SIGNETICS CORPORATION KEY EVENT CHRONOLOGY

Compiled by Donald F. Liddie
Former Executive Vice President of Signetics/Philips Semiconductors
[Annual revenue and headcount data from DFL index binder]

June 1961 – David James and Lionel Kattner meet with Lehman Brothers in New York to discuss starting an IC company

August 1961 – D. F. Allison, David James, Lionel Kattner and Mark Weissenstern resign from Fairchild to form Signetics with the backing of Lehman and other investors.

Sept. 12, 1961 - Signetics Corporation is founded in Mountain View, California by Dave Allison, David James, Lionel Kattner and Mark Weissenstern. They are joined by Orville Baker as a founding member. Signetics was the first company in the world to be established solely for the manufacture and sale of integrated circuits.

Nov. 1961 - Occupied 680 West Maude Avenue, Sunnyvale building (18K sq ft).

March 1962 – The industry's first integrated circuit implementation of Diode Transistor Logic (SE 100 Series DTL) is announced at the IEEE Show

July 1962 - SE 100 Series DTL devices are available in production quantities.

Nov. 1962 - Corning Glass Works (CGW) acquired a 51% equity position with an initial investment of \$2,250,000.

Sept. 1, 1963 - Donald F. Liddie (DFL) was first CGW employee to transfer to Signetics.

1963 - Revenue \$1,892,000 Headcount 307

Nov. 1963 - Occupied 14K sq ft building to house R&D and Sales & Marketing on Stierlin Road.

Feb. 1964 - Broke ground for 811 E. Arques building on 8 acres of land with an option to purchase an additional 7 acres.

Mar. 1964 - Construction began on (120K sq ft) 811 Arques building.

Sept. 1964 - James F, Riley, former Electronic Component Div. Sales & Marketing Manager, named President.

Oct. 16, 1964 - Move in to 811 Arques building began.

Dec. 1964 - CGW increased their equity position to 82% for \$0.50/share.

1964 - Revenue \$4,942,000 Headcount 309

Jan. 1965 - Dr. David James, Founding President resigned.

Jan. 19, 1965 - Dedicated new Arques Plant.

Oct. 1965 - Re-activated Maude Ave, building with Instrumentation and Pilot Assembly Line

1965 - Revenue \$5,803,000 Headcount 646

June 8, 1966 - Announced the leasing of 30K sq ft Military Product Assembly Plant in old bowling alley in Provo, Utah as the first Signetics I.C. Assembly Plant located outside Santa Clara Valley.

June 8, 1966 - Announced a 30K sq ft addition (total of 150K sq ft) to Arques Plant for occupancy in early 1967 (Feb. 1967).

June 20, 1966 - Malcom H. Hunt, first COB of Signetics, died in Raleigh, N.C. William Decker, President of CGW, elected new COB of Signetics.

Aug. 9, 1966 - Dedicated Provo interim facility (30K sq ft) in old bowling alley).

Sept. 14, 1966 - Signetics Korea Co. Ltd (SigKor). Registration # 7682.

Sept. 19, 1966 - Signetics Federal Credit Union established

Sept. 30, 1966 - Announced new Seoul Korea Assembly Plant (33,426 sq ft) to be constructed on Kirnpo Road and the opening of interim facility (8553 sq ft) in Seoul at 79 Bang-san Dong, Choong-ku. Was the first I.C. Assembly Plant in South Korea.

Dec. 28, 1966 - Received \$500K Export/Import Bank and Cooley \$450K loans.

1966 - Revenue \$12,635,000 Headcount 1224

Jan. 1967 - R&D moved back into Maude Ave. building.

Feb. 1967 - Occupied new 30K sq ft Arques addition for Assemby & Test.

May 30, 1967 - Completed SigKor Plant construction (33K sq ft).

June 22, 1 967 - Dedicated new Seoul, Korea Plant on Kirnpo Rd. site.

June 1967 - Dave Allison received patent, "Transistor with small inverse gain".

1967 - Revenue \$20,932M,000 Headcount 1928

Jan. 1968 - Announced new Utilogic II line of commercial/industrial digital circuits.

Jan. 1968 - Announced new 70K sq ft Fab Plant in Orem, Utah called Signetics Utah Valley Plant,

May 15, 1968 - Construction began on new Orem Plant (Utah Valley Plant) Completion date - late 1968

Sept. 4, 1968 - Amory Houghton, Jr., COB of CGW, elected COB of Signetics.

1968 - Revenue \$29,054,000 Headcount 2745

Jan. 1969 - DFL appointed President of Signetics International Corporation

Mar. 5, 1969 - Announced location of EFTA plant (20K sq ft) in Linlithgow, Scotland.

Mar. 1969 - Measurement Data Group moved into Moffett Blvd. building ((26K sq ft)

May 1969 - Tim daSilva assumed Presidency of SigKor and first expansion of 25K sq ft announced.

May 1969 - Started Linlithgow interim facility in Academy building.

May 28, 1969 - Announced EEC interim facility (5K sq ft) in Noerdlingen, West Germany in old Gast Haus (Anchor Brewery).

June 10, 1969 - Dedicated Orem (Utah Valley) Assembly & Test Plant (70K sq ft) Will house future wafer fab.

June 10, 1969 - Announced Second Source Agreement with General Instrument Corp. in Hicksville, N.Y. for MOS.

June 1969 - Announced the construction of **a** new Assembly & Test Plant in Noerdlingen, West Germany.

June/July 1969 - Occupied new R & D building expansion (75K sq ft) at Arques site.

Aug. 1969 - First European Sales Meeting held in Zug, Switzerland, Headquarters.

Aug. 15, 1969 - Completed SigKor first expansion (24,933 sq ft).

Sept. 6, 1969 - Started-up Noerdlingen interim facility (5K sq ft) in Anchor Brau Gast Haus.

Dec. 1969 - Announced proposed wafer fab site in Lincoln, Nebraska.

1969 - Revenue \$41,010,000 Headcount 4052

Feb. 2. 1970 - Proposed Lincoln, Nebraska plant shelved due to severe industry recession.

Mar. 1970 - Announced formation of Signetics Memory Systems (SMS) with Orville Baker as President

April 27, 1970 - Announced first in industry Phase-Locked Loop Linear Line

June 1970 - James F. Riley resigned as President to become president of Intersil Inc. Charles C. Harwood, former Vice President of CGW International, appointed President.

June 1970 - Started operations in new Linlithgow Plant.

1970 - Revenue \$33,931,000 Headcount 2311

1971 - Revenue \$41,010,000 Headcount 3698

Nov. 1972 - Leased 450 Wolfe Building (23.4K sq ft) for HiRel & Military

Dec. 1972 - Announced curtailment of Orem Plant operations. Gilchrist to return to Sunnyvale and Hillis to act as Production Supt..

Dec. 1972 - Moved Hi-Re1 and Military operations into 450 Wolfe.

1972 - Revenue \$48,008,000 Headcount 5194

Feb. 18, 1973 - Announced construction of Wafer Fab area in Orem Plant.

April 1973 - Filed an initial registration with SEC to offer 715K shares

May 1973 - Broke ground for new Noerdlingen A & T Plant. Initially 30K sq ft and subsequently increased to 50K sq ft.

May 1973 - Opened new parking area next to Firehouse on Wolfe Road.

Aug. 1973 - Purchased 450 Wolfe Building after having leased it for (9) months.

Aug. 1973 - Purchased 815 Stewart Building (20.2K sq ft) for Distributor Sales.

Oct. 17, 1973 - Filed a modified registration with SEC for initial public offerring of 1.3M shares of common stock.

Nov. 2, 1973 - Went public with first public stock issue of 1.3M shares at \$17/share. This reduced CGW ownership from 92% to 70%.

Nov. 1973 - Completed construction of Arques OM Building (Office & Maintenance) connecting 81 1 with R&D Building.

Nov. 1973 - Dedicated construction of new Noerdlingen Plant (50K sq ft).

Dec. 19, 1973 - Completed second SigKor expansion (52,774 sq ft)

1973 - Revenue \$98,274,000 Headcount 9557

Mar. 1974 - Leased 305 Mathilda building for Distribution and Sales.

Mar. 28, 1974 - Registered Signetics Thailand Co., Ltd. (SigThai) and began settingup assembly and test operations in a shop house in Bangkok, Thailand,

April 18, 1974 - Held First Annual Public Meeting of shareholders. - Announced first expansion of Orem (Utah Valley) Plant from 70K sq ft to 150K sq ft.

May 1, 1974 - Issued Employee Badge # 10,000.

July 1, 1974 - Inaugurated new Noerdlingen A & T Plant (50K sq ft).

Aug. 1974 - Started-up SigThai interim heility in Don Muang, Bangkok, Thailand.

Nov. 1974 - Made first SigThai shipments.

1974 - Revenue \$120,836,000 Headcount 6688

Mar. 1975 - Announced planned merger with U.S. Philips Trust Corporation in June.

May 30, 1975 - Completed third SigKor Plant expansion (38,140 sq ft).

June 5, 1975 - Completed merger with U.S. Philips Trust Corporation at \$8/share.

Dec. 1975 - Held first Signetics/Philips Combined Sales Meeting at Rickey's Hyatt in Palo Alto - "Integrating Forces"

1975 - Revenue \$77,600,000 Headcount 6400

Jan. 1976 - Signetics Japan, Ltd. (KK) began operations.

April 1976 - Linlithgow Plant, Scotland closed and sold to Sun Microsystems - Setubal, Portugal Plant (29K sq ft + 13.4K sq ft basement) closed

1976 - Revenue \$127,400,000 Headcount 8635

Oct. 1977 – ICE rates Signetics #1 IC company in over-all business performance.

1977 - Revenue \$172,300M, Headcount 8042

Mar. 29, 1978 - Signetics Filippinas (SigFi1) incorporated in Manila, the Philippines.

June 9, 1978 - Broke ground for new SigThai plant (100K sq ft) to be completed Q2 1979.

Aug. 1978 - Completed construction of Fab 14 - MOS at Arques.

Aug. 1978 - Started SigFil operations in Manila.

Sept. 1978 - Completed construction of Fab 14 (9600 sq ft) and Automated Test (8000 sq ft) for MOS in 811 Building.

Nov. 1978 - Held Annual Recognition Dinner at the Le Baron Hotel.

1978 - Revenue \$201,275,000 Headcount 9793

Oct. 30, 1979 - Began construction of Oakmea d (70K sq ft) building in Santa Clara.

Nov. 1979 - Held Annual Recognition Dinner at Le Baron Hotel.

Nov. 1979 - Dedicated new SigThai Bangkok building (100K sq ft).

Nov. 10, 1979 - Inaugurated new SigFil building (56K sq ft) in Manila.

Dec. 1979 - Started move-in to new SigThai Plant

1979 - Revenue \$257,645,000 Headcount 11742

Jan. 1980 - Launched Crosby 14-Point Quality Program

Jan. 1980 - Broke ground for new R&D building (180K sq ft) at 440 Wolfe Road for PRLS and ATC. To be completed Q2 1981.

Jan. 9, 1980 - City of Sunnyvale places six months moratorium on industrial development stopping work on R & D building.

Late Jan. 1980 - SigFil operations began.

Mar. 1980 - Series of news articles appear in Mercury News regarding Signetics and Semiconductor Industry health issues.

April 1980 - Occupied new SigThai building (140K sq ft).

July 1, 1980 - DFL appointed Corporate Vice President and Tom Diener appointed President of SIC.

July 1980 - Occupied 2251 Lawson Lane building as Signetics HQ in Santa Clara.

July 1980 - Began Project Golden Gate to build new data systems for order entry, unit movement, inventory control, shipping, etc. known as SCORES, SPRINT, SCOPE, etc.

Sept. 24, 1980 - Albuquerque, New Mexico Plant (250K sq ft & 58 Acres) dedicated. Construction begun. To be completed in early 1982

Oct. 1980 - Signet Society established as extension of Authors Incentive Program

Oct. 22, 1980 - Held Annual Recognition Dinner at Le Baron Hotel.

Dec. 1980 - Began construction of 20K sq ft addition to Orem Plant for Fabs 18 & 19.

1980 - Revenue \$367,805,000 Headcount 13888

Jan. 1981 - Selected site and leased 82K sq ft building for Military Division in Northgate Industrial Park, Sacramento. Move-in to start late Spring 1981.

Feb. 1981 - Congressman Norman Mineta visited Signetics.

Mar. 1981 - Signetics has (21) operating buildings in Sunnyvale/Santa Clara area.

Mar. 1981 - Started to move equipment into new Albuquerque Plant.

Mar. 1981 - Corporate Quality Improvement Team (CQIT) established under CCH with Dr. Tom Endicott as Program Manager. Began Crosby Quality Is Free 14-Step Program.

July 1981 - Celebrated Orem Utah Valley Plant 15th Anniversary.

July 1981 - Signetics employs California EDP Work Share Program to assist in downsizing activities.

July 30, 1981 - Announced 200K sq ft expension in Orem (Utah Valley) Plant bringing total to 380K sq ft. Never fully occupied all space.

Aug. 7, 1981 - Announced 10-day shutdown by Y.E. 1981 --- Actually took 19 days.

Sept . 1981 - Celebrated 20th Anniversary of Signetics founding.

Oct. 1981 - Began transq fter of Military Div. to Sacramento. Completed in Dec. 1981.

Nov. 1981 - Opened new Fab 15 MOS Fab area in 811 Arques. Will move later to new Albuquerque Plant.

1981 - Revenue \$344,400,000 Headcount 11695

Mar. 1982 - Officially started-up Albuquerque Plant including Fab 22.

Mid 1982 - ZD Days in full swing through-out the company.

Aug. 1982 - Announced lay-off of 400 people in USA.

Oct. 1, 1982 - Vice President George H. W. Bush and Governor- Elect George Deukmejian visited Signetics.in Lawson Lane

1982 - Revenue \$324,500,000 Headcount 11033

1983 - Sold Manila Plant

April 27, 1983 - Held first annual QIP Awards ceremony at Marriott.

Nov. 7, 1983 - Announced sale of Signetics Gmbh to SES employees.

Nov. 8, 1983 - Held Service Award Ceremony at 440 Building cafeteria

Nov. 17, 1983 - Held Annual Recognition Reception at Red Lion - over 1400 employees and guests attended.

Q4 1983 - Attempting to sell Setubal, Portugal Plant

1983 - Revenue \$414,468,000 Headcount 11306

Feb. 17, 1984 - Discovered leak in underground spent solvent storage tank at 811 Arques. Groundwater contaminated. Still pumping and treating water in 2006. Problem found throughout Silicon Valley.

Mar. 1984 - Worldwide Sales Conference held in Monterey, CA

Mar. 12, 1984 - New York Times publishes article on Signetics security as well as a series of articles re: Industrial Security.

June 13, 1984 - Held second annual QIP Awards at Red Lion.

July/Aug. 1 984 - Congressman Norm Mineta visits R&D Building.

Sept. 14, 1984 - Held Service Award Ceremony at Marriott.

Oct. 5, 1984 - Held Grand Opening of the 440 Wolfe R&D Building (128K sq ft).

Oct. 1984 - Email System implemented with Manufacturing as pilot.

Oct. 16, 1984 - Held Annual Recognition Dinner at Marriott.

Nov. 10, 1984 - Orem 200K sq ft expansion completed.

Dec. 1984 - Danray Phone System replaced by AT&T Dimension 85 System.

Winter 1984 - Held Corporate-wide ZD Days

1984 - Revenue \$720,000,000 Headcount 12515

Jan. 1985 - Began moving Corporate HQ from Lawson Lane to 1144 Arques. Move completed by end of March.

Mar. 1985 - Announced Charles Harwood resignation. Norman A. Neumann, former North American Philips VP, appointed Interim President & CEO.

June 25, 1985 - Announced Norman A. Neumann appointed President & CEO

July 9, 1985 - Signetics was the first semiconductor company to offer ZD warranty (guarantee).

July/Aug. 1985 - MOS Tech Dev. (MTD), Advanced Process Dev. (APD), Philips Research Labs in Sunnyvale (PRLS) all combined under Dr. Elsa Kooi.

1985 - SigFil closed.

Sept. 1985 - Jack Halter, Sr. VP - Digital Bipolar Products Group resigned and replaced by Bob Mollerstuen.

Oct. 2, 1985 - Held Service Award Ceremony in 1144 Arques Cafeteria.

Oct. 1985 - Announced lay-off of 400 people in Sunnyvale.

1985 - Revenue \$500,000,000 Headcount 8310

Mar. 1986 - New Die Manufacturing organization established under V.P. Glen Possley.

May 1986 - Sales & Marketing Conference held in Monterey, CA

June 6, 1986 - Held 25th Anniversary Old Timers Reunion in Lakewood Park, Sunnyvale with 300 attending..

Aug 14, 1986 - Celebrated Orem Utah Vatley Plant's 20th Anniversary.

- Celebrated SigKor 20th Anniversary.

Sept 12, 1986 - Celebrated Signetics 25th Anniversary. - PROBE publishes Time Line of Key Events.

Oct. 1986 - Last of toxic cases filed in 1978 were all favorably closed.

Nov. 1986 - Held Annual Recognition Reception at Marriott.

1986 - Revenue \$487,400,000 Headcount 9137

Jan. 13, 1987 - Held QIP Awards Ceremony at Sunnyvale High School

Mar. 1987 - Fab I renovated with 10-fold improvement in cleanliness.

April 1987 - Orem expansion begun to accomodate E/Sort Test needs and H/C growth from 1250 to 2000 people.

Aug. 1987 - Construction begun on Albuquerque Fab 23 (23K sq ft) for CMOS 6" (150mm) wafer fabrication. Initial construction cost of \$9.7M plus equipment at installation completion in Dec. 1 988 of \$1 7.9M.

Sept. 1987 - Began Purdue MSM Program with Keith Flagler who received his degree while Plant Manager of SigThai.

Sept. 16, 1987 - Held Service Awards Ceremony at Sunnyvale Hilton.

Oct. 15, 1987 - Held Annual Recognition Reception at Santa Clara Marriott for all employees with greater than five years service.

Nov. 1987 - Leo Heesels retired after 40 years of service, lastly as Division VP of Elcoma and Member of the Board of Management. He and Tony Opstelten were the "Fathers" of the Signetics merger with Philips.

1987 – Revenue [dfl file shows \$489M and \$535M both with ?] Headcount 9537

Jan/Feb. 1988 - Announced Albuq. Fab 23 in press conference with New Mexico Governor. First phase to be completed in April 1988 and full capacity by March 1990.

Jan. 20, 1988 - Held QIP Awards Ceremony

April 1988 - Cut Ribbon at Albuquerque Fab 23 opening.

Aug. 18, 1988 - Utah Governor Norman Bangerter and Senator Jake Garn visited Signetics, Sunnyvale.

Sept. 2, 1988 - Governor Norman Bangerter of Utah presented to the Orem Plant a Commemorative vase handcrafted by native Utah indians.

Oct. 13, 1988 - Held Service Awards Ceremony at Marriott.

1988 - Revenue \$560,000,000 (?) Headcount 9053

Jan. 1, 1989 - Norman A. Neumann transq ftered back to NAPC. James E. Dykes appointed President and begins the "Turnaround Process" - Embarked on the Baldrige Award Process.

Jan. 11, 1989 - Held QIP Awards Ceremony.

May, 1989 - Phil Thomas Group hired to improve cycle time management.

Sept. 1989 - Former President of Signetics, Jim Riley, died of cancer.

Oct. 17, 1989 at 5:05 P.M. PDT - A 7.1 earthquake struck the San Francisco area during the World Series game at Candlestick Park. No major damage done to Sig. plants. Falling ceiling tiles and triggered sprinkler systems damaged some equipment.

1989 - Revenue \$508,138,000 Headcount 7538

Jan. 10, 1990 - Held QIP Awards Ceremony.

Oct. 1990 - Albuquerque Plant won the EPA's Regional Administration Environmental Excellence Award for the third consecutive time.

Oct. 1990 - First Employee Survey held and results communicated in Nov..

Oct. 1990 - Introduced pre-employment drug testing.

Dec. 1990 - Dr. Elsa Kooi received the EEE 1990 Cledo Brunetti Award for development of the LOCOS process for VLSI products.

1990 - Revenue \$547,537,000 Headcount 7291

May 5, 1991 - Congressman Tom Campbell visited Signetics Sunnyvale and speaks to all employees at a Town Meeting in 1144 Arques.

May 1991 - Occupied new SigThai expansion.

- New Qubic process brought-up Code 1 in Fab 22. - Fab 23 yielded working parts first pass from Fab 15.

July 1, 1991- Adopted a Smoke-Free Policy at all domestic sites.

Aug. 9, 1991 - Celebrated 25th Anniversary of Signetics Orem Plant

Sept. 12, 1991 - Celebrated Signetics 30th Anniversary.

Oct. 1991 - Held Annual Recognition Reception at Marriott.

Oct. 1991 - Held Service Awards Ceremony.

1991 - Revenue \$515,805,000 Headcount 6121

Feb. 1992 - Announced Orem Plant Closure by Year End 1992.

Mar. 2, 1992 - Moved HQ into 440 Wolfe Building (128K sq ft)

July/Aug. 1992 - 1600 attended Albuquerque Open House. - Career Transition Center opens in Orem - Ultimately, 85% of employees were re-deployed.

Oct. 1992 - Senator Pete Dominici & Congressman Steve Schiff visited Albuquerque Plant.

Nov. 19, 1992 - James E. Dykes retires. DFL appointed Executive Vice President and Chairman of the Management Committee.

Dec. 15, 1992 - Orem Plant closed.

1992 - Revenue \$570,000,000 Headcount 5411

Jan. 1, 1993 - Name Changed - Signetics becomes Philips Semiconductors.

Jan/Feb. 1993 - PROBE name changed to P.S. as transition to Philips Semiconductors effected.

- Signetics/Philips received the International Organization Standardization (ISO) Award - The first IC company world-wide to do so.

Mar/April 1993 - PSNA named one of ten employers exhibiting excellence in the workplace by the Community Career Education Center (CCEC) in San Mateo.

June/July 1993 - Philips sponsors World Cup Soccer Championships in the USA 6/17-7/17

Oct/Nov. 1993 - Heinz Hagmeister retired. Doug Dunn, new President & CEO of Philips Semiconductors, introduced to employees in Albuquerque and Sunnyvale.

Dec 1993/Jan 1994 - In 1993 the company exceeded sales budget by well over 10% and doubled net income budget.

1993 - Revenue \$717,000,000 Headcount 3311

Mar/April 1994 - Introduced PGA-90 Goal - Be customers first choice in all products and services by 1995.

July/Aug 1994 - Sunnyvale became center of gravity for the Standard Products Logic Group under Brian Bachman with Ger Schunk(AT0) moved to Sunnyvale.

- Trimedia Group established to manufacture and market a DSP with over 3M transistors and chip size of 100mm square.

Aug, 1994 - Dedicated an additional 140K sq ft building at SigThai Plant bringing total to 280K SQ FT. Celebrated SigThai's 20th Anniversary.

Nov/Dec 1994 – Philips/IBM established a joint venture for wafer fabs at IBM's Stuttgart fab plant.

1994 - Revenue \$990,000,000 Headcount 3527

Jan. 9, 1995 - Held 4th Annual Worldwide Customer Day.

Aug. 1995 – Executive Vice President Don Liddie retired after 39 years with the CGW/SIG/P family of companies

1995 - Revenue \$1,363,000,000 Headcount 3076

Feb. 1996 - Former President & CEO Norman Neumann died.

Mar/April 1996 - Jan Timmer retired as President of Philips Electronics. Cor Boonstra replaced Timmer. Dunn transferred to Sound & Vision. Arthur Van der Poll replaced Dunn as Pres/CEO of PS. All to be effective October 1996

May 1996 - Boonstra visited Sunnyvale & Albuquerque

Oct. 29, 1996 - Signetics Old Timers celebrated Signetics 35th Anniversary at Davids

1996 - Revenue \$1,109,000,000 Headcount 2919

June 1999 – Philips purchases former ASIC pioneer VLSI Technology, Inc. of San Jose, CA with particular interest in the company's wireless capabilities.

July 23, 2004 - Held a "Lights Out" Old Timers Reunion at 811 Arques Building prior to its demolition to make way for a Lowe's Store.

December 2005 – Philips announces plans to make the Semiconductor Division a separate legal entity. To be completed by October 2006.

October 1, 2006 – After selling 80.1% of the Division to a consortium of private investors headed by Kohlberg Kravis Roberts (KKR), the business is established as a separate legal entity called NXP Semiconductors (Next eXPerience) with headquarters in Eindhoven, Netherlands.

2006 – NXP Revenue \$6,365,000,000 Headcount 37,000

February 2008 – Don Liddie donates the Signetics Collection of documents and ephemera describing the history of the company to the Computer History Museum.

Last edit by DFL 12/28/06 Minor edits and input of revenue data by DL 3.2.08