties pursuant to this Section 14.

15. ASSIGNMENT

This Agreement shall be binding on and inure to the benefit of each party and its successors, and except that Analog may assign this Agreement under Section 7 above, neither party shall assign any of its rights hereunder, nor delegate its obligations hereunder, to any third party, without the prior written consent of the other.

16. CONFIDENTIALITY

Neither party shall disclose the existence or contents of this Agreement except as required by Analog's assignment of this Agreement to any third parties pursuant to Section 7 above, in confidence to its advisers, as required by applicable law, or otherwise with the prior written consent of the other party. Neither party shall make any public announcement concerning this Agreement without the prior written consent of the other, except to the extent required by law or regulation.

17. FORCE MAJEURE

Neither party shall be responsible for delays or failure in performance resulting from acts beyond the reasonable control of such party. Such acts shall include but not be limited to acts of God, war, riot, labor stoppages, governmental actions, fires, floods, and earthquakes.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first stated above.

TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	ANALOG DEVICES B.V.
BY: /s/ Donald Brooks	BY: /s/ Joseph E. McDonough
Donald Brooks	Joseph E. McDonough
President	Managing Director

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EXHIBIT A

ANALOG/TSMC COMMITTED CAPACITY

Unit: Wafer Equivalent

	1996	1997	1998	1999
Base Capacity	******	******	*******	*******
X% of Base Capacity	******	******	*******	*******
Option Capacity	******	******	******	******
TSMC Committed Capacity (Base Capacity+Option Capacity)	******	*******	*******	*******
Analog Committed Capacity (X% Base Capacity+Option Capacity)	******	*******	*******	*******

* The parties agree to maintain ********** throughout any calendar year.

Exhibit B

CAPACITY FACTOR TABLE

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Capacity Factor Table

Date: 11-Apr-1995

GENERIC TECHNOLOGY	Masking Layers(A) (w/o ESD)	W-Plug Layers(B)	Complexity Index(C)	Capacity Factor(D)
********** ********	**		**	****
********** *******	**		**	*
********** *******	**		**	*
********** ********	**		**	****
********** *******	**		**	*
********** **********	**		**	****
********** ********	**		**	****
********** *******	**	*	****	****
********** *******	**	*	****	****
********** ******	**		**	****
********** ******	**	*	****	****
********** ******	**	*	****	****
********** *******	**	*	**	****
********** **********	**	*	****	****
********** **********	**	*	****	****
********** ******	**	*	****	****
********** ******	**	*	****	****
********** **********	**	*	****	****

Remark: (1) Masking Layer of w/i ESD = Masking Layer of w/o ESD + *
(2) Masking Layer of Mixed-Mode(**) = Masking Layer of Logic(**) + *
(3) Complexity Index (C) = (A) + (B) / 2
(4) Capacity Factor (D) = (C) / **, normalized to ********** as 1

Exhibit C

TSMC TECHNOLOGY ROAD MAP

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Generic Technology Roadmap

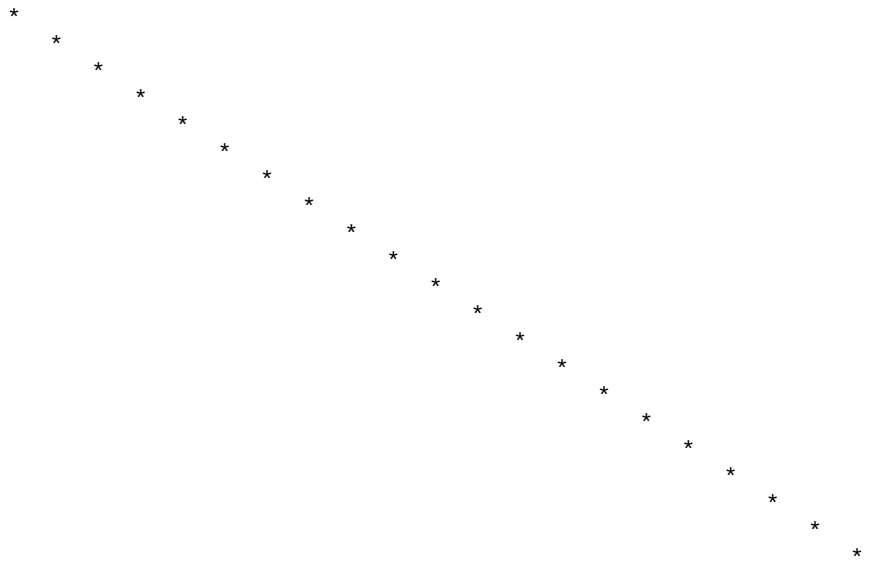

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Exhibit D

OPTION FEE

Year	Option Capacity (Unit: Wafer Equivalent	Option Fee (Unit: US$ Million)	Due Date
1996	******	***	June 30, 1995
1997	******	***	June 30, 1996
1998	******	***	June 30, 1997
1999	******	***	June 30, 1998

Exhibit E

STANDARD FORM OF PROMISSORY NOTE

Amount: US$_____ Due Date: _____

The Undersigned, _____ (the "Maker"), unconditionally promise to pay to Taiwan Semiconductor Manufacturing Co., Ltd. the sum of US Dollars _____ ($_____), plus interest calculated from the Due date stated herein to the date of full payment at the rate of 10% per annum on any unpaid portion of the principal amount stated herein, and said payment will be made at Taipei, Taiwan.

This Note shall be governed in all respects by the laws of the State of California.

The Maker of this Note agrees to waive protests and notice of whatever kind.

This Note is made to evidence the obligation of the Maker to pay to TSMC the Option Fee due on the Due Date hereof under the Option Agreement between the Maker and TSMC dated _____. This Note is nonnegotiable ad the Maker shall be entitled to all the defenses available to it under the aforesaid Option Agreement.

Issue Date: _____

Issue Place: _____

Analog Devices B.V.

By: _____

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WAFER PRODUCTION AGREEMENT

BETWEEN

TAIWAN SEMICONDUCTOR MANUFACTURING

COMPANY, LTD.

AND

ANALOG DEVICES, B.V.

DATE: May 16, 1995

TSMC AGREEMENT

FOR WAFER PRODUCTION

This agreement ("Agreement") is entered into by Taiwan Semiconductor Manufacturing Co., Ltd. ("TSMC"), a company duly incorporated under the laws of the Republic of China, having its principal place of business at No. 121, Park Avenue 3, Science Based Industrial Park, Hsin-Chu, Taiwan, and Analog Devices, B.V.. ("Analog Devices"), a company organized under the laws of the Netherlands, with its registered address at Beneluxweg Z7, 4904 FJ Oosterhout, the Netherlands.

RECITALS

A. Analog Devices and its affiliates have designed and/or manufacture integrated circuits, and wish to have an additional manufacturing source for certain of such integrated circuits.

B. TSMC (all locations) represents that it can manufacture and is in the business of manufacturing such integrated circuits and wishes to manufacture such integrated circuits for Analog Devices.

NOW, THEREFORE, the parties agree as follows:

1.0 DEFINITIONS

1.1 "Device" shall mean good die of Analog Devices integrated circuits meeting the parametric, electrical, and other specifications set forth in Exhibit 1.1. Good die are those which meet agreed to specifications and are topologically identical to Analog Devices manufactured integrated circuits of the same type.

1.2 "Packaged Device" shall mean a device packaged and tested in accordance with Analog Devices specifications, as set forth in exhibit 1.1.

1.3 "Process" shall mean either the process, as specified in Exhibit 1.1, or such other process as may be mutually acceptable.

1.4 "Device Family" shall mean any group of products using the same base layers.

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1.5 "Wafers" and "Wafer Equivalents"

1.5.1 "Wafers" shall mean ****** or ****** silicon wafers manufactured by TSMC using a process, design and mask set (or database tape) for producing integrated circuits. Wafer quantities for forecasts and most other purposes will be stated in terms of ** wafers, unless stated explicitly otherwise, and are to be interpreted, regardless of the wafer sizes actually delivered, to provide the same usable area of silicon circuits as would have been represented by the stated number of ** wafers.

1.5.2 "Wafer Equivalents" shall mean that adjusted quantity of ** wafers which accounts for both the wafer size and the process complexity factors that affect fab capacity, according to mutually acceptable conversion indices. Capacity allocation and commitments will be stated in terms of such "wafer equivalents."

1.6 "Proprietary Information" shall mean this Agreement, including all exhibits, and any information including but not limited to technical information, database tapes, specifications, test tapes, masks and supporting documentation provided either orally, in writing, or in machine readable format and masks or reticules generated by or for TSMC using Analog Devices database tape; provided that all such information is marked "Confidential" or similarly, or, if oral, identified as proprietary at the time of disclosure. Each party's rights and obligations are further described in section 9.0.

1.7 "Code Layer" shall mean mask layers which make a device unique to a custom requirement and different from others of the same device family.

1.8 "Products" shall mean Devices, Wafers or Packaged Devices as defined in sections 1.1, 1.2, and 1.5, but does not include test wafers or risk starts described in section 3.

1.9 "Affiliate" used in this Agreement shall mean Analog Devices, Inc. ("ANALOG DEVICES") and any direct subsidiary of ANALOG DEVICES, in addition to Analog Devices.

2.0 PROCESS TECHNOLOGY

2.1 TSMC will ******** ** Analog Devices the ****** **** *** ********** ********** for the Process. Analog Devices and TSMC will from time to time exchange technical information. TSMC will provide technical information required to allow Analog Devices to bring up compatible process for engineering and low volume special application processes.

Analog Devices will supply technical information required to allow TSMC to efficiently produce Analog Devices products.

2.2 TSMC will bring up the Process for the purpose of manufacturing Wafers in accordance with qualification plan described in Section 3.1 and Exhibit 3.1A All Wafers shall meet the reliability and quality specifications described in Exhibit 3.1B.

2.3 TSMC will provide Analog Devices with the name of TSMC's chosen mask vendor. Analog Devices will provide mask vendor with device data base tapes. TSMC will provide mask vendor with mask alignment and test structure data base, and oversee merging of device and mask alignment data bases by mask vendor. Analog Devices will bear the cost of mask set.

2.4 After TSMC has provided Analog Devices with sufficient Wafers for qualification, but prior to completion of full qualification, Analog Devices may request that TSMC provide additional Wafers or "risk starts". TSMC will provide these additional Wafers to Analog Devices at the prices specified in Section 8.

2.5 During qualification, TSMC and Analog Devices will agree upon parametric and process flow specifications, which will be finalized before TSMC begins production. TSMC will not modify agreed upon specifications in any way without the prior written consent of Analog Devices.

2.6 TSMC and Analog Devices agree to jointly develop a long term technology roadmap for the technologies listed in Exhibit 2.6. Analog Devices and TSMC will cooperate in developing technology of common interest. Both Analog Devices and TSMC shall each have full rights to jointly developed technology. TSMC will provide its ****** technology roadmap and an inclusive forecast of process obsolescence, ******** to Analog Devices. Analog Devices will annually forecast its demand for the technologies listed in the current TSMC technology roadmap.

2.7 Analog Devices agrees to include TSMC in any third party development of CMOS and related technologies if TSMC desires to be involved and if TSMC's involvement does not adversely affect the relationship of Analog Devices and the third party.

2.8 TSMC agrees to commit prototype capacity for new technologies for design and development purposes. This prototype capacity would normally be available 3-6 months prior to risk production.

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2.9 As additional consideration for the purchase of wafers by Analog Devices from TSMC as provided by this Agreement, TSMC agrees to
****
****
****
****
****
****
********** **********

3.0 QUALIFICATION

3.1 The parties shall agree upon the Process for the manufacture of the Products in accordance with the Qualification plan described in Exhibit 3. 1A and upon the parametric, electrical, process flow, quality, and reliability specifications, as well as other standards or requirements that the parties deem necessary ("Quality and Reliability Specifications"). The Quality and Reliability Specifications shall constitute the contractual standards according to which Analog Devices shall conduct acceptance of the Products. The Quality and Reliability Specifications shall be reduced into writing and attached hereto as Exhibit 3.1B.

3.2 After the Process and the Quality and Reliability Specifications are agreed upon in accordance with Subsection 3.1, TSMC will provide Analog Devices with such amount of test wafers as Analog Devices may require for qualification, at the purchase prices specified in Section 8. Within ******** upon receipt of the test wafers, Analog Devices shall inform TSMC in writing of whether or not such test wafers meet the Quality and Reliability Specifications, and if affirmative, full qualification is completed and TSMC will proceed to produce the Products pursuant to the purchase order or orders issued by Analog Devices and accepted by TSMC under Section 4 below, if any. If no notification is received by TSMC during the time period specified in the preceding sentence, full qualification shall be deemed accomplished. In the event that the test wafers do not meet the Quality and Reliability Specifications, the parties will work together in good faith to achieve full qualification.

3.3 Prior to the completion of the full qualification, Analog Devices may, by giving at least ****** notice to TSMC, terminate the production of any test wafers or risk starts specified in Subsection 2.4, and TSMC will do so following the completion of the process steps at which such test wafers or risk starts reside at the time of receiving such notice. Analog Devices shall pay TSMC for all the test wafers and/or risk starts so affected, and the prices for such wafers and/ or risk starts shall be the respective purchase prices specified in Section 8, equitably prorated based on the completed stage of production.

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4.0 PRODUCTION AND SUPPLY

4.1 Using the Process, qualified to the requirements both of TSMC and of Analog Devices as listed in Exhibit 3.1A, TSMC will manufacture those integrated circuits of Analog Devices described in individual Purchase Order documents accepted by TSMC. For those products and processes which are no longer in active manufacturing, TSMC and Analog Devices shall both agree before the obsolescence and destruction of existing tooling and recipes for their manufacture. Analog Devices reserves the right to witness the destruction of tooling consigned to TSMC for manufacture of Analog Devices products. TSMC agrees to provide a minimum of ********* ********** advance notice of the obsolescence of any process, for which a compatible process would not be offered, with a phase-down plan to be mutually agreed upon.

4.2 Subject to TSMC's qualification of the Process, TSMC will produce Analog Devices' requirements for Wafers, up to a maximum number of wafers per week as agreed upon from time to time.

4.2.1 If Analog Devices fails to load to the committed levels in any given year for which there is no specific other agreement on committed capacity levels, TSMC is obligated for the following year to only increase the committed capacity by *** from actual volume.

4.2.2 Analog Devices offers TSMC ************ to be Analog Devices' primary source for ********** ********* for which TSMC provides a competitive capability, price, delivery, and other terms.

4.2.3 In any given year for which there is no specific other agreement on committed capacity levels, TSMC agrees not to hold Analog Devices' capacity to some arbitrary percentage of TSMC's total capacity.

4.2.4 If ADI decides to build its own Fab of significant size or invest in a TSMC competitor, ADI agrees to notify TSMC ********** and TSMC and ADI would negotiate in good faith to modify their commitments.

4.3.0 Purchase orders shall be provided to TSMC by Analog Devices consistent with the current forecast. The sequence of events is as follows:

4.3.1 **** times a year, Analog Devices will forecast * ******** in the future (below numbered ** to **, indicating successive ******** into the future from the date of the forecast). TSMC will allow

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Analog Devices to at least change its actual volumes, for any calendar *******, either up or down by the following percentages from the previous ********* forecasts.

**	**	**	**	**	**
+/-**%	+/-**	+/-**%	+/-**%	+/-**%	+/- **%

For ** and **, Analog Devices agrees to order wafers within these limits of its forecast and the percentages indicated above.

For ** and **, Analog Devices has the right to reduce volume below that determined by the *** ******* rules if their market price is the primary determinate for reducing the volume. TSMC has the right, after Analog Devices presents its price requirements, to accept the new price requiring Analog Devices to raise the volume back to the minimum under the ********** rules, or to accept the new Analog Devices forecast. For this purpose, Analog Devices agrees to provide ********** notice before the start of any ******* for which a reduced volume limit is being sought.

For ** and **, Analog Devices agrees to give *** ****** notice of any forecast reduction below the *****************. If the forecast drops below the six quarter rules, Analog Devices must revise the ********* forecast consistent with the new requirements.

4.3.2 TSMC will allow these changes as long as they do not exceed TSMC maximum capacity commitment. TSMC will provide its ****** capacity plan, annually to Analog Devices.

4.3.3 It is agreed and understood that the purchase of Wafers and/or Devices pursuant to this Agreement shall be accomplished by means of Analog Devices individual purchase orders and/or other release documents (hereinafter collectively referred to as "purchase orders"). The purchase orders placed by Analog Devices will be open purchase orders for a fixed quantity of Wafers, covering the minimum guaranteed volume per *****. TSMC reserves the right to refuse purchase orders beyond the TSMC commitment of capacity.

4.4 Analog Devices will accept deliveries made in installments from TSMC, upon mutual agreement to be determined in each case. Such partial shipments will be billed as made; and payments, therefore, are subject to the terms of payment noted below. Individual fab lots shall be complete within a single shipment, unless agreed to by Analog Devices in each case.

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4.5 If the cumulative quantity shipped by TSMC of each product ordered by Analog Devices is within +/- * percent of the quantity ordered, such quantity shall constitute compliance with Analog Devices order. Billing for partial orders shipped as described in this paragraph will be at the established purchase price per unit times the total quantity of units delivered.

4.6 If Analog Devices determines that modifications to the specifications are required, including modifications to mask tooling, process or testing, TSMC agrees to initiate corrective action within ********** upon receipt of notification at appropriate TSMC manufacturing location and to complete such modifications within a reasonable period of time after notification in writing by Analog Devices. The parties will negotiate adjustment to price and delivery schedule as well as charges for retooling costs if warranted by such modifications. Initiation of corrective action would include halting manufacturing of affected material at the appropriate stages of production and other action as mutually deemed appropriate.

4.7 Analog Devices may add or substitute similar product types using the process flows approved by Analog Devices and TSMC for existing production at any time, provided that the agreed upon quantities of Wafer shipments required by Analog Devices will not be in excess of those previously agreed upon except with the consent of TSMC. A similar product type is one which is manufactured using the same process, or a similar process in the same production facility as mutually agreed to be acceptable, and in accordance with the same qualification plan as Analog Devices integrated circuits currently manufactured by TSMC under this Agreement. TSMC will provide Device and Wafers of such similar product types under the same terms as specified herein.

4.8 If Wafers or Devices fail to meet Quality and Reliability specifications, and in Analog Devices reasonable opinion such failure appears material, Analog Devices may request TSMC to stop production. If TSMC is unable to correct such failures within ********** ****, Analog Devices may cancel such particular orders. Analog Devices will notify TSMC in writing of its intention to suspend or cancel such orders and will include any substantiating data.

5.0 ON-SITE INSPECTION AND VENDOR INFORMATION

5.1 Analog Devices representatives shall be allowed to visit TSMC's FAB and test facilities during normal working hours upon reasonable notice to TSMC.

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5.2 Upon Analog Devices request, TSMC will allow Analog Devices to perform an audit of TSMC manufacturing facility, and TSMC will provide Analog Devices with process control information, including but not limited to: Process and electrical test yield results, current process specifications and conformance to specifications; calibration schedules and logs for equipment; environmental monitor information for air, gases and DI water; documentation of operator qualification and training; documentation of traceability through TSMC's operation, TSMC process verification information, and TSMC's trouble reports all in accordance with Exhibit 5.2.

6. DELIVERY

6.1 Unless otherwise agreed to between the parties, TSMC shall deliver the Products to Analog Devices in accordance with the terms and conditions of the INCOTERMS 1990 - **********. Title and risk of loss shall pass to Analog Devices upon delivery. TSMC shall package the Products for secure shipment according to good manufacturing practices in consideration of the method of shipment chosen. The bill of lading or other receipt issued by the carrier shall be conclusive proof of the date and fact of shipment of the Products.

6.2 Within the limitation of section 4.4, partial shipments are allowed, so long as full shipment of the appropriate quantities are made by the delivery dates specified in the respective Purchase Orders. Such partial shipments may be invoiced individually or in combination with all the other partial shipments made for the same Purchase Orders.

6.3 Any delivery or shipment made within ********** before or after the delivery date(s) specified in the Purchase Orders shall constitute timely delivery or shipment.

7. ACCEPTANCE

7.1 Analog Devices shall accept all conforming tenders of the Products delivered under this Agreement, and shall notify TSMC in writing, within ********** following the delivery of unprobed Wafers and within ********** ***** following the delivery of any other Products, as to either acceptance or rejection thereof. If no notification indicating rejection is received by TSMC within the above time period, then such Products shall be deemed accepted.

7.2 Analog Devices may inspect the Products and carry out testing, prior to acceptance thereof, at its own facilities. The inspection and testing shall be performed pursuant to the methods set forth in Exhibit 7.2.

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8. PRICE

8.1 The prices for the Products shall be such prices as are quoted in Exhibit 8.1, and subject to Subsection 8.3 below, shall be **** and ***** for ********. The Prices quoted in Exhibit 8.1 are in ********** and ****** **********, including but not limited to ********** ********** shall pay all applicable ***** (including one or more of the above *****) **** ********* the prices quoted in Exhibit 8.1. The parties shall negotiate the prices for the Products for each of the succeeding years, and if no agreement can be reached with respect to the Product prices prior to the end of the preceding year, the applicable prices in the succeeding year shall be those in ********** then in effect.

8.2 Unless otherwise agreed upon by the parties, payment terms shall be net due ********** after the date of TSMC's invoice or receipt of material by Analog Devices, whichever is later. Any payment made under this Agreement shall be in **********.

8.3 The prices quoted in Exhibit 8.1 are based upon the *** ********** exchange rate in effect ****** **********, and will be subject to ********** due to changes in the exchange rate between ********** exceeding plus or minus **** percent (+/- *%).

9. PROPRIETARY INFORMATION

9.1 Both parties agree to maintain Proprietary Information in strict confidence, not to make use thereof other than for the performance of this Agreement, to release it only to employees who have a reasonable need to know the same, and not to release or disclose it to any third parties, without the prior written consent of the disclosing party. The obligations set forth in this Subsection shall not apply to any information that: (i) is now or hereafter in public domain or otherwise becomes available to the public other than by breach of this Agreement by the receiving party, (ii) has been rightfully in the receiving party's possession prior to receipt from the disclosing party, (iii) is rightfully received by the receiving party from a third party, (iv) is independently developed by the receiving party, or (v) is authorized by the disclosing party to be released or disclosed.

9.2 All Proprietary Information and any copies thereof shall remain the property of the disclosing party, and no license or other rights are granted or implied hereby. The receiving party shall, upon the disclosing party's request, return the original and all copies of tangible

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Proprietary Information. Any masks generated by TSMC from Analog Devices' database tapes shall be the property of Analog Devices, and will be returned to Analog Devices upon request. TSMC reserves all rights to any modifications or improvements to the Process and to any TSMC Proprietary Information received or acquired during the course of performance of this Agreement.

9.3 The obligations under this Section shall survive the termination or expiration of this Agreement for five (5) years from the date of termination or expiration.

10. WARRANTY

10.1 TSMC warrants that the Products delivered hereunder shall meet the Quality and Reliability Specifications and shall be free from defects in material and workmanship under normal use for a period of ******* **** from the date of shipment. If, during the ******* **** period, (i) TSMC is notified promptly in writing upon discovery of any defect in the Products, including a detailed description of the alleged defect, (ii) such Products are returned to TSMC, ********** (INCOTERMS 1990), and (iii) TSMC's examination of such Products reveals that such Products are indeed defective and such defect was not caused by accident, abuse, misuse, neglect, improper installation or packaging, repair or alteration by someone other than TSMC, or improper testing or use contrary to any instructions given by TSMC, then TSMC shall, upon mutual agreement, either repair, replace, or credit Analog Devices for such defective Products. TSMC shall return any Products repaired or replaced under this warranty to Analog Devices transportation prepaid , and shall reimburse Analog Devices for the transportation charges paid by Analog Devices for returning such defective Products to TSMC. The performance of this warranty shall not act to extend the ********** warranty period for any Products repaired or replaced beyond that period applicable to such Products as originally delivered.

10.2 The foregoing warranty constitutes TSMC's exclusive liability, and Analog Devices' exclusive remedy for any non-conformity of the Products with the Quality and Reliability Specifications, or for any defects in material or workmanship of the Products.

THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

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10.3 Notwithstanding the provisions of Subsection 10.1 above, prior to any return of allegedly defective Products by Analog Devices pursuant to Subsection 10.1 Analog Devices shall first afford TSMC the opportunity upon TSMC's request, to inspect the allegedly defective Products at Analog Devices' facilities. If TSMC thereby determines that the allegedly defective Products are defective or non-conforming with the Quality and Reliability Specifications, or that such alleged defects are caused by defects in material or workmanship of TSMC, then Analog Devices shall be entitled to repair, replacement or credit under Subsection 10.1.

11. INTELLECTUAL PROPERTY INDEMNITY

11.1 Subject to Subsection 11.2 below, TSMC shall, at its expense and at Analog Devices' request, defend any claim or suit brought against Analog Devices, to the extent that it is based solely on a claim that the Process used by TSMC pursuant to this Agreement infringes any patent, copyright, trade secret or other proprietary rights of a third party, and TSMC shall indemnify and hold Analog Devices harmless from and against any costs, damages and fees reasonably incurred by Analog Devices, including but not limited to attorney's fees, that are attributable to such claim or suit, provided that (i) Analog Devices gives TSMC reasonably prompt notice in writing of any such claim or suit, and permits TSMC, through counsel of its choice, to answer the charge of infringement and defend such claim or suit; (ii) Analog Devices provides TSMC information, assistance and authority, at TSMC's expense, to enable TSMC to defend such suit or claim; (iii) TSMC shall not be responsible for any settlement made by Analog Devices without TSMC's written permission.

11.2 TSMC shall have no liability under this Agreement for any claim or suit to the extent that the alleged infringement is attributable to ********** ********** ********** ********** ********** ********** ********** ******* any costs, damages and fees reasonably incurred by TSMC, including but not limited to attorneys' fees, that are attributable to such claims or suit, provided that (i) TSMC gives Analog Devices reasonably prompt notice in writing of any such claim or suit, and permits Analog Devices, through counsel of its choice, to answer the charge of infringement and defend such claims or suit; (ii) TSMC provides Analog Devices information, assistance and authority, at Analog Devices' expense, to enable Analog Devices to defend such claim or suit; and (iii) Analog

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Devices shall not be responsible for any settlement made by TSMC without Analog Devices' written permission.

11.3 If the court or a settlement enjoins the use of the Process by TSMC or if, in TSMC's opinion, the Process is likely to become the subject of a claim of infringement, TSMC shall have the option to modify such Process so that it becomes non-infringing, substitute a substantially equivalent noninfringing process, or obtain the right to continue using the Products furnished under this Agreement, or aid Analog Devices in identifying and qualifying a viable alternative.

11.4 The foregoing states the entire liability and exclusive remedies of TSMC and Analog Devices for infringement by the Products, the Process and the production of the Products furnished hereunder.

12. LIMITATION OF LIABILITY

12.1 In no event shall TSMC be liable for any indirect, special, incidental or consequential damages (including loss of profits and loss of use) resulting from, arising out of or in connection with TSMC's performance or failure to perform under this Agreement, or resulting from, arising out of or in connection with TSMC's producing, supplying, and/or sale of the Products or any part thereof, whether due to a breach of contract, breach of warranty, tort, or negligence of TSMC, or otherwise.
****
****
********** **********.

13. EXPORT CONTROL

13.1 TSMC and Analog Devices are subject to national export control regulations of the Republic of China and Republic of Ireland and in addition, to the Export Administration Regulations of the United States of America. TSMC and Analog Devices will take all appropriate measures not to violate these regulations and will keep the other party fully harmless from all damages arising out of or in connection with any violation.

14. TERM AND TERMINATION

14.1 The term of this Agreement shall be for five (5) years commencing from the date hereof.

14.2 This Agreement may be terminated by either party if the other party (i) breaches any material provision of this Agreement and does not cure or remedy such breach within *** ******* ****** ***** **** of notice of

breach; (ii) becomes the subject of a voluntary or involuntary petition in bankruptcy or any proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors if such petition or proceeding is not dismissed with prejudice within sixty (60) days after filing. If Analog Devices is the breaching party under this provision, then TSMC shall be entitled to stop the production of the Products upon giving notice to Analog Devices, and Analog Devices shall be obligated to pay for all finished Products and work-in-process (partially finished Products) which are identifiable to this Agreement, at the purchase prices set forth in Section 8 without prejudice to damages that may be claimed by TSMC due to the breach of Analog Devices.

14.3 In addition to Section 9 above, the provisions under Sections 11, 13 and 16 shall survive the termination or expiration of this Agreement.

15. FORCE MAJEURE

15.1 Neither party shall be responsible for any delay or failure to perform under this Agreement if such delay or failure is caused by unforeseen circumstances or to causes beyond its control, including but not limited to acts of God, war, riot, embargoes, labor stoppages, acts of civil and military authorities, fire, floods, earthquakes or accidents.

16. NON-PUBLICITY

16.1 No publicity or information regarding the existence or contents of this Agreement shall be given or released by either party without the prior written consent of the other party, except to the extent required by law or regulation.

17. ASSIGNMENT

17.1 Neither party shall delegate any obligations under this Agreement or assign this Agreement or any interest or rights hereunder without the prior written consent of the other, except that TSMC shall be free to choose the mask vendor to make mask sets and/or to subcontract the packaging of the Devices, and (ii) Analog Devices shall be permitted to make purchases of Wafers from TSMC under this Agreement on behalf of Affiliates or third parties designated by Analog Devices and reasonably acceptable to TSMC, and all such purchases shall be considered purchases by Analog Devices for purposes of this Agreement. Analog Devices will remain responsible for those purchases. made by Analog Devices for its Affiliates and third parties pursuant to this section 17.

18. GOVERNING LAW

18.1 This Agreement shall be governed by and construed in accordance with the laws of the State of California, USA.

18.2 In the event of any dispute arising out of or in connection with this Agreement which cannot be amicably settled by the parties, the parties hereto agree to submit any such disputes to appropriate courts of law located in the State of California, USA which shall have exclusive jurisdiction over the subject matter.

19. NOTICE

19.1 All notices required or permitted to be sent by either party to the other party under this Agreement shall be sent by registered mail postage prepaid, or by personal delivery, or by fax. Any notice given by fax shall be followed by a confirmation copy within ten (10) days. Unless changed by written notice given by either party to the other, the addresses and fax numbers of the respective parties shall be as follows:

To TSMC:

Taiwan Semiconductor Manufacturing Company, Ltd.
No. 121, Park Avenue 3
Science Based Industrial Park
Hsin-Chu, Taiwan
Republic of China
Fax: 886-35-781546
Attn:

To Analog Devices:

Analog Devices B.V.
Bay F-1
Raheen Industrial Estate
Limerick, Ireland
Fax: 353-613-08448
Attn: Managing Director

With a copy to:

Analog Devices, Inc.
One Technology Way
P. O. Box 9105
Norwood, MA 02062-9106
USA
Fax: 1-617-461-4100
Attn: Vice President & General Manager

20. ENTIRE AGREEMENT

20.1 This Agreement and attached Exhibits 1.1, 2.6, 2.9, 3.1A, 3.1B, 5.2, 7.2 and 8.1 constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes and replaces all prior or contemporaneous understandings, agreements, dealings, and negotiations, oral or written, regarding the subject matter. Any terms and conditions listed in the Purchase Orders placed by Analog Devices under this Agreement shall not constitute part of this Agreement, nor affect or revise the terms and conditions of this Agreement, even in cases such Purchase Orders are signed and returned by TSMC, unless both parties expressly agree in writing to include any such terms or conditions in the Agreement. No modification, alteration or amendment of this Agreement shall be effective unless in writing and signed by both parties. No waiver of any breach or failure by either party to enforce any provision of this Agreement shall be deemed a waiver of any other or subsequent breach or a waiver of future enforcement of that or any other provision.

20.2 This Agreement is entered into concurrently with an Option Agreement between the same parties. In the event of an conflict or inconsistency between the provisions of this Agreement and those of the Option Agreement, the Option Agreement shall control.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be duly executed in duplicate on their behalf by their duly authorized officers and representatives on the date given above.

Taiwan Semiconductor Manufacturing Company, Ltd.	Analog Devices, BV
/s/ Donald Brooks	/s/ Joseph E. McDonough
Signature	Signature
Donald Brooks	Joseph E. McDonough
Name in Print	Name in Print
President	Managing Director
Title	Title

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ATTACHMENTS

ATTACHMENT 1.1 ANALOG DEVICES PROCUREMENT SPEC

ATTACHMENT 2.6 TSMC TECHNOLOGY ROADMAP

ATTACHMENT 2.9 REQUIREMENTS TO ********** ********** ANALOG DEVICES

ATTACHMENT 3.1A QUALIFICATION PLAN

ATTACHMENT 3.1B QUALITY AND RELIABILITY SPECIFICATIONS

ATTACHMENT 5.2 AUDIT INFORMATION

ATTACHMENT 7.2 INSPECTION AND ACCEPTANCE TESTING METHODS

ATTACHMENT 8.1 PRICES

ATTACHMENT 1.1

/ShippiSpecification No.: ADI-0018 REV. D
Sun TITLE: TSMC GENERAL PROCUREMENT SPECIFICATION

REVISION HISTORY

ECN #	DATE	REV.	AUTHOR	DESCRIPTION OF CHANGE
61365	******	A	K. LISIAK	INITIAL RELEASE
65075	******	B	M. ROBINSON	REVISE APPENDIX 1 AND 4 ADD 3.11, 3.12, 3.13
67614	******	C	GARY CHEEK	ADD PROCESS & DEVICE CODE DEFINITION TO APPENDIX 3
		D	P. KORALISHN	UPDATE APPENDIX 1 & 3; UPDATE SEC. 9.2

START ADI-0018 REV. D CURRENT

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1.0 GENERAL

1.1 The purpose of this specification is to define the procedure for the supply of products manufactured at TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY (TSMC).

1.2 This specification applies to all parts supplied to Analog Devices Inc. and manufactured at TSMC.

1.3 Electrical test limits, topology information, assembly requirements and other division and product-specific requirements will be detailed in a separate specification referring to this document.

1.4 A Purchase Order as described in 7.0 is required for wafer fabrication.

2.0 APPLICABLE DOCUMENTS

2.1 The following documents, of the revision in effect on the date of order, form a part of this specification to the extent specified in this document.

2.1.1 Visual inspection requirements per TSMC Specification **********.

2.1.2 Electrical test requirements per the product- specific procurement specification.

2.1.3 Topology requirements per the product-specific procurement specification.

2.1.4 Bond strength requirements per ********** **********.

2.1.5 SEM metallization step coverage requirements per **********.

2.1.6 Die attach requirements per ********** **********.

2.1.7 Glassivation integrity requirements per ****** **********.

2.1.8 Process changes requiring ADI notification per TSMC spec. ********** and Appendix 2 of this document.

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2.2 The following documents, of the revision noted below, form a part of this specification to the extent specified in this document. Revised versions of these specifications become effective when updated on this list.

2.2.1 PCM Measurement specification, TSMC specification **********.

2.2.2 Regulation of Wafer Packing, TSMC specification **********.

2.2.3 If any item of quality or conformance is not explicitly defined here, the TSMC quality manual shall define the procedures and requirements. A list of relevant specification numbers is attached in Appendix 4.

3.0 REQUIREMENTS

3.1 TSMC will manufacture product for Analog Devices Inc. using the processes listed in Appendix 1.

3.2 ********** **********.

3.3 TSMC must provide Analog Devices Inc. with a formal written notification of proposed Significant Process Changes that may affect the electrical parameters, quality or reliability of the finished devices. No major change may be implemented prior to ADI acknowledging and approving the change.

Significant Process Changes are defined in Appendix 2.

3.4 PCM Measurement Technology must comply with TSMC specification: **********.

3.5 PCM Monitor data must comply with TSMC specifications by number and revision level as listed IN APPENDIX 3.

3.6 For each wafer, TSMC will test * PCM sites. A wafer must be rejected if * or more sites fail the PCM specification.

3.7 Parametric results, traceable to each individual wafer, must be available to Analog Devices. This data must be maintained by TSMC for ADI use for a period of at least one year.

The Parametric results (WAT SUMMARY REPORT) must be sent with the Wafer Lot, and a copy must also be sent electronically to the Analog Devices' designated representative for the respective ordering division as specified with the purchase order.

3.8 For Engineering lots and on request, the WAT SUMMARY REPORT will also include all other tested parameters which do NOT have PASS/FAIL criteria, as per the usual TSMC procedures. Specific requirements regarding these added tests for any lot shall be communicated to TSMC with the order.

3.9 Only wafers that have met the required criteria and are documented as having passed are to be shipped to Analog Devices or a location designated by Analog Devices.

In the case of wafers being shipped to a designated location, it is the responsibility of TSMC to ensure Parametric information has been sent to the Analog Devices PRODUCT ENGINEER as designated in the Purchase Requisition.

3.10 TSMC must provide ********* monitor information on electromigration, step coverage, metal integrity, gate oxide integrity, and Vt stability for the relevant processes, listed in APPENDIX 1. TSMC shall specify normal control limits for these monitors. Any process, for which no product using that process was ordered or delivered for ********, does not require ********* monitors.

3.11 TSMC will work with ADI to jointly determine defect density and defect size distribution for all wafer fabrication areas. This data will be used to continuously validate the yield models.

3.12 OZONE DEPLETING SUBSTANCES (O.D.S.) must not be used in the manufacturing and/or cleaning of components for Analog Devices, Inc. after 1/1/93.

3.12.1 Use of OZONE DEPLETING SUBSTANCES in manufacture and / or cleaning occurs when any component or part of a product is ever in contact with ANY QUANTITY of an OZONE DEPLETING SUBSTANCE anywhere in the manufacturing chain.

3.12.2 The definitions of Ozone Depleting substances are as follows:

CLASS 1 SUBSTANCES are those which significantly cause or contribute to harming the OZONE LAYER and have an OZONE DEPLETING POTENTIAL (O.D.P.) GREATER THAN OR EQUAL TO 0.2. These substances, which include all ISOMERS, are separated into five groups:

GROUP 1 - CFC 11,12,113,114,115
GROUP 2 - HALON 1211,1301,2402
GROUP 3 - OTHER CFC's with ONE, TWO or THREE CARBON ATOMS.
GROUP 4 - CARBON TETRACHLORIDE

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GROUP 5 - METHYL CHLOROFORM (except the 1,1,2 ISOMER)

CLASS 2 SUBSTANCES are those which are known or may be reasonably anticipated to cause or contribute to harmful effects on the Ozone layer. These substances include all ISOMERS of HCFC's having ONE, TWO or THREE CARBON ATOMS.

++
ALL CLASS 1 AND CLASS 2 SUBSTANCES ARE
CONSIDERED TO BE OZONE DEPLETING SUBSTANCES.
++

3.13 REWORK

3.13.1 REWORK (the strip and redeposition or regrowth of a layer to correct a non-conformance to a specification limit) may not be performed. The following are not considered rework, but must be identified for each lot affected:
**********. All other processing to continue or finish incomplete processing is not allowed.

3.14 DISPOSITION

3.14.1 A wafer lot shall be maintained as a traceable, homogeneous group, with all wafers starting and completing processing at the same time. (No bonus lots or combination lots are allowed.) TSMC shall reject or hold all lots which do not meet parametric specifications for engineering disposition. An MRB release must be signed by the responsible ADI engineer prior to shipping or sending such material on to assembly.

3.15 MINIMUM YIELD

The mean and standard deviation of a product yield will be calculated and the (Mean-4sigma) will be used to determine the yield cutoff subject to the following conditions:

For Die > **** sq. mils the yield cut-off will be:

i) **********
or ii) **********
or iii) ********** **********

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For Die < **** sq. mils the yield cut-off will be:

i) **********
or ii) **********
or iii) ********** **********

3.16 For all ADI wafers processed, in-line control data will be made available to the foundry engineering group upon request. This data will be presented in a form that allows ADI to determine where the in-line monitor data for the ADI materials is positioned statistically relative to all materials processed in the manufacturing line.

4.0 APPROVED MASKS AND PROCESSES

4.1 TSMC shall maintain a cross reference table of product and mask level revision codes indicating ADI and TSMC product designations and the process version for each product. A current copy of this matrix will be provided to the EXTERNAL FOUNDRY MANAGER on a monthly basis.

4.2 TSMC shall acknowledge product revision level, process, and process status (Production, Risk, etc.) for each order.

4.3 TSMC shall ensure that mask tooling is supplied in accordance with appropriate technical and quality standards normally specified by TSMC.

4.3.1 Any mask supplier for ADI products will be an existing approved vendor to TSMC. All masks will conform to TSMC specifications appropriate to the wafer manufacturing process to which they relate.

4.3.2 TSMC will have a non-disclosure agreement in place with any mask vendor used for ADI products.

4.3.3 All masks for use on ADI products will be inspected by TSMC prior to use, per TSMC incoming mask inspection procedure specification **********. All non-conforming masks will be replaced prior to use on wafers.

4.3.4 ADI must be informed in writing of all major changes related to the manufacture of masks, including:

Change of materials
Change of materials supplier
Change of manufacturing location.

5.0 PROBED WAFERS

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5.1 PROCEDURE.

5.1.1 TSMC shall probe all wafers in accordance with product-specific procedures provided by ADI.

5.1.2 Probe programs will be kept under revision control and cross checked for accuracy using test standards provided by ADI at each change of test set-up.

5.1.3 Acceptable dice may have no more than * probe marks on each bond pad for parts that go through the production probe flow once. For device which go through a logic probe and a memory probe, no more than * probe marks are allowed.

5.1.4 Reject dice must be clearly marked with a single black ink spot. Good dice must be unmarked.

5.1.5 All other die visual inspection criteria shall conform to TSMC specification **********.

5.2 BINNING

5.2.1 TSMC shall provide data on product yield to all test bins when each lot is shipped out of the probe area. Bin yield data shall be sent to the ADI ordering location. At ADI's option, the bin data on a wafer basis for every product will be made available to the Foundry Engineer Manager or an agreed upon electronic format.

5.3 DISPOSITION

5.3.1 All wafers from a lot shall be probed, reported and dispositioned together, except where a partial or split lot was requested by ADI. TSMC shall hold all lots which do not meet minimum probe yield levels for engineering disposition. An MRB release must be signed by the responsible ADI engineer prior to shipping or sending such material on to assembly.

6.0 TESTED FINISHED PRODUCT

6.1 PROCEDURE.

6.1.1 TSMC shall test all product in accordance with product-specific procedures provided by ADI.

6.1.2 Test programs will be kept under revision control and cross checked for accuracy using test standards provided by ADI at each change of test set-up and at least once per 8 hour shift.

6.2 BINNING

6.2.1 TSMC shall provide data on product yield to all test bins when each lot is shipped out of the test area. Bin yield data shall be sent to the ADI ordering location. At ADI's option, the bin data on a lot basis for every product will be made available to the Foundry Engineering Manager on an agreed upon electronic format.

6.3 DISPOSITION

6.3.1 All product from a single wafer fab lot shall be tested, reported and dispositioned together, except where a partial or split lot was requested by ADI. TSMC shall hold all lots which do not meet minimum standard test yield for engineering disposition. An MRB release must be signed by the responsible ADI engineer prior to shipping such material.

7.0 ORDERING

7.1 All Analog Devices Purchase Orders for the manufacture of wafers at TSMC will contain as a minimum the following information:

DIVISION SPECIFICATION FOR PROCUREMENT OF THIS PART
PRODUCT FORM (unprobed wafers, probed die in wafer form, assembled, or assembled and tested finished product)
NUMBER OF WAFERS, DIE OR FINISHED GOODS
ACCEPTABLE TOLERANCE (over/under) ON QUANTITY
STARTING MATERIAL
PROCESS
ADI AND TSMC DEVICE NAME
PRICE AND TERMS
REQUIRED DELIVERY DATE
SHIP TO DESTINATION
SHIPMENT INSURANCE REQUIREMENTS
BILLING INFORMATION
PROBE REQUIREMENTS (probed die or finished product)
ORDERING DIVISION PRODUCT ENGINEERING CONTACT

The Purchase Order (initiated by a Purchase Requisition) should also clearly indicate if a Production lot, an Engineering Evaluation lot or a New Product lot is being ordered.

7.2 PURCHASE REQUISITION - ENGINEERING SIGNOFF

Purchase Requisitions for any device on a process (or process variation) not included in this specification, require signoff by the division PROCESS ENGINEER and QUALITY CONTROL ENGINEER. Details of process (or process change) must accompany the

Purchase Requisition, along with an ECO to update this spec. (ADI-0018)

8.0 TRACEABILITY

8.1 Customer Product Status Report (WEEKLY STATUS REPORT) must be sent to the EXTERNAL FOUNDRY MANAGER and to the PRODUCTION CONTROL at each Analog Devices site at least once per week. This report will describe the status of all active lots and contain a minimum of

PURCHASE ORDER NUMBER
TSMC DEVICE NAME
ANALOG DEVICES DEVICE NAME
LOT NUMBER
CURRENT PRODUCTION STAGE
CURRENT LOT SIZE
SHIP DATE (for completed lots)

In addition, the report will summarize the status of each purchase order showing quantity shipped and projected schedule for open items.

8.2 Shipped or scrapped lots will be kept on the report for a period of one week after which they will be deleted from the report.

8.3 The TSMC lot number will identify production lots from engineering lots using the format:

**xxxx.x	production lot
**xxxx.x	production lot
**xxxx.x	production lot
**xxxx.x	engineering, split or skew lot (first silicon or pilot lot on production process)
**xxxx.x	development lot (process is under development)
**xxxx.x	TSMC R&D lot

8.4 Copies of all lot histories, parametric data, probe test results, final test results, and related quality data shall be kept by TSMC for a period of not less than 3 years and shall be identifiable by date and lot number.

8.5 Other Reporting Requirements

8.5.1 ******* Commit Schedule. This report would show ADI requested volumes, by process, for at least * months into the future in ******* buckets, with TSMC's commit schedule relative to request. If several ADI divisions

are involved, each division should be reported separately, with an ADI total.

8.5.2 The following production lot travellers should be completed and shipped to ADI with the individual production lots:

Assembly Lot Traveller (ASAT, ANAM, etc.)
Test Lot Traveller (TSMC)

8.5.3 TSMC should provide a list of standard turntimes for each major step in the process flow (i.e. fab, probe and test). This information should be updated whenever turn-times change for any reason. This information is critical for ADI to properly plan end-product deliveries to our customers.

9.0 PACKAGING

9.1 All wafer packaging must comply with the TSMC document no: **********.

9.2 METHOD

Wafers must be inspected and packed under a maximum of class ****** conditions, except EPROM wafers which will be handled in maximum class *** conditions. Wafers shall be stored in a controlled environment such that wafers shall not degrade physically or electrically and shall at no time exceed the temperature range of **** to ****.

For wafers <= ** mils in thickness, Cylindrical Wafer Shipping Boxes shall be used. For wafers >= ** mils in thickness, EMPAC shipping boxes shall be used.

A maximum of ** wafers should be put into the Cylindrical Wafer Shipping Box. Wafers are to be loaded by vacuum wands in the following procedure:

ANTI STATIC SPONGE,
CONDUCTIVE PAPER,
WAFER,
CONDUCTIVE PAPER,
ANTI STATIC SPONGE,
ETC.

The last sponge must be at least *** from the rim of the box. If there are less than ** wafers, additional sponges should be used, still maintaining *** clearance at the rim of the box.

For wafers >= ** mils

Containers must be 100% inspected for foreign material.

The container is then to be sealed such that particular matter and other contamination are prevented from coming in contact with the enclosed wafers.

All primary packaging must be non-shedding. The individual containers are to be packed in a corrugated box (or similar pack) and secured to prevent damage during transit.

In the case of individual wafers a single wafer packing method may be used as defined in the TSMC document
****
**********.

10.0 SHIPMENT REQUIREMENTS

10.1 All shipments must be preceded by a shipping alert. The shipping alert will be sent to both the ordering location and the designated shipping destination prior to sending any material. The shipping alert must contain the same information as the packing list, as shown below.

10.2 All outer containers must contain a packing list with the following information for production material:

MANUFACTURERS NAME AND ADDRESS
DATECODE OR DATE OF MANUFACTURE
ANALOG DEVICES PART NUMBER.
LOT NUMBER
QUANTITY OF WAFERS (FOR WAFERS, PROBED OR UNPROBED)
QUANTITY OF DIE (FOR PROBED WAFERS)
QUANTITY OF FINISHED UNITS (FOR ASSEMBLED PRODUCT)
ANALOG DEVICES' PURCHASE ORDER NO. (P.O. No.)
QC ACCEPTANCE STAMP
SYMBOL INDICATING THAT MATERIAL IS STATIC SENSITIVE.

11.0 QUALITY ASSURANCE PROVISIONS

11.1 Responsibility for inspection: The manufacturer is responsible for controlling the quality of this product and must provide devices that conform to all requirements specified here.

11.2 ADI reserves the right to perform periodic audits of wafer documentation, process flow charts, SPC program and processing after giving the manufacturer *** week notice.

12.0 SPECIFICATION CHANGES

12.1 This document is under Engineering Change Order (ECO) control at Analog Devices, Inc. Wilmington.

TSMC will be involved in the SIGNOFF list for any changes to this document.

TSMC will also be on the controlled circulation list for this document.

12.2 Any changes and updates to this controlled specification must be directed to the ADI EXTERNAL FOUNDRY MANAGER.

12.3 Any proposed changes to TSMC specifications listed in this document must be approved by the ADI EXTERNAL FOUNDRY MANAGER and the new revision level reflected in this document before being implemented. Analog Devices must be on the controlled circulation list for all TSMC specifications referenced in this spec. A copy of each document must be kept in the TSMC Central File in Analog Devices, Inc., Wilmington.

13.0 COMMUNICATIONS CHANNEL

13.1 The following communication channel between TSMC and Analog Devices should be observed:

MAIN CONTACT: EXTERNAL FOUNDRY MANAGER
SECONDARY CONTACT: PRODUCT ENGINEER
(new products and engineering lots)
SECONDARY CONTACT: PRODUCTION CONTROL
or MATERIAL CONTROL
(released products)

The EXTERNAL FOUNDRY MANAGER must be copied on all Engineering correspondence and documents and on all new product and production lot status reports.

13.2 The following communication channel between Analog Devices and TSMC should be observed:

MAIN EUROPEAN CONTACT:
TSMC European Sales Manager
MAIN U.S. CONTACT:
TSMC San Jose Sales Manager

One of these persons should be copied on all correspondence.

13.3 CENTRAL FILE

13.3.1 In Analog Devices, a Central File for TSMC will contain controlled copies of all specifications referenced in this document, and other relevant information, related documentation and procedures. The Central File will be located in Wilmington, Massachusetts. These will address all areas of interest (e.g. Design, Fabrication, Quality, Product Engineering).

13.3.2 All specifications and technical information sent to individual ADI sites should also be copied to the Central File in Wilmington, Massachusetts.

13.4 RETURNS POLICY

TSMC shall accept return of discrepant material for up to ** days from the date of final shipment to ADI or their designated representative. Material shown to not conform with specifications shall be replaced or credited at the option of ADI.

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APPENDIX

TSMC PROCESS SPECIFICATION CROSS REFERENCE LIST FOR ADI

PROCESS CODE	DESCRIPTION
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********

PROCESS FLOW AND DESIGN RULE SPECIFICATIONS

PROCESS CODE	PROCESS FLOW	DESIGN RULE
**********	**********	**********
**********	**********	**********
**********	**********	**********
**********		
**********		
**********		
**********	**********	**********
**********		
**********		
**********		
**********	**********	**********
**********	**********	**********

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**********	**********	**********
**********	**********	**********
**********	**********	**********

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APPENDIX 2

SIGNIFICANT PROCESS CHANGES

* WAFER DIAMETER

* CHANGES TO PROCESS FLOW CHART

* WAFER FAB MOVE - ONE WAFER FAB AREA TO ANOTHER

* MAJOR CHANGES which affect the electrical parameters, quality or reliability of the device as defined in

  TSMC DOCUMENT NO:

  ********** (Engineering Change Request) **********,
  ********** (Engineering Change Request Notice Procedure) **********,

  Analog Devices must be on the controlled circulation list. A copy of these document must be kept in the TSMC Central File at Analog Devices Inc., Wilmington, MA.

* Changes in Metal Composition on finished product wafer.

* Changes to the composition of the passivation materials.

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APPENDIX 3

PCM SPECIFICATION CROSS REFERENCE

For some processes with product-specific requirements, alternate PCM spec. and/or test line may be required. The list below reflects the active PCM and test line combinations for ADI products.

PROCESS CODE	PCM SPEC	TEST LINE
**********	*********	****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	****
**********	*********	*****
**********	*********	*****
**********	*********	*****
**********	*********	****

PROCESS CODE DEFINITION

e.g.**********

```
****: ********
**  : ************************
*** : ****************
**  : ********
      ********
```

DEVICE CODE DEFINITION

Once a foundry form is received, TSMC will identify the manufacturing requirements in a coded format as follows. This then remains as the official production instructions for the product lifetime. The last four digits in the device name have not been seen before by ADI and must be included in the procurement spec.

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e.g. ********** and **********

******	:	Standard part number assigned by TSMC.
***	:	Example identifies a **** ****** with this **** from another part being used.
*	:	**********
*	:	**********
Z	:	Internal use at TSMC only.
*	:	**********

APPENDIX 4

TSMC QUALITY MANUAL SPECIFICATIONS

The following is a list of the TSMC quality specifications, which are considered part of this document. A controlled copy of each must be maintained in the TSMC Central File at Analog Devices in Wilmington. ADI must be on the sign-off for any changes to these specifications.

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Table 1:

TSMC Spec No.	Document Title
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	********** **********
**********	**********
**********	**********
**********	********** *********
**********	**********
**********	**********
**********	********** *******
**********	**********
**********	**********
**********	**********
**********	********** **********
**********	**********
**********	********** **********
**********	**********
**********	**********
**********	********** **********
**********	**********

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Table 1:

TSMC Spec No.	Document Title
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	********** **********
**********	********** *********
**********	**********

Note: Use the most current version of these specifications.

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ATTACHMENT 2.6

GENERIC TECHNOLOGY ROADMAP

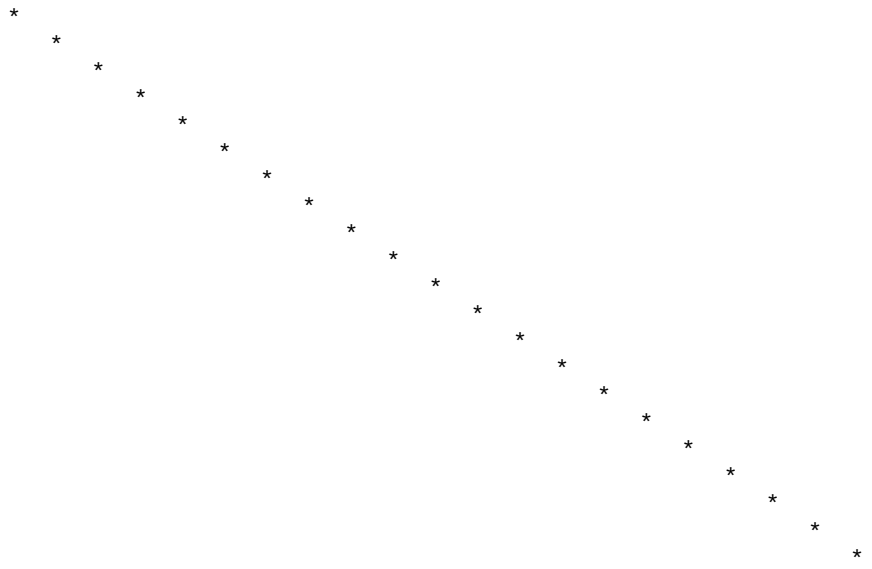

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EXHIBIT 2.9

REQUIREMENTS TO ********** TO **********

TSMC and ANALOG DEVICES agree to an objective to **********
**********, starting some time in the next ** months.

PROJECT DEFINITION:

TSMC and ANALOG DEVICES will ********** ANALOG DEVICES, herein assumed to be the **********, and hereafter referred to as the *********.

GOAL OF THIS PROJECT:

The ******* would be ********** using the **********.

********** will be completed in **** months from the time that ********** begins to ****** in the **********.

PROPOSED DEFINITION OF **********

All ********** and ********** have been ********** at **********.

********** for the ******* have been ******** and ********** at ********** with ********** *** from the **********.

KEY ASSUMPTIONS:

ANALOG DEVICES will have a ********** to ********** issues as they arise.

The ********** at TSMC, at all ********** levels, will be authorized without ambiguity to ********* ********** and **** of the ********** ******* to ANALOG DEVICES *********.

One ********** would ******** to **** for a period of time, estimated to be **** to ****** months, as a member of the **********. The essence and the details of the ********** will be ********** through this ********** and **********. This ******** may need to ********** at **** for the duration of the ******** to act as the **********

**********, while at ****, will have access to the ********** appropriate **********, designated office space and communication equipment.

Every effort will be made to protect proprietary information of other **********.

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A dedicated ********************************, will be assigned to this project, with the responsibility to assure that the ******************************** are ********* the ********** that they need. ******************************** will work with the **********************, who will request, review, and approve ************* related to the ********. These ********* will be ********** into ******* from ******* at **********************.

************** would also ******************* at the ************** for short periods of time to ********************** in a ************* of **********. **** will provide ****************************** to resolve ***************** in ************ the ******************. The details will have to be discussed further at a later date when more information is available.

************** would ************** of the ******** including ************************ of **********************, and related direct ******** of ********************** to the project or ******* to ********************.

**** agrees to provide a ************* of the *************, the ************ of the ************, the **************************** and the ****************** of the ********************************** to **************.

************** and **** agree to ************************** ******************************** this *******.

**** will ************************** to **** and any ************ arrangements which cover this *******; provided, however, **** shall not be required to disclose any confidential information which it is not permitted to disclose under *****************************.

**** shall ***** to **************, ******* to ***************** included in the ******* to which **** has *************.

THE CRITICAL ITEMS TO BE ************ INCLUDE THE FOLLOWING:

A ***************** of the ********************, including key options. (An *************** has been received.)

The ************ of the ******** in terms of ************* ****************** and ***************** and the ********************** to arrive at this ****.

The ******************************** and ****************** used for the ********** and **************************.

The actual ****************** to ******** the *******, including ****** from the ***************** to ********* the ************************. (Preliminary ************ have been received.)

Detailed access to the ********************** used in this ******************, such as ************ and ************, specific ************, special ********************************, and *************** between ****************.

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The ********** and ********** procedures for **********.

Highly detailed ********** and ********** indicating all critical details such as the **********
****
****
********** (i.e. use of **********), ********** and **********, **********
********** from ********** and **********.

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ATTACHMENT 3.1-A

QUALITY CONTROL/RELIABILITY

SPECIFICATION NAME	SPECIFICATION NUMBER
**********	
**********	**********

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ATTACHMENT 3.1-B

QUALITY CONTROL/RELIABILITY

SPECIFICATION NAME	SPECIFICATION NUMBER
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	**********
**********	********** Obsolete Replaced by: **********
**********	**********
**********	**********
**********	**********

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EXHIBIT 5.2

AUDIT PROCEDURES

Analog Devices may conduct a QA audit of TSMC wafer fabrication facility (re-audit at Analog Devices option on ********* frequency, with ********* prior notification). Items to be included in the QA audit will include but not limited to the following:

*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*

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Attachment 7.2

Inspection and Acceptance Testing Methods

The following specifications describe the requirements and the minimum conformance standards for TSMC manufactured products. The specifications listed below apply to all products manufactured by TSMC for Analog Devices.

1) TSMC Document **********

2) ADI0018: TSMC General Procurement Specification (Attachment 1.1)

3) ADI Product probe requirements, per the Product-specific Procurement Spec (for wafers delivered from TSMC probed, or unprobed for Analog Devices probing)

4) ADI Product test requirements, per the Product-specific Procurement Spec (for assembled products delivered from TSMC tested, or untested for Analog Devices testing)

The above specifications identify the electrical criteria, minimum yield criteria, visual criteria, and structural and mechanical standards that all TSMC manufactured products are required to meet.

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ATTACHMENT 8.1
PRICING

PROCESS	1995 (****)	1996 (BUDGETARY)
**********	$***	$***
**********	$***	$***
**********	$***	$***
**********	$***	$***
**********	$***	$***
**********	$***	$***
**********	$***	$***
**********	$****	$****
**********	$****	$****
**********	$****	$****
**********	$****	$****
**********	$****	$****
**********	$****	$****
**********	$****	$****
**********	$***	$***
**********	$****	$****
**********	$***	$***
**********	$****	$****

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1995 PROTOTYPE NRE

Process Technology	Masking Layers	Nbr of Masks	Prototype NRE	Prototype Days	Super Hot Lot NRE	Super Hot Lot Days
**** **** ----- ********* ****	**	**	$***	*****	$***	*****
********* ****	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** **** *******	**	**	$***	*****	$***	*****
***** ****	**	**	$***	*****	$***	*****
***** ****	**	**	$***	*****	$***	*****
***** ****	**	**	$***	*****	$***	*****

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1995 PROTOTYPE NRE
(continued)

Process Technology	Masking Layers	Nbr of Masks	Prototype NRE	Prototype Days	Super Hot Lot NRE	Super Hot Lot Days
****						
****						
****						

*****	**	**	$***	*****	$***	*****
****						
*****	**	**	$***	*****	$***	*****
****						
****						
****						

*****	**	**	$***	*****	$***	*****
****						
*****	**	**	$***	*****	$***	*****
****						
******						

*****	**	**	$***	*****	$***	*****
****						
*****	**	**	$***	*****	$***	*****
****						

WARNING: THE EDGAR SYSTEM ENCOUNTERED ERROR(S) WHILE PROCESSING THIS SCHEDULE.

5

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS OF ANALOG DEVICES, INC. FOR THE NINE MONTHS ENDED JULY 29, 1995 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

1,000
U.S. DOLLARS

9-MOS	
OCT-28-1995	
OCT-30-1994	
JUL-29-1995	
1	
62,268	
66,233	
185,700*	
0	
135,790	
486,144	
796,566	
412,985	
911,536	
201,574	
80,000	
12,703	
0	
0	
606,944	
911,536	
684,352	
684,352	
337,980	
337,980	
235,188	
0	
3,242	
111,819	
27,683	
84,136	
0	
0	
0	
84,136	
1.06	
1.06	

*ASSET VALUE REPRESENTS NET AMOUNT