

**FAIRCHILD® F100K ECL
COMPONENTS LIBRARY**
Schematic Symbols

October 1986

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CONTENTS

OVERVIEW.....	1
FILE MANAGEMENT.....	2
CREATING A DESIGN.....	2
Layer Structure.....	3
Drawing Sheets.....	3
Components.....	3
GENERAL INFORMATION.....	5
NAMING CONVENTIONS.....	5
COMPONENT LIST BY SEQUENCE.....	6
COMPONENT LIST BY FUNCTION.....	9
COMPONENT PIN SEQUENCES.....	13
DIP Pin Sequence List.....	13
Flatpak Pin Sequence List.....	29
COMPONENT PLOTS.....	45

TABLES

1. LAYS.SCH Layer Structure.....	4
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OVERVIEW

The PCAD/Fairchild[®] 100K ECL Schematic Symbols Library consists of this manual and two Fairchild 100K ECL Schematic Symbol diskettes. The library has been developed jointly with Fairchild at the request of our users, and we welcome any suggestions for improvements or additions.

The library diskettes contain the following files for use with the PC-CAPS schematic capture program:

- Component files
- Layer structure file LAYS.SCH
- Standard-size drawing sheet files, ASIZE.SCH through ESIZE.SCH
- F100K.FIL and F100K.LIB files

F100K.FIL is a sample text file used as input into PREPACK to create the binary file F100K.LIB that contains packaging information for PC-PACK. Both F100K.FIL and F100K.LIB contain all the components in the Fairchild 100K ECL Library. Normal usage is to extract only those components used in a design and put them in a new .FIL file for input to PREPACK.

Storage of these files in a practical and efficient directory structure is discussed in the next section of this manual. The following section, "Creating a Design", tells you how to use the files with PC-CAPS.

The remainder of the manual is devoted to lists of components by sequence and function, component pin sequences, and component plots.

FILE MANAGEMENT

The complete Fairchild 100K ECL Symbols Library includes more than 500 KB of files. If you are loading the library onto the hard disk of your stand-alone computer, you should omit any of the components that you will not need in order to conserve disk space. This is especially important if you are using a 10 MB hard disk. If your hard disk space is very limited, you can remove individual unneeded components from the library. Each component is contained in a separate DOS file, and individual components can be erased using the DOS erase command. Refer to your IBM DOS manual or the "DOS Reference" chapter in your *PC-CAPS* or *PC-CARDS User's Manuals* for instructions on listing and erasing files.

P-CAD recommends a specific directory structure for efficient system operation. Your library symbols are normally placed in a specific subdirectory to make it easy to manage these files. The directory structure is described in your P-CAD *Installation Guide*.

CREATING A DESIGN

To use the library in a design, run PC-CAPS. Instructions are given in the "Using PC-CAPS" chapter of your *PC-CAPS User's Manual*. When the menu appears, select FILE/LOAD and load the layer structure. You can load LAYS.SCH or one of the standard-size drawing sheet files, ASIZE.SCH through ESIZE.SCH.

Layer Structure

One layer structure file, LAYS.SCH, is included with this library.

LAYS.SCH, shown in Table 1, is a standard P-CAD layer structure and is recommended when creating schematics.

Drawing Sheets

The standard-size drawing sheet files, ASIZE.SCH through ESIZE.SCH, were created using the LAYS.SCH layer structure. When loaded, they provide the correct layer structure for the library plus a standard-size drawing sheet border.

Components

When you have loaded your layer structure or drawing sheet file, you can enter the symbols, wires, text, instances, and net names. Complete instructions are given in the "Using PC-CAPS" chapter of your *PC-CAPS User's Manual*.

Table 1. LAYS.SCH Layer Structure

Layer	Name	Pen	Status	Use
1	WIRES	1	ABL (A)	Interconnecting wires
2	BUS	2	ABL	Interconnecting buses/wires
3	GATE	3	ON	Symbol graphics (ANSII)
4	IEEE	3	OFF	Symbol graphics (IEEE)
5	PINFUN	3	OFF	Pin functions (IEEE)
6	PINNUM	4	ON	Pin numbers
7	PINNAM	3	ON	Pin names
8	PINCON	4	ON	Pin connections
9	REFDES	5	ON	Reference designators
10	ATTR	6	OFF	Visible attributes
11	SDOT	1	ON	Solder dots (not used)
12	DEVICE	6	ON	Device name
13	OUTLIN	6	OFF	Component outline
14	ATTR2	7	OFF	Invisible attributes
15	NOTES	7	OFF	Notes/text/documentation
16	NETNAM	8	ABL	Net/signal names (schematic)
17	CMPNAM	8	OFF	Component instance names
18	BORDER	9	OFF	Drawing/schematic border

GENERAL INFORMATION

This library was created using the *Fairchild F100K ECL Data Book* and Fairchild's F100K ECL August 1986 Preliminary Data Sheet. IEEE representations of all the devices are included.

Two categories of symbols are included in this library; the symbol numbers ending in D have pin numbers appropriate for the DIP package, the symbol numbers ending in F are for use with the Cerpak (flatpack) package.

NAMING CONVENTIONS

In this library, all signal names are drawn exactly as shown in the *Fairchild F100K ECL Data Book* and the Preliminary Data Sheets. The actual signal names for the symbols are given in the Component Pin Sequences section of this manual.

COMPONENT LIST BY SEQUENCE

The component filename consists of the symbol number plus the extension .SYM; for example, 100142D.SYM. "Plot Number" refers to the plots in the last section of this manual.

Symbol Number	Disk Number	Plot Number (ANSI/IEEE)
100101D	1	1/1A
100102D	1	1/1A
100104D	1	1/1A
100107D	1	1/1A
100112D	1	1/1A
100113D	1	1/1A
100114D	1	1/1A
100117D	1	2/2A
100118D	1	2/2A
100121D	1	2/2A
100122D	1	2/2A
100123D	1	3/3A
100124D	1	3/3A
100125D	1	3/3A
100126D	1	3/3A
100128D	1	4/4A
100130D	1	4/4A
100131D	1	4/4A
100135D	1	4/4A
100136D	1	4/4A
100139D	1	4/4A
100140D	1	4/4A
100141D	1	5/5A
100142D	1	5/5A
100145D	1	5/5A
100150D	1	5/5A
100151D	1	5/5A

Symbol Number	Disk Number	Plot Number (ANSI/IEEE)
100155D	1	5/5A
100156D	1	6/6A
100158D	1	6/6A
100160D	1	6/6A
100163D	1	6/6A
100164D	1	6/6A
100165D	1	6/6A
100166D	1	6/6A
100170D	1	6/6A
100171D	1	7/7A
100175D	1	7/7A
100179D	1	7/7A
100180D	1	7/7A
100181D	1	7/7A
100182D	1	7/7A
100183D	1	7/7A
100241D	1	7/7A
100413D	1	7/7A
E100142D	1	5A
E100165D	1	6A
100101F	2	8/8A
100102F	2	8/8A
100104F	2	8/8A
100107F	2	8/8A
100112F	2	8/8A
100113F	2	8/8A
100114F	2	8/8A
100117F	2	9/9A
100118F	2	9/9A
100121F	2	9/9A
100122F	2	9/9A
100123F	2	10/10A
100124F	2	10/10A
100125F	2	10/10A
100126F	2	10/10A

Symbol Number	Disk Number	Plot Number (ANSI/IEEE)
100128F	2	11/11A
100130F	2	11/11A
100131F	2	11/11A
100135F	2	11/11A
100136F	2	11/11A
100139F	2	11/11A
100140F	2	11/11A
100141F	2	12/12A
100142F	2	12/12A
100145F	2	12/12A
100150F	2	12/12A
100151F	2	12/12A
100155F	2	12/12A
100156F	2	13/13A
100158F	2	13/13A
100160F	2	13/13A
100163F	2	13/13A
100164F	2	13/13A
100165F	2	13/13A
100166F	2	13/13A
100170F	2	13/13A
100171F	2	14/14A
100179F	2	14/14A
100180F	2	14/14A
100181F	2	14/14A
100182F	2	14/14A
100183F	2	14/14A
100241F	2	14/14A
100413F	2	14/14A
E100142F	2	12A
E100165F	2	13A

COMPONENT LIST BY FUNCTION

The components described below come in both DIP and flatpak-type packaging, except component 100175 which comes only in a DIP. To distinguish between the two types, DIP schematic symbols have a "D" suffix while the flatpak schematic symbols have an "F" suffix after the component's name. For instance, the 100101 component will have a file named 100101D.SYM for DIP packaging and one named 100101F.SYM for flatpak packaging.

AND/NAND Gates

100104 Quint 2-input

Arithmetic Operators

100156 4-bit mask-merge/latch
 100158 8-bit shift matrix
 100160 Dual 9-bit parity checker/generator
 100165 8-input priority encoder
 100166 9-bit comparator
 100179 Carry lookahead
 100180 High speed 6-bit adder
 100181 4-bit binary/BCD ALU
 100182 9-bit Wallace tree adder
 100183 2x8 decode multiplier

Buffers

100121 9-bit inverter
 100122 9-bit buffer
 100126 9-bit backplane driver
 100413 16x8 FIFO memory buffer

Content Addressable Memory

100142 4x4-bit content addressable memory

Counters/Prescalers

100136 4-bit binary (count up/down)

100139 4-bit binary (async reset)

100140 4-bit decade (count down)

Demultiplexer/Decoders

100170 Universal (dual 1 of 4/single 1 of 8)

Exclusive OR/NOR Gates

100107 Quint EXCLUSIVE OR/NOR

Flip-Flops

100131 Triple D (async set/reset)

100135 Triple J-K (async set)

100151 Hex D (async reset)

Latches

100130 Triple D (async set/reset)

100150 Hex D (async reset)

100155 Quad 2-input MUX/latch (async reset)

100175 Quint latch 100K in/10K out

Line Bus Drivers/Transceivers/Receivers

100112	Quad line driver
100113	Quad line driver
100114	Quint differential line receiver
100123	Hex bus driver

Multiplexers

100155	Quad 2-input MUX/latch (async reset)
100163	Dual 8-input MUX
100164	16-input MUX
100171	Triple 4-input MUX (W/enable)

OR-AND/OR-AND-INVERT Gates

100117	Triple 2-wide OA/OAI
100118	5-wide 5,4,4,4,2-input OA/OAI

OR/NOR Gates

100101	Triple 5-input
100102	Quint 2-input

RAMS

100145	16x4-bit register file
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Shift Registers

100136	4-bit bidirectional
100141	8-bit bidirectional
100241	8-bit bidirectional

Translators

- 100124 Hex TTL-100K ECL
- 100125 Hex 100K ECL-TTL
- 100128 Octal ECL/TTL bidirectional

COMPONENT PIN SEQUENCES**DIP Pin Sequence List**

100101D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= D3 (C)	9	= O' (B)	17	= D1 (B)
2	= D4 (C)	10	= O' (A)	18	= VEE
3	= D5 (C)	11	= O (A)	19	= D2 (B)
4	= O (C)	12	= D1 (A)	20	= D3 (B)
5	= O' (C)	13	= D2 (A)	21	= D4 (B)
6	= VCC	14	= D3 (A)	22	= D5 (B)
7	= VCCA	15	= D4 (A)	23	= D1 (C)
8	= O (B)	16	= D5 (A)	24	= D2 (C)

100102D: Number of gates per package = 5

Pin	Signal	Pin	Signal	Pin	Signal
1	= D2 (E)	9	= O (C)	17	= D2 (B)
2	= O (E)	10	= O (B)	18	= VEE
3	= O' (E)	11	= O' (B)	19	= E
4	= O' (D)	12	= O' (A)	20	= D1 (C)
5	= O (D)	13	= O (A)	21	= D2 (C)
6	= VCC	14	= D1 (A)	22	= D1 (D)
7	= VCCA	15	= D2 (A)	23	= D2 (D)
8	= O' (C)	16	= D1	24	= D1 (E)

100104D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= OE	9	= OC	17	= D2B
2	= OE'	10	= OB'	18	= VEE
3	= OD	11	= OB	19	= D1C
4	= OD'	12	= OA'	20	= D2C
5	= F	13	= OA	21	= D2D
6	= VCC	14	= D1A	22	= D1D
7	= VCCA	15	= D2A	23	= D1E
8	= OC'	16	= D1B	24	= D2E

100107D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= OE	9	= OC	17	= D2B
2	= OE'	10	= OB'	18	= VEE
3	= OD	11	= OB	19	= D1C
4	= OD'	12	= OA'	20	= D2C
5	= F	13	= OA	21	= D2D
6	= VCC	14	= D1A	22	= D1D
7	= VCCA	15	= D2A	23	= D1E
8	= OC'	16	= D1B	24	= D2E

100112D: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	= O2' (D)	9	= O2 (B)	17	= D (B)
2	= O2' (C)	10	= O1' (B)	18	= VEE
3	= O1' (C)	11	= O2' (B)	19	= E
4	= O2 (C)	12	= O2' (A)	20	= D (C)
5	= O1 (C)	13	= O1' (A)	21	= D (D)
6	= VCC	14	= O2 (A)	22	= O1 (D)
7	= VCCA	15	= O1 (A)	23	= O2 (D)
8	= O1 (B)	16	= D (A)	24	= O1' (D)

100113D: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	= O2' (D)	9	= O2 (B)	17	= D (B)
2	= O2' (C)	10	= O1' (B)	18	= VEE
3	= O1' (C)	11	= O2' (B)	19	= E
4	= O2 (C)	12	= O2' (A)	20	= D (C)
5	= O1 (C)	13	= O1' (A)	21	= D (D)
6	= VCC	14	= O2 (A)	22	= O1 (D)
7	= VCCA	15	= O1 (A)	23	= O2 (D)
8	= O1 (B)	16	= D (A)	24	= O1' (D)

100114D: Number of gates per package = 5

Pin	Signal	Pin	Signal	Pin	Signal
1	= D' (E)	9	= O (C)	17	= D' (B)
2	= O' (E)	10	= O' (B)	18	= VEE
3	= O (E)	11	= O (B)	19	= VBB
4	= O' (D)	12	= O' (A)	20	= D (C)
5	= O (D)	13	= O (A)	21	= D' (C)
6	= VCC	14	= D (A)	22	= D (D)
7	= VCCA	15	= D' (A)	23	= D' (D)
8	= O' (C)	16	= D (B)	24	= D (E)

100117D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= D2 (C)	9	= O' (B)	17	= E (B)
2	= D3 (C)	10	= O' (A)	18	= VEE
3	= D4 (C)	11	= O (A)	19	= E (C)
4	= O (C)	12	= D1 (A)	20	= D1 (B)
5	= O' (C)	13	= D2 (A)	21	= D2 (B)
6	= VCC	14	= D3 (A)	22	= D3 (B)
7	= VCCA	15	= D4 (A)	23	= D4 (B)
8	= O (B)	16	= E (A)	24	= D1 (C)

100118D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D2D	9	= O	17	= D3B
2	= D3D	10	= D1A	18	= VEE
3	= D4D	11	= D2A	19	= D4B
4	= D1E	12	= D3A	20	= D1C
5	= D2E	13	= D4A	21	= D2C
6	= VCC	14	= D5A	22	= D3C
7	= VCCA	15	= D1B	23	= D4C
8	= O'	16	= D2B	24	= D1D

100121D: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	= VCCA	9	= O' (G)	17	= D (G)
2	= O' (C)	10	= O' (F)	18	= VEE
3	= O' (B)	11	= O' (E)	19	= VCCA
4	= O' (A)	12	= O' (D)	20	= D (H)
5	= O' (I)	13	= VCCA	21	= D (I)
6	= VCC	14	= D (D)	22	= D (A)
7	= VCCA	15	= D (E)	23	= D (B)
8	= O' (H)	16	= D (F)	24	= D (C)

100122D: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	= VCCA	9	= O (G)	17	= D (G)
2	= O (C)	10	= O (F)	18	= VEE
3	= O (B)	11	= O (E)	19	= VCCA
4	= O (A)	12	= O (D)	20	= D (H)
5	= O (I)	13	= VCCA	21	= D (I)
6	= VCC	14	= D (D)	22	= D (A)
7	= VCCA	15	= D (E)	23	= D (B)
8	= O (H)	16	= D (F)	24	= D (C)

100123D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= VCCA2 (C)	9	= VCCA2 (A)	17	= DE (B)
2	= OA (C)	10	= OB (A)	18	= VEE
3	= VCCA1 (C)	11	= VCCA1 (B)	19	= E
4	= OB (B)	12	= OA (B)	20	= DE (C)
5	= VCCA2 (B)	13	= DA (B)	21	= DB (C)
6	= VCC	14	= DB (A)	22	= DA (C)
7	= VCCA1 (A)	15	= DA (A)	23	= DB (B)
8	= OA (A)	16	= DE (A)	24	= OB (C)

100124D: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= O' (A)	9	= O (D)	17	= D (D)
2	= O (B)	10	= O' (D)	18	= VEE
3	= O' (B)	11	= O' (E)	19	= E
4	= O' (C)	12	= O (E)	20	= VTTL
5	= O (C)	13	= O' (F)	21	= D (A)
6	= VCC	14	= O (F)	22	= D (B)
7	= VCCA	15	= D (F)	23	= D (C)
8	= VCCA	16	= D (E)	24	= O (A)

100125D: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= O (F)	9	= O (B)	17	= VBB
2	= O (E)	10	= O (A)	18	= VEE
3	= O (D)	11	= D' (A)	19	= D (D)
4	= VTTL	12	= D (A)	20	= D' (D)
5	= VTTL	13	= D' (B)	21	= D (E)
6	= VCC	14	= D (B)	22	= D' (E)
7	= VCC	15	= D' (C)	23	= D (F)
8	= O (C)	16	= D (C)	24	= D' (F)

100126D: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	= VCCA	9	= O (G)	17	= D (G)
2	= O (C)	10	= O (F)	18	= VEE
3	= O (B)	11	= O (E)	19	= VCCA
4	= O (A)	12	= O (D)	20	= D (H)
5	= O (I)	13	= VCCA	21	= D (I)
6	= VCC	14	= D (D)	22	= D (A)
7	= VCCA	15	= D (E)	23	= D (B)
8	= O (H)	16	= D (F)	24	= D (C)

100128D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= E4	9	= T7	17	= LE
2	= E5	10	= T6	18	= VEE
3	= E6	11	= T5	19	= VCC
4	= E7	12	= T4	20	= VTTL
5	= OE	13	= T3	21	= E0
6	= VCC	14	= T2	22	= E1
7	= VCCA	15	= T1	23	= E2
8	= DIR	16	= T0	24	= E3

100130D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= CD (C)	9	= Q' (B)	17	= EC'
2	= E' (C)	10	= Q' (A)	18	= VEE
3	= D (C)	11	= Q (A)	19	= MR
4	= Q (C)	12	= D (A)	20	= SD (B)
5	= Q' (C)	13	= E' (A)	21	= D (B)
6	= VCC	14	= CD (A)	22	= E' (B)
7	= VCCA	15	= SD (A)	23	= CD (B)
8	= Q (B)	16	= MS	24	= SD (C)

100131D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= CD (C)	9	= Q' (B)	17	= CPC
2	= CP (C)	10	= Q' (A)	18	= VEE
3	= D (C)	11	= Q (A)	19	= MR
4	= Q (C)	12	= D (A)	20	= SD (B)
5	= Q' (C)	13	= CP (A)	21	= D (B)
6	= VCC	14	= CD (A)	22	= CP (B)
7	= VCCA	15	= SD (A)	23	= CD (B)
8	= Q (B)	16	= MS	24	= SD (C)

100135D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= S (C)	9	= Q (B)	17	= S (B)
2	= J (C)	10	= Q' (A)	18	= VEE
3	= K (C)	11	= Q (A)	19	= K (B)
4	= Q' (C)	12	= S (A)	20	= J (B)
5	= Q (C)	13	= C (A)	21	= CP (B)
6	= VCC	14	= CP (A)	22	= C (B)
7	= VCCA	15	= J (A)	23	= CP (C)
8	= Q' (B)	16	= K (A)	24	= C (C)

100136D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= TC'	9	= Q2'	17	= CP
2	= Q0	10	= Q3'	18	= VEE
3	= Q0'	11	= Q3	19	= MR
4	= Q1'	12	= D3	20	= S0
5	= Q1	13	= P3	21	= S1
6	= VCC	14	= P2	22	= S2
7	= VCCA	15	= P1	23	= CEP'
8	= Q2	16	= P0	24	= D0/CET

100139D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P0	9	= PE1	17	= CP
2	= Q0'	10	= TC15'	18	= VEE
3	= Q0	11	= TC14	19	= CEP
4	= Q1'	12	= Q2'	20	= MR
5	= Q1	13	= Q2	21	= CET
6	= VCC	14	= Q3'	22	= P3
7	= VCCA	15	= Q3	23	= P2
8	= TC14'	16	= PE2	24	= P1

100140D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P0	9	= PE1	17	= CP
2	= Q0'	10	= TC0'	18	= VEE
3	= Q0	11	= TC1	19	= CEP
4	= Q1'	12	= Q2'	20	= MR
5	= Q1	13	= Q2	21	= CET
6	= VCC	14	= Q3'	22	= P3
7	= VCCA	15	= Q3	23	= P2
8	= TC1'	16	= PE2	24	= P1

100141D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D0	9	= Q5	17	= CP
2	= Q0	10	= Q6	18	= VEE
3	= Q1	11	= Q7	19	= S0
4	= Q2	12	= D7	20	= S1
5	= Q3	13	= P7	21	= P3
6	= VCC	14	= P6	22	= P2
7	= VCCA	15	= P5	23	= P1
8	= Q4	16	= P4	24	= P0

100142D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= MK3	9	= Q2	17	= A2
2	= M0	10	= Q1	18	= VEE
3	= M1	11	= Q0	19	= WS
4	= M2	12	= MK1	20	= A1
5	= M3	13	= D1	21	= A0
6	= VCC	14	= MK0	22	= D2
7	= VCCA	15	= D0	23	= MK2
8	= Q3	16	= A3	24	= D3

100145D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= AR2	9	= Q3	17	= WE2
2	= AR1	10	= D3	18	= VEE
3	= AR0	11	= D2	19	= MR
4	= Q0	12	= D1	20	= AW0
5	= Q1	13	= D0	21	= AW1
6	= VCC	14	= OE1	22	= AW2
7	= VCCA	15	= OE2	23	= AW3
8	= Q2	16	= WE1	24	= AR3

100150D: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= Q' (F)	9	= Q (C)	17	= D (D)
2	= Q' (E)	10	= Q' (B)	18	= VEE
3	= Q (E)	11	= Q (B)	19	= MR
4	= Q' (D)	12	= Q' (A)	20	= EA'
5	= Q (D)	13	= Q (A)	21	= EB'
6	= VCC	14	= D (A)	22	= D (E)
7	= VCCA	15	= D (B)	23	= D (F)
8	= Q' (C)	16	= D (C)	24	= Q (F)

100151D: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	Q' (F)	9	Q (C)	17	D (D)
2	Q' (E)	10	Q' (B)	18	VEE
3	Q (E)	11	Q (B)	19	MR
4	Q' (D)	12	Q' (A)	20	CPA
5	Q (D)	13	Q (A)	21	CPB
6	VCC	14	D (A)	22	D (E)
7	VCCA	15	D (B)	23	D (F)
8	Q' (C)	16	D (C)	24	Q (F)

100155D: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	D1 (D)	9	Q (B)	17	S1
2	Q (D)	10	Q (A)	18	VEE
3	Q' (D)	11	Q' (A)	19	MR
4	Q' (C)	12	D0 (A)	20	E1'
5	Q (C)	13	D1 (A)	21	E2'
6	VCC	14	D0 (B)	22	D0 (C)
7	VCCA	15	D1 (B)	23	D1 (C)
8	Q' (B)	16	S0'	24	D0 (D)

100156D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	AM1	9	Q0	17	E'
2	A3	10	B0	18	VEE
3	B3	11	A0	19	AS0
4	Q3	12	B1	20	BS1
5	Q2	13	A1	21	AS1
6	VCC	14	B2	22	BM0
7	VCCA	15	A2	23	AM0
8	Q1	16	BS0	24	BM1

100158D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= Z7	9	= Z2	17	= S1
2	= Z6	10	= Z1	18	= VEE
3	= Z5	11	= Z0	19	= M
4	= Z4	12	= D0	20	= S2
5	= VCCA	13	= D1	21	= D4
6	= VCC	14	= D2	22	= D5
7	= VCCA	15	= D3	23	= D6
8	= Z3	16	= S0	24	= D7

100160D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= I6B	9	= IA	17	= I7A
2	= I7B	10	= I0A	18	= VEE
3	= IB	11	= I1A	19	= I0B
4	= ZB	12	= I2A	20	= I1B
5	= C'	13	= I3A	21	= I2B
6	= VCC	14	= I4A	22	= I3B
7	= VCCA	15	= I5A	23	= I4B
8	= ZA	16	= I6A	24	= I5B

100163D: Number of gates per package = 2

Pin	Signal	Pin	Signal	Pin	Signal
1	= D3 (B)	9	= D0 (A)	17	= S0
2	= D2 (B)	10	= D1 (A)	18	= VEE
3	= D1 (B)	11	= D2 (A)	19	= S1
4	= D0 (B)	12	= D3 (A)	20	= S2
5	= Z (B)	13	= D4 (A)	21	= D7 (B)
6	= VCC	14	= D5 (A)	22	= D6 (B)
7	= VCCA	15	= D6 (A)	23	= D5 (B)
8	= Z (A)	16	= D7 (A)	24	= D4 (B)

100164D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= I3	9	= I8	17	= S0
2	= I4	10	= I9	18	= VEE
3	= I5	11	= I10	19	= S1
4	= I6	12	= I11	20	= S2
5	= I7	13	= I12	21	= S3
6	= VCC	14	= I13	22	= I0
7	= VCCA	15	= I14	23	= I1
8	= Z	16	= I15	24	= I2

100165D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= Q0	9	= Q2	17	= OE'
2	= Q0'	10	= Q2'	18	= VEE
3	= Q1'	11	= Q3'	19	= E'
4	= Q1	12	= Q3	20	= M
5	= GS1	13	= I7	21	= I3
6	= VCC	14	= I6	22	= I2
7	= VCCA	15	= I5	23	= I1
8	= GS2	16	= I4	24	= I0

100166D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= B2	9	= A0	17	= A8
2	= B1	10	= A1	18	= VEE
3	= B0	11	= A2	19	= B8
4	= A<B	12	= A3	20	= B7
5	= A=B	13	= A4	21	= B6
6	= VCC	14	= A5	22	= B5
7	= VCCA	15	= A6	23	= B4
8	= A>B	16	= A7	24	= B3

100170D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= A1B	9	= Z0	17	= EB1
2	= Z7	10	= Z2	18	= VEE
3	= Z4	11	= Z1	19	= EB2
4	= Z6	12	= A0A	20	= EA2
5	= Z5	13	= A1A	21	= HA
6	= VCC	14	= M	22	= HC
7	= VCCA	15	= A2A	23	= HB
8	= Z3	16	= EA1	24	= A0B

100171D: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= I1 (C)	9	= Z' (B)	17	= S1
2	= I2 (C)	10	= Z' (A)	18	= VEE
3	= I3 (C)	11	= Z (A)	19	= E'
4	= Z (C)	12	= I0 (A)	20	= I0 (B)
5	= Z' (C)	13	= I1 (A)	21	= I1 (B)
6	= VCC	14	= I2 (A)	22	= I2 (B)
7	= VCCA	15	= I3 (A)	23	= I3 (B)
8	= Z (B)	16	= S0	24	= I0 (C)

100175D: Number of gates per package = 5

Pin	Signal	Pin	Signal	Pin	Signal
1	= VCCA	7	= E2	12	= D (E)
2	= Q (A)	8	= VEE	13	= D (A)
3	= Q (B)	9	= D (B)	14	= Q (D)
4	= Q (C)	10	= D (D)	15	= Q (E)
5	= D (C)	11	= MR	16	= VCC
6	= E1				

100179D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P1	9	= CN+8	17	= P6
2	= G2	10	= G3	18	= VEE
3	= P2	11	= P3	19	= CN
4	= CN+2	12	= G4	20	= G7
5	= CN+4	13	= P4	21	= P7
6	= VCC	14	= G5	22	= G0
7	= VCCA	15	= P5	23	= P0
8	= CN+6	16	= G6	24	= G1

100180D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= A0	9	= F5	17	= A3
2	= F0	10	= P	18	= VEE
3	= F1	11	= G	19	= CN
4	= F2	12	= B5	20	= B2
5	= F3	13	= A5	21	= A2
6	= VCC	14	= B4	22	= B1
7	= VCCA	15	= A4	23	= A1
8	= F4	16	= B3	24	= B0

100181D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= A0	9	= P	17	= S1
2	= F0	10	= G	18	= VEE
3	= F1	11	= CN	19	= E
4	= F2	12	= B0	20	= S2
5	= F3	13	= B1	21	= S3
6	= VCC	14	= B2	22	= A3
7	= VCCA	15	= B3	23	= A2
8	= CN+4	16	= S0	24	= A1

100182D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D1	9	= PC	17	= D6
2	= D0	10	= PS	18	= VEE
3	= CON+2	11	= CI3	19	= D5
4	= CO3	12	= CI2	20	= {n/c}
5	= CO1	13	= CI1	21	= {n/c}
6	= VCC	14	= CIN-2	22	= D4
7	= VCCA	15	= D8	23	= D3
8	= CO2	16	= D7	24	= D2

100183D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= B0	9	= F5	17	= B4
2	= F0	10	= F6	18	= VEE
3	= F1	11	= F7	19	= A2
4	= F2	12	= F8'	20	= A1
5	= F3	13	= B8	21	= A0
6	= VCC	14	= B7	22	= B3
7	= VCCA	15	= B6	23	= B2
8	= F4	16	= B5	24	= B1

100241D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D0	9	= Q5	17	= CP
2	= Q0	10	= Q6	18	= VEE
3	= Q1	11	= Q7	19	= S0
4	= Q2	12	= D7	20	= S1
5	= Q3	13	= P7	21	= P3
6	= VCC	14	= P6	22	= P2
7	= VCCA	15	= P5	23	= P1
8	= Q4	16	= P4	24	= P0

100413D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	Q0	9	Q4	17	IR
2	Q1	10	Q5	18	VEE
3	Q2	11	Q6	19	MR
4	Q3	12	Q7	20	TI
5	OR	13	D7	21	D3
6	VCC	14	D6	22	D2
7	VCCA	15	D5	23	D1
8	TO	16	D4	24	D0

E100142D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	MK3	9	Q2	17	A2
2	M0	10	Q1	18	VEE
3	M1	11	Q0	19	WS
4	M2	12	MK1	20	A1
5	M3	13	D1	21	A0
6	VCC	14	MK0	22	D2
7	VCCA	15	D0	23	MK2
8	Q3	16	A3	24	D3

E100165D: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	Q0	9	Q2	17	I6
2	Q0'	10	Q2'	18	VEE
3	Q1'	11	Q3'	19	I5
4	Q1	12	Q3	20	I7
5	GS1	13	M	21	I1
6	VCC	14	OE'	22	I2
7	VCCA	15	E'	23	I3
8	GS2	16	I0	24	I4

Flatpak Pin Sequence List

100101F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= D5 (B)	9	= VCC	17	= D3 (A)
2	= D1 (C)	10	= VCCA	18	= D4 (A)
3	= D2 (C)	11	= O (B)	19	= D5 (A)
4	= D3 (C)	12	= O' (B)	20	= D1 (B)
5	= D4 (C)	13	= O' (A)	21	= VEE
6	= D5 (C)	14	= O (A)	22	= D2 (B)
7	= O (C)	15	= D1 (A)	23	= D3 (B)
8	= O' (C)	16	= D2 (A)	24	= D4 (B)

100102F: Number of gates per package = 5

Pin	Signal	Pin	Signal	Pin	Signal
1	= D1 (D)	9	= VCC	17	= D1 (A)
2	= D2 (D)	10	= VCCA	18	= D2 (A)
3	= D1 (E)	11	= O' (C)	19	= D1 (B)
4	= D2 (E)	12	= O (C)	20	= D2 (B)
5	= O (E)	13	= O (B)	21	= VEE
6	= O' (E)	14	= O' (B)	22	= E
7	= O' (D)	15	= O' (A)	23	= D1 (C)
8	= O (D)	16	= O (A)	24	= D2 (C)

100104F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D1D	9	= VCC	17	= D1A
2	= D1E	10	= VCCA	18	= D2A
3	= D2E	11	= OC'	19	= D1B
4	= OE	12	= OC	20	= D2B
5	= OE'	13	= OB'	21	= VEE
6	= OD	14	= OB	22	= D1C
7	= OD'	15	= OA'	23	= D2C
8	= F	16	= OA	24	= D2D

100107F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D1D	9	= VCC	17	= D1A
2	= D1E	10	= VCCA	18	= D2A
3	= D2E	11	= OC'	19	= D1B
4	= OE	12	= OC	20	= D2B
5	= OE'	13	= OB'	21	= VEE
6	= OD	14	= OB	22	= D1C
7	= OD'	15	= OA'	23	= D2C
8	= F	16	= OA	24	= D2D

100112F: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	= O1 (D)	9	= VCC	17	= O2 (A)
2	= O2 (D)	10	= VCCA	18	= O1 (A)
3	= O1' (D)	11	= O1 (B)	19	= D (A)
4	= O2' (D)	12	= O2 (B)	20	= D (B)
5	= O2' (C)	13	= O1' (B)	21	= VEE
6	= O1' (C)	14	= O2' (B)	22	= E
7	= O2 (C)	15	= O2' (A)	23	= D (C)
8	= O1 (C)	16	= O1' (A)	24	= D (D)

100113F: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	= O1 (D)	9	= VCC	17	= O2 (A)
2	= O2 (D)	10	= VCCA	18	= O1 (A)
3	= O1' (D)	11	= O1 (B)	19	= D (A)
4	= O2' (D)	12	= O2 (B)	20	= D (B)
5	= O2' (C)	13	= O1' (B)	21	= VEE
6	= O1' (C)	14	= O2' (B)	22	= E
7	= O2 (C)	15	= O2' (A)	23	= D (C)
8	= O1 (C)	16	= O1' (A)	24	= D (D)

100114F: Number of gates per package = 5

Pin	Signal	Pin	Signal	Pin	Signal
1	= D (D)	9	= VCC	17	= D (A)
2	= D' (D)	10	= VCCA	18	= D' (A)
3	= D (E)	11	= O' (C)	19	= D (B)
4	= D' (E)	12	= O (C)	20	= D' (B)
5	= O' (E)	13	= O' (B)	21	= VEE
6	= O (E)	14	= O (B)	22	= VBB
7	= O' (D)	15	= O' (A)	23	= D (C)
8	= O (D)	16	= O (A)	24	= D' (C)

100117F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= D3 (B)	9	= VCC	17	= D3 (A)
2	= D4 (B)	10	= VCCA	18	= D4 (A)
3	= D1 (C)	11	= O (B)	19	= E (A)
4	= D2 (C)	12	= O' (B)	20	= E (B)
5	= D3 (C)	13	= O' (A)	21	= VEE
6	= D4 (C)	14	= O (A)	22	= E (C)
7	= O (C)	15	= D1 (A)	23	= D1 (B)
8	= O' (C)	16	= D2 (A)	24	= D2 (B)

100118F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D3C	9	= VCC	17	= D5A
2	= D4C	10	= VCCA	18	= D1B
3	= D1D	11	= O'	19	= D2B
4	= D2D	12	= O	20	= D3B
5	= D3D	13	= D1A	21	= VEE
6	= D4D	14	= D2A	22	= D4B
7	= D1E	15	= D3A	23	= D1C
8	= D2E	16	= D4A	24	= D2C

100121F: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	= D (A)	9	= VCC	17	= D (D)
2	= D (B)	10	= VCCA	18	= D (E)
3	= D (C)	11	= O' (H)	19	= D (F)
4	= VCCA	12	= O' (G)	20	= D (G)
5	= O' (C)	13	= O' (F)	21	= VEE
6	= O' (B)	14	= O' (E)	22	= VCCA
7	= O' (A)	15	= O' (D)	23	= D (H)
8	= O' (I)	16	= VCCA	24	= D (I)

100122F: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	= D (A)	9	= VCC	17	= D (D)
2	= D (B)	10	= VCCA	18	= D (E)
3	= D (C)	11	= O (H)	19	= D (F)
4	= VCCA	12	= O (G)	20	= D (G)
5	= O (C)	13	= O (F)	21	= VEE
6	= O (B)	14	= O (E)	22	= VCCA
7	= O (A)	15	= O (D)	23	= D (H)
8	= O (I)	16	= VCCA	24	= D (I)

100123F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= DA (C)	9	= VCC	17	= DB (A)
2	= DB (B)	10	= VCCA1 (A)	18	= DA (A)
3	= OB (C)	11	= OA (A)	19	= DE (A)
4	= VCCA2 (C)	12	= VCCA2 (A)	20	= DE (B)
5	= OA (C)	13	= OB (A)	21	= VEE
6	= VCCA1 (C)	14	= VCCA1 (B)	22	= E
7	= OB (B)	15	= OA (B)	23	= DE (C)
8	= VCCA2 (B)	16	= DA (B)	24	= DB (C)

100124F: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= D (B)	9	= VCC	17	= O (F)
2	= D (C)	10	= VCCA	18	= D (F)
3	= O (A)	11	= VCCA	19	= D (E)
4	= O' (A)	12	= O (D)	20	= D (D)
5	= O (B)	13	= O' (D)	21	= VEE
6	= O' (B)	14	= O' (E)	22	= E
7	= O' (C)	15	= O (E)	23	= VTTL
8	= O (C)	16	= O' (F)	24	= D (A)

100125F: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= D' (E)	9	= VCC	17	= D (B)
2	= D (F)	10	= VCC	18	= D' (C)
3	= D' (F)	11	= O (C)	19	= D (C)
4	= O (F)	12	= O (B)	20	= VBB
5	= O (E)	13	= O (A)	21	= VEE
6	= O (D)	14	= D' (A)	22	= D (D)
7	= VTTL	15	= D (A)	23	= D' (D)
8	= VTTL	16	= D' (B)	24	= D (E)

100126F: Number of gates per package = 9

Pin	Signal	Pin	Signal	Pin	Signal
1	D (A)	9	VCC	17	D (D)
2	D (B)	10	VCCA	18	D (E)
3	D (C)	11	O (H)	19	D (F)
4	VCCA	12	O (G)	20	D (G)
5	O (C)	13	O (F)	21	VEE
6	O (B)	14	O (E)	22	VCCA
7	O (A)	15	O (D)	23	D (H)
8	O (I)	16	VCCA	24	D (I)

100128F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	E1	9	VCC	17	T2
2	E2	10	VCCA	18	T1
3	E3	11	DIR	19	T0
4	E4	12	T7	20	LE
5	E5	13	T6	21	VEE
6	E6	14	T5	22	VCC
7	E7	15	T4	23	VTTL
8	OE	16	T3	24	E0

100130F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	E' (B)	9	VCC	17	CD (A)
2	CD (B)	10	VCCA	18	SD (A)
3	SD (C)	11	Q (B)	19	MS
4	CD (C)	12	Q' (B)	20	EC'
5	E' (C)	13	Q' (A)	21	VEE
6	D (C)	14	Q (A)	22	MR
7	Q (C)	15	D (A)	23	SD (B)
8	Q' (C)	16	E' (A)	24	D (B)

100131F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= CP (B)	9	= VCC	17	= CD (A)
2	= CD (B)	10	= VCCA	18	= SD (A)
3	= SD (C)	11	= Q (B)	19	= MS
4	= CD (C)	12	= Q' (B)	20	= CPC
5	= CP (C)	13	= Q' (A)	21	= VEE
6	= D (C)	14	= Q (A)	22	= MR
7	= Q (C)	15	= D (A)	23	= SD (B)
8	= Q' (C)	16	= CP (A)	24	= D (B)

100135F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= C (B)	9	= VCC	17	= CP (A)
2	= CP (C)	10	= VCCA	18	= J (A)
3	= C (C)	11	= Q' (B)	19	= K (A)
4	= S (C)	12	= Q (B)	20	= S (B)
5	= J (C)	13	= Q' (A)	21	= VEE
6	= K (C)	14	= Q (A)	22	= K (B)
7	= Q' (C)	15	= S (A)	23	= J (B)
8	= Q (C)	16	= C (A)	24	= CP (B)

100136F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= S2	9	= VCC	17	= P2
2	= CEP'	10	= VCCA	18	= P1
3	= D0/CET	11	= Q2	19	= P0
4	= TC'	12	= Q2'	20	= CP
5	= Q0	13	= Q3'	21	= VEE
6	= Q0'	14	= Q3	22	= MR
7	= Q1'	15	= D3	23	= S0
8	= Q1	16	= P3	24	= S1

100139F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P3	9	= VCC	17	= Q3'
2	= P2	10	= VCCA	18	= Q3
3	= P1	11	= TC14'	19	= PE2
4	= P0	12	= PE1	20	= CP
5	= Q0'	13	= TC15'	21	= VEE
6	= Q0	14	= TC14	22	= CEP
7	= Q1'	15	= Q2'	23	= MR
8	= Q1	16	= Q2	24	= CET

100140F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P3	9	= VCC	17	= Q3'
2	= P2	10	= VCCA	18	= Q3
3	= P1	11	= TC1'	19	= PE2
4	= P0	12	= PE1	20	= CP
5	= Q0'	13	= TC0'	21	= VEE
6	= Q0	14	= TC1	22	= CEP
7	= Q1'	15	= Q2'	23	= MR
8	= Q1	16	= Q2	24	= CET

100141F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P2	9	= VCC	17	= P6
2	= P1	10	= VCCA	18	= P5
3	= P0	11	= Q4	19	= P4
4	= D0	12	= Q5	20	= CP
5	= Q0	13	= Q6	21	= VEE
6	= Q1	14	= Q7	22	= S0
7	= Q2	15	= D7	23	= S1
8	= Q3	16	= P7	24	= P3

100142F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D2	9	= VCC	17	= MK0
2	= MK2	10	= VCCA	18	= D0
3	= D3	11	= Q3	19	= A3
4	= MK3	12	= Q2	20	= A2
5	= M0	13	= Q1	21	= VEE
6	= M1	14	= Q0	22	= WS
7	= M2	15	= MK1	23	= A1
8	= M3	16	= D1	24	= A0

100145F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= AW2	9	= VCC	17	= OE1
2	= AW3	10	= VCCA	18	= OE2
3	= AR3	11	= Q2	19	= WE1
4	= AR2	12	= Q3	20	= WE2
5	= AR1	13	= D3	21	= VEE
6	= AR0	14	= D2	22	= MR
7	= Q0	15	= D1	23	= AW0
8	= Q1	16	= D0	24	= AW1

100150F: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	= D (E)	9	= VCC	17	= D (A)
2	= D (F)	10	= VCCA	18	= D (B)
3	= Q (F)	11	= Q' (C)	19	= D (C)
4	= Q' (F)	12	= Q (C)	20	= D (D)
5	= Q' (E)	13	= Q' (B)	21	= VEE
6	= Q (E)	14	= Q (B)	22	= MR
7	= Q' (D)	15	= Q' (A)	23	= EA'
8	= Q (D)	16	= Q (A)	24	= EB'

100151F: Number of gates per package = 6

Pin	Signal	Pin	Signal	Pin	Signal
1	D (E)	9	VCC	17	D (A)
2	D (F)	10	VCCA	18	D (B)
3	Q (F)	11	Q' (C)	19	D (C)
4	Q' (F)	12	Q (C)	20	D (D)
5	Q' (E)	13	Q' (B)	21	VEE
6	Q (E)	14	Q (B)	22	MR
7	Q' (D)	15	Q' (A)	23	CPA
8	Q (D)	16	Q (A)	24	CPB

100155F: Number of gates per package = 4

Pin	Signal	Pin	Signal	Pin	Signal
1	E2' (C)	9	VCC	17	E2' (B)
2	D0 (C)	10	VCCA	18	D0 (B)
3	E2' (D)	11	Q' (B)	19	D1
4	D0 (D)	12	Q (B)	20	S0'
5	Q (D)	13	Q (A)	21	VEE
6	Q' (D)	14	Q' (A)	22	S1
7	Q' (C)	15	E2' (A)	23	MR
8	Q (C)	16	D0 (A)	24	E1'

100156F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	BM0	9	VCC	17	B2
2	AM0	10	VCCA	18	A2
3	BM1	11	Q1	19	BS0
4	AM1	12	Q0	20	E'
5	A3	13	B0	21	VEE
6	B3	14	A0	22	AS0
7	Q3	15	B1	23	BS1
8	Q2	16	A1	24	AS1

100158F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D5	9	= VCC	17	= D2
2	= D6	10	= VCCA	18	= D3
3	= D7	11	= Z3	19	= S0
4	= Z7	12	= Z2	20	= S1
5	= Z6	13	= Z1	21	= VEE
6	= Z5	14	= Z0	22	= M
7	= Z4	15	= D0	23	= S2
8	= VCCA	16	= D1	24	= D4

100160F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= I3B	9	= VCC	17	= I4A
2	= I4B	10	= VCCA	18	= I5A
3	= I5B	11	= ZA	19	= I6A
4	= I6B	12	= IA	20	= I7A
5	= I7B	13	= I0A	21	= VEE
6	= IB	14	= I1A	22	= I0B
7	= ZB	15	= I2A	23	= I1B
8	= C'	16	= I3A	24	= I2B

100163F: Number of gates per package = 2

Pin	Signal	Pin	Signal	Pin	Signal
1	= D6 (B)	9	= VCC	17	= D5 (A)
2	= D5 (B)	10	= VCCA	18	= D6 (A)
3	= D4 (B)	11	= Z (A)	19	= D7 (A)
4	= D3 (B)	12	= D0 (A)	20	= S0
5	= D2 (B)	13	= D1 (A)	21	= VEE
6	= D1 (B)	14	= D2 (A)	22	= S1
7	= D0 (B)	15	= D3 (A)	23	= S2
8	= Z (B)	16	= D4 (A)	24	= D7 (B)

100164F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= I0	9	= VCC	17	= I13
2	= I1	10	= VCCA	18	= I14
3	= I2	11	= Z	19	= I15
4	= I3	12	= I8	20	= S0
5	= I4	13	= I9	21	= VEE
6	= I5	14	= I10	22	= S1
7	= I6	15	= I11	23	= S2
8	= I7	16	= I12	24	= S3

100165F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= I2	9	= VCC	17	= I6
2	= I1	10	= VCCA	18	= I5
3	= I0	11	= GS2	19	= I4
4	= Q0	12	= Q2	20	= OE'
5	= Q0'	13	= Q2'	21	= VEE
6	= Q1'	14	= Q3'	22	= E'
7	= Q1	15	= Q3	23	= M
8	= GS1	16	= I7	24	= I3

100166F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= B5	9	= VCC	17	= A5
2	= B4	10	= VCCA	18	= A6
3	= B3	11	= A>B	19	= A7
4	= B2	12	= A0	20	= A8
5	= B1	13	= A1	21	= VEE
6	= B0	14	= A2	22	= B8
7	= A<B	15	= A3	23	= B7
8	= A=B	16	= A4	24	= B6

100170F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= HC	9	= VCC	17	= M
2	= HB	10	= VCCA	18	= A2A
3	= A0B	11	= Z3	19	= EA1
4	= A1B	12	= Z0	20	= EB1
5	= Z7	13	= Z2	21	= VEE
6	= Z4	14	= Z1	22	= EB2
7	= Z6	15	= A0A	23	= EA2
8	= Z5	16	= A1A	24	= HA

100171F: Number of gates per package = 3

Pin	Signal	Pin	Signal	Pin	Signal
1	= I2 (B)	9	= VCC	17	= I2 (A)
2	= I3 (B)	10	= VCCA	18	= I3 (A)
3	= I0 (C)	11	= Z (B)	19	= S0
4	= I1 (C)	12	= Z' (B)	20	= S1
5	= I2 (C)	13	= Z' (A)	21	= VEE
6	= I3 (C)	14	= Z (A)	22	= E'
7	= Z (C)	15	= I0 (A)	23	= I0 (B)
8	= Z' (C)	16	= I1 (A)	24	= I1 (B)

100179F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= G0	9	= VCC	17	= G5
2	= P0	10	= VCCA	18	= P5
3	= G1	11	= CN+6	19	= G6
4	= P1	12	= CN+8	20	= P6
5	= G2	13	= G3	21	= VEE
6	= P2	14	= P3	22	= CN
7	= CN+2	15	= G4	23	= G7
8	= CN+4	16	= P4	24	= P7

100180F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= B1	9	= VCC	17	= B4
2	= A1	10	= VCCA	18	= A4
3	= B0	11	= F4	19	= B3
4	= A0	12	= F5	20	= A3
5	= F0	13	= P	21	= VEE
6	= F1	14	= G	22	= CN
7	= F2	15	= B5	23	= B2
8	= F3	16	= A5	24	= A2

100181F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= A3	9	= VCC	17	= B2
2	= A2	10	= VCCA	18	= B3
3	= A1	11	= CN+4	19	= S0
4	= A0	12	= P	20	= S1
5	= F0	13	= G	21	= VEE
6	= F1	14	= CN	22	= E
7	= F2	15	= B0	23	= S2
8	= F3	16	= B1	24	= S3

100182F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D4	9	= VCC	17	= CIN-2
2	= D3	10	= VCCA	18	= D8
3	= D2	11	= CO2	19	= D7
4	= D1	12	= PC	20	= D6
5	= D0	13	= PS	21	= VEE
6	= CON+2	14	= CI3	22	= D5
7	= CO3	15	= CI2	23	= {n/c}
8	= CO1	16	= CI1	24	= {n/c}

100183F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= B3	9	= VCC	17	= B7
2	= B2	10	= VCCA	18	= B6
3	= B1	11	= F4	19	= B5
4	= B0	12	= F5	20	= B4
5	= F0	13	= F6	21	= VEE
6	= F1	14	= F7	22	= A2
7	= F2	15	= F8'	23	= A1
8	= F3	16	= B8	24	= A0

100241F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= P2	9	= VCC	17	= P6
2	= P1	10	= VCCA	18	= P5
3	= P0	11	= Q4	19	= P4
4	= D0	12	= Q5	20	= CP
5	= Q0	13	= Q6	21	= VEE
6	= Q1	14	= Q7	22	= S0
7	= Q2	15	= D7	23	= S1
8	= Q3	16	= P7	24	= P3

100413F: Number of gates per package = 1

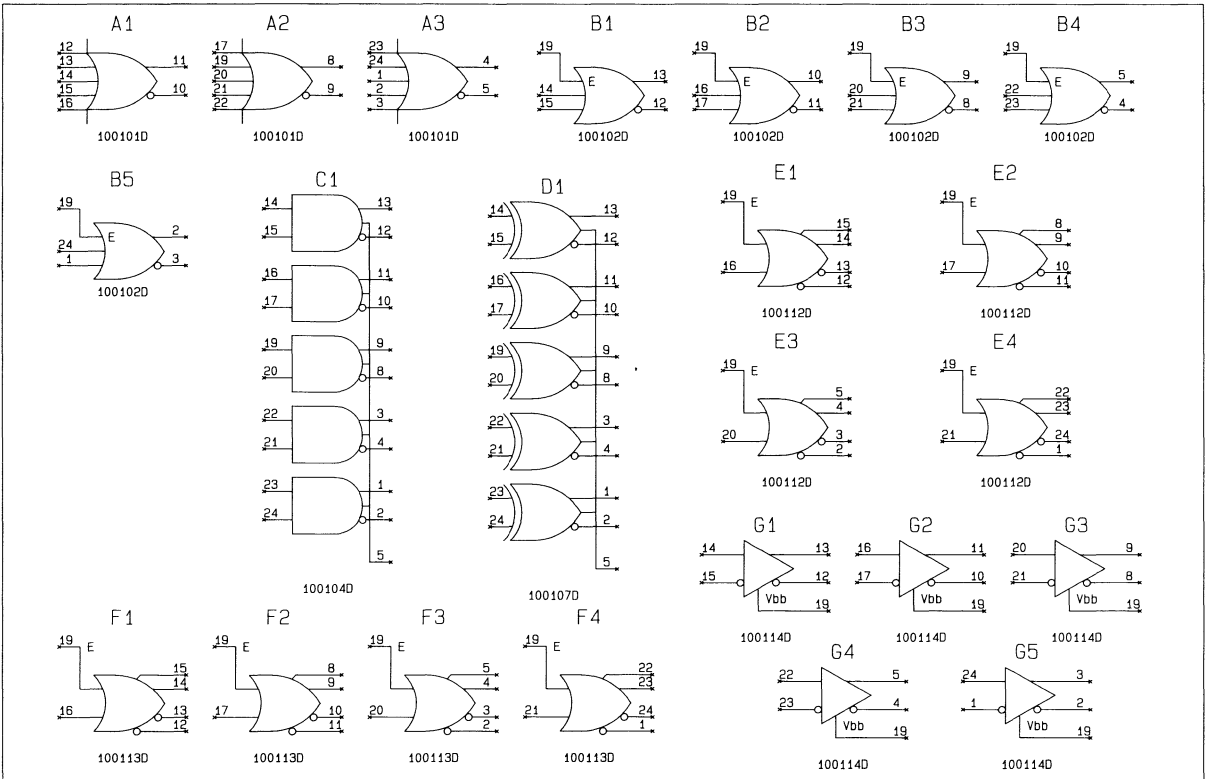
Pin	Signal	Pin	Signal	Pin	Signal
1	= D2	9	= VCC	17	= D6
2	= D1	10	= VCCA	18	= D5
3	= D0	11	= T0	19	= D4
4	= Q0	12	= Q4	20	= IR
5	= Q1	13	= Q5	21	= VEE
6	= Q2	14	= Q6	22	= MR
7	= Q3	15	= Q7	23	= TI
8	= OR	16	= D7	24	= D3

E100142F: Number of gates per package = 1

Pin	Signal	Pin	Signal	Pin	Signal
1	= D2	9	= VCC	17	= MK0
2	= MK2	10	= VCCA	18	= D0
3	= D3	11	= Q3	19	= A3
4	= MK3	12	= Q2	20	= A2
5	= M0	13	= Q1	21	= VEE
6	= M1	14	= Q0	22	= WS
7	= M2	15	= MK1	23	= A1
8	= M3	16	= D1	24	= A0

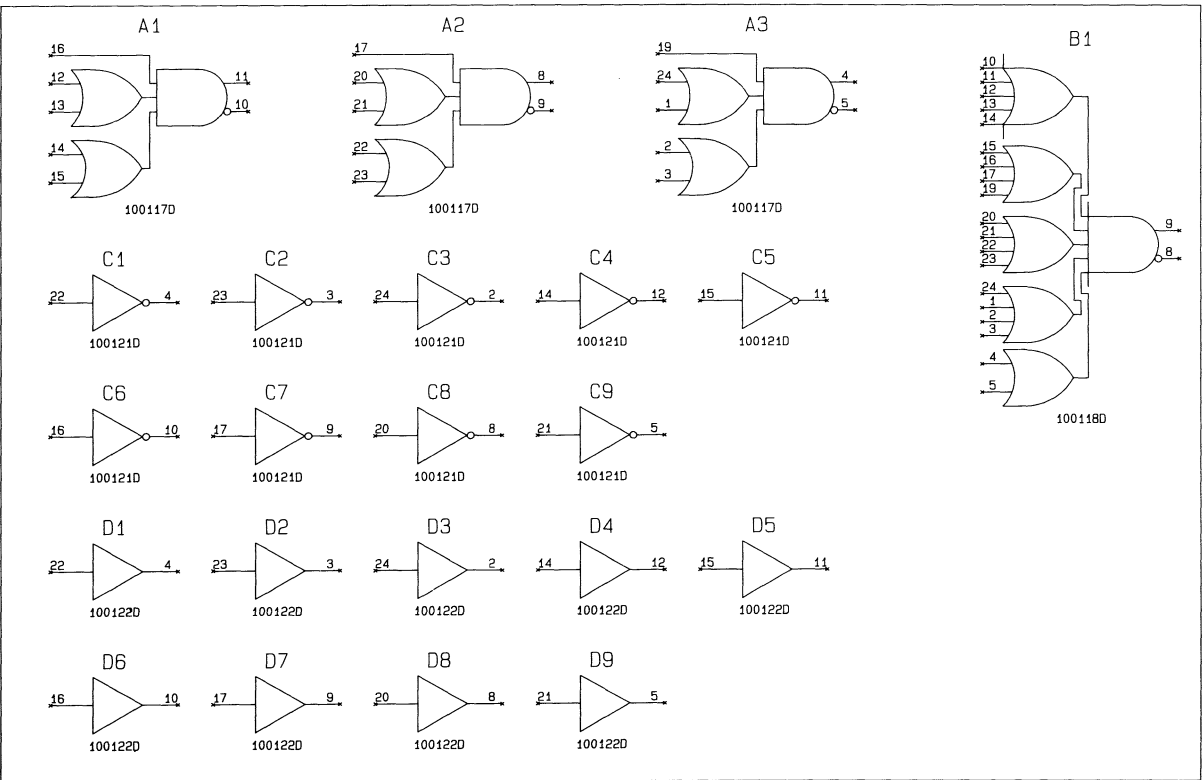
E100165F: Number of gates per package = 1

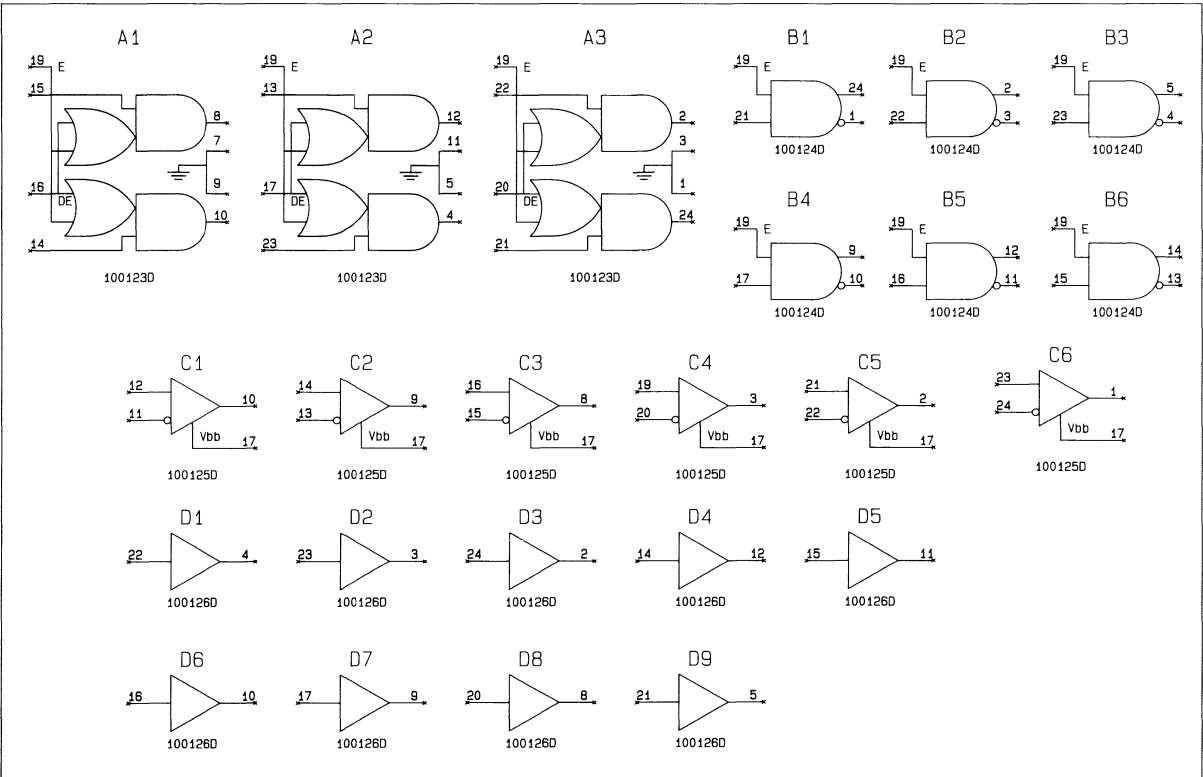
Pin	Signal	Pin	Signal	Pin	Signal
1	= I2	9	= VCC	17	= I6
2	= I1	10	= VCCA	18	= I5
3	= I0	11	= GS2	19	= I4
4	= Q0	12	= Q2	20	= OE'
5	= Q0'	13	= Q2'	21	= VEE
6	= Q1'	14	= Q3'	22	= E'
7	= Q1	15	= Q3	23	= M
8	= GS1	16	= I7	24	= I3



COMPONENT PLOTS

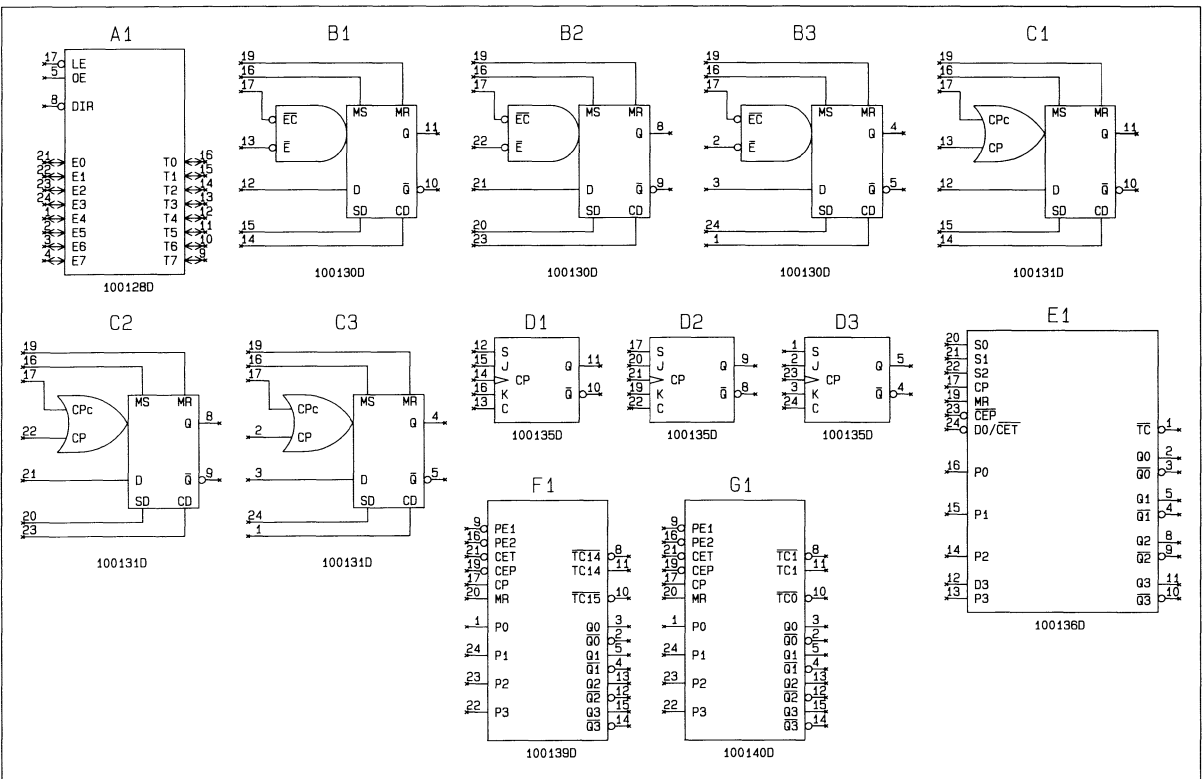
Plot 2





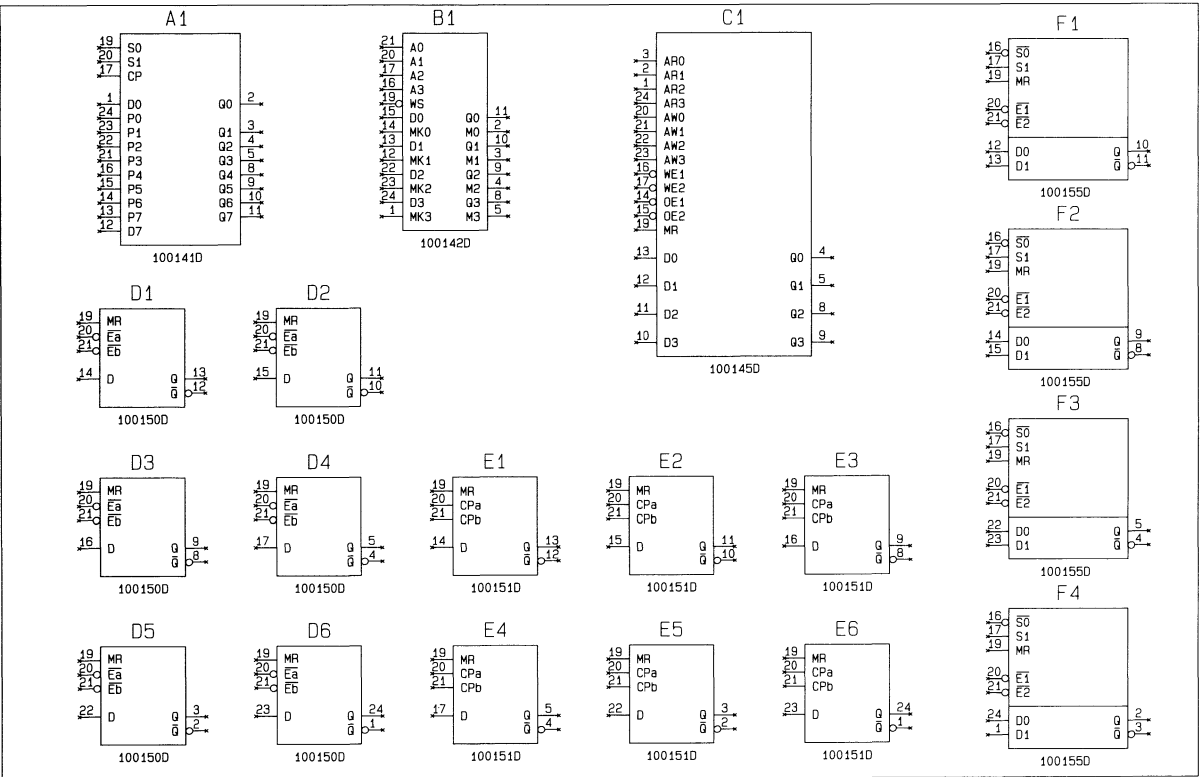
COMPONENT PLOTS

Plot 4



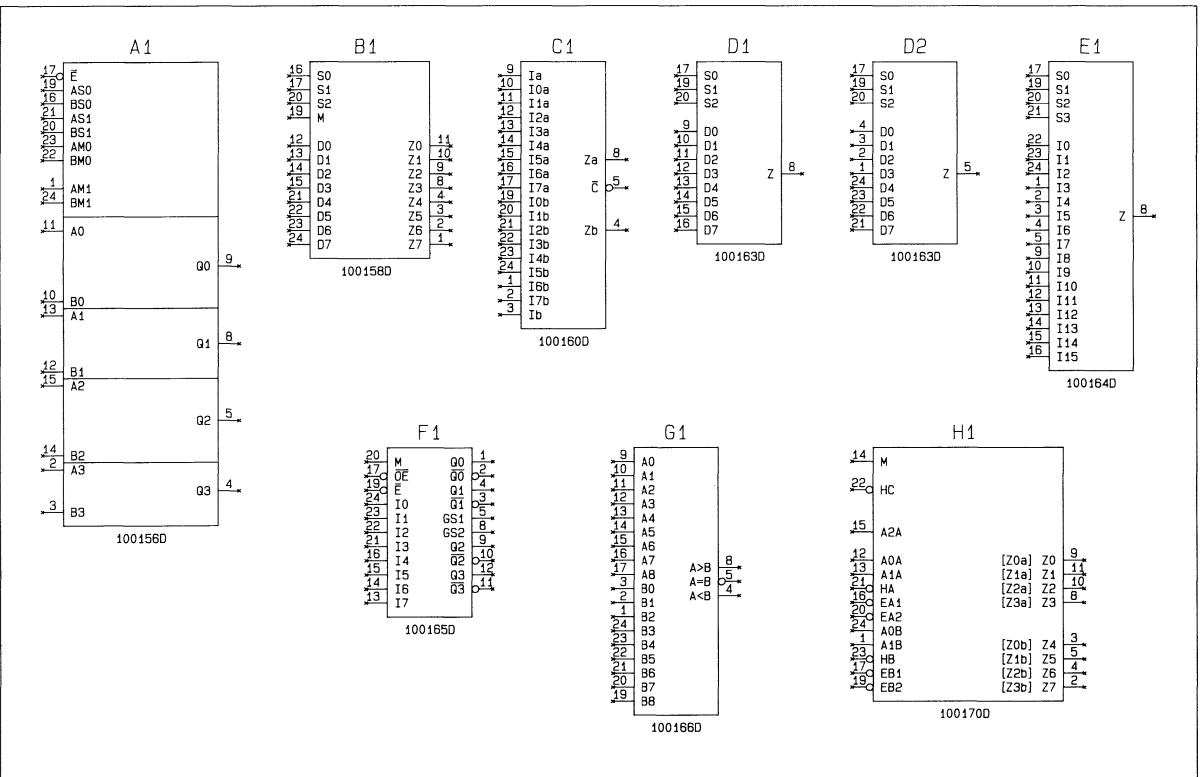
COMPONENT PLOTS

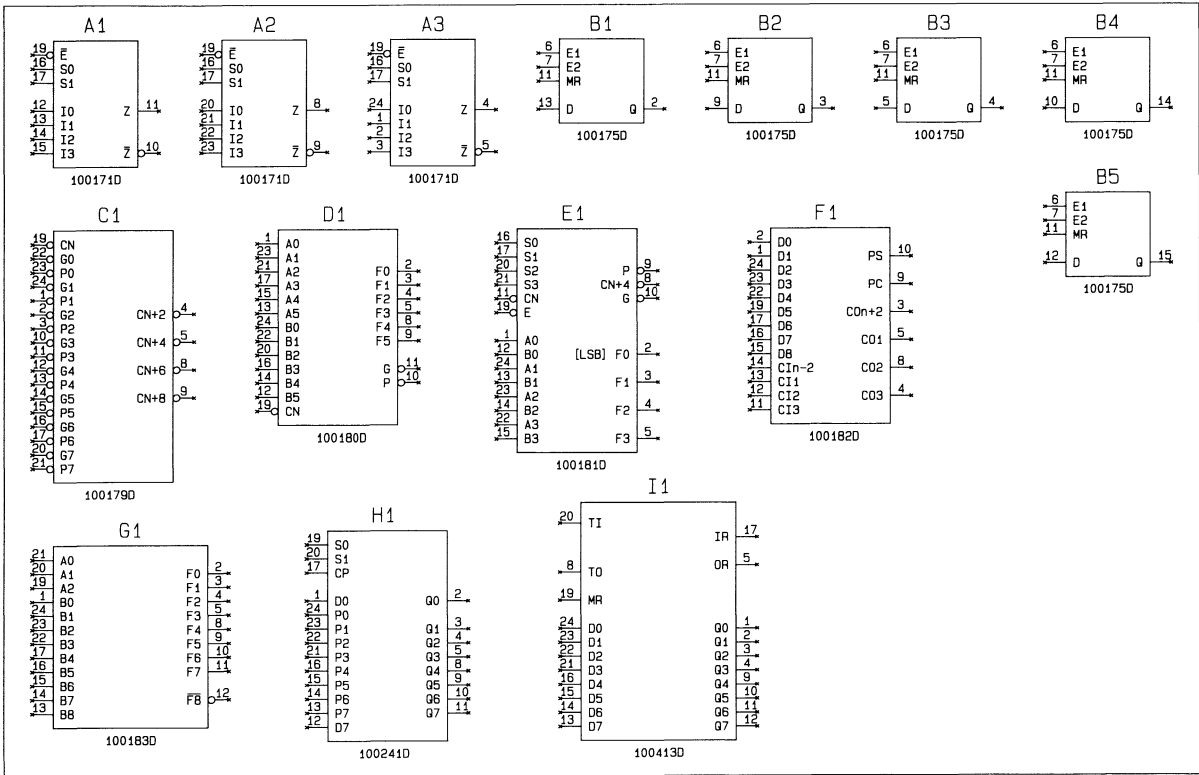
Plot 5



COMPONENT PLOTS

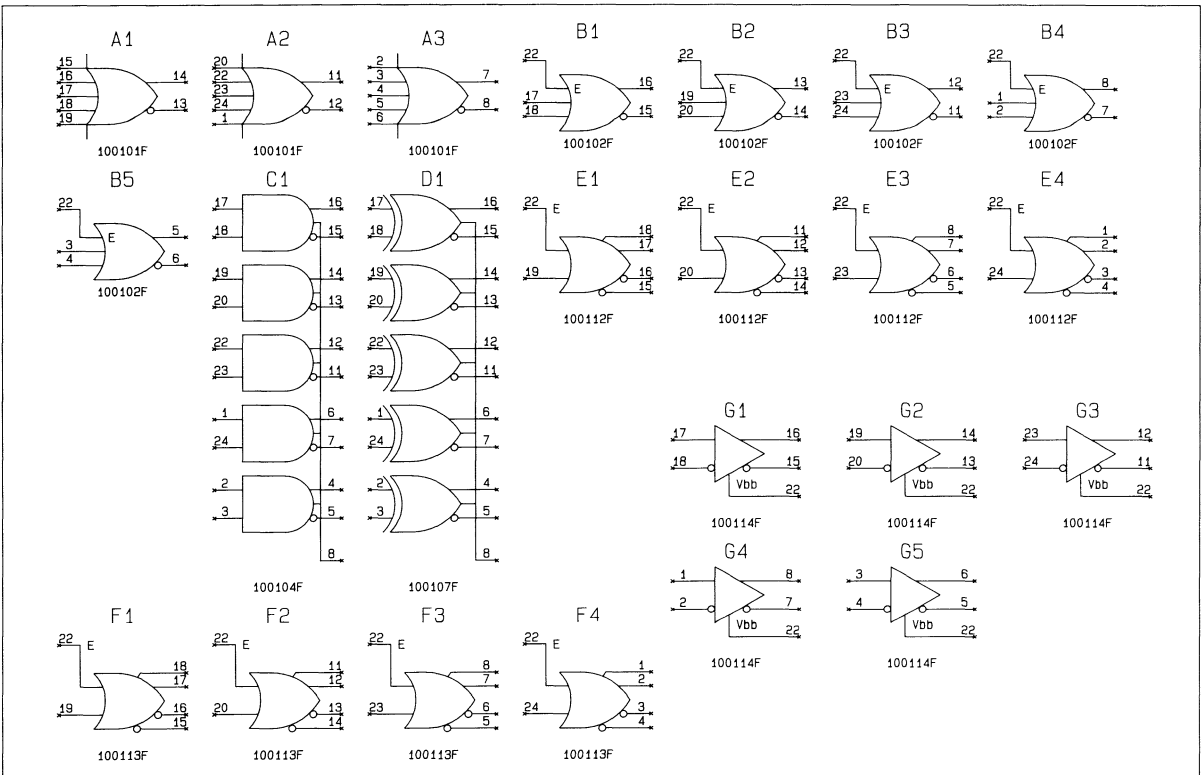
Plot 6

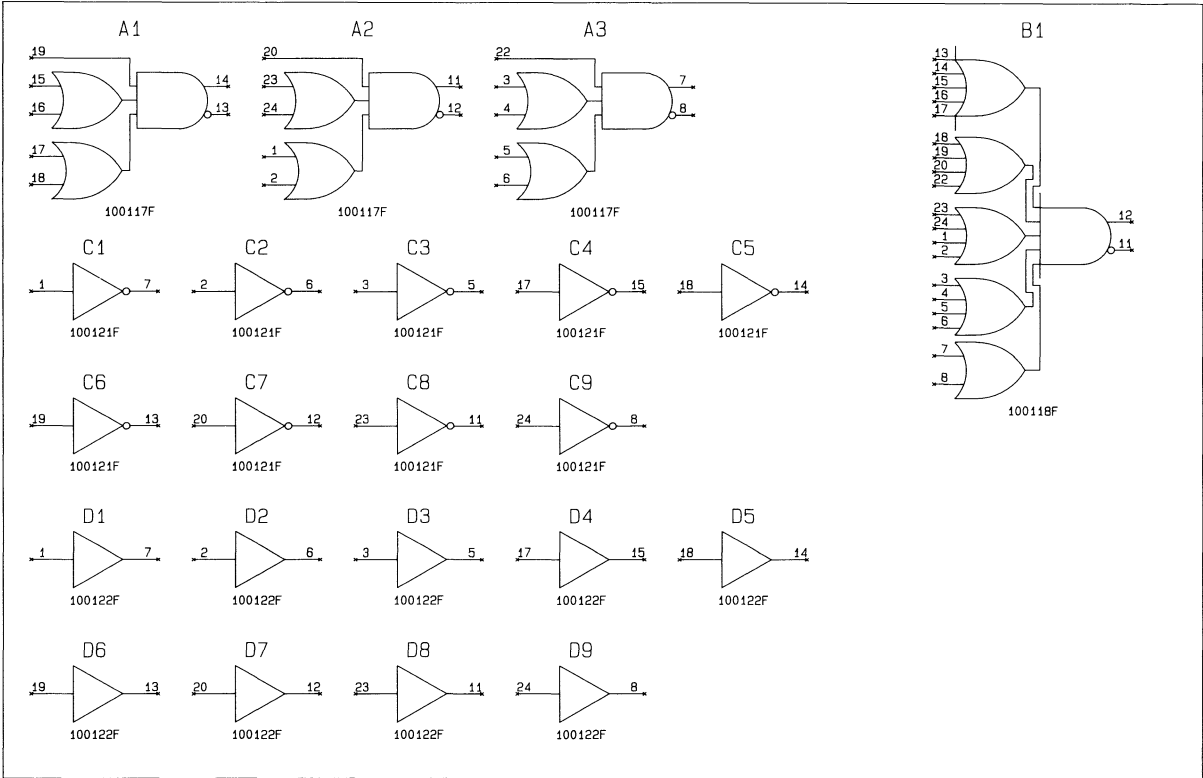




COMPONENT PLOTS

Plot 8



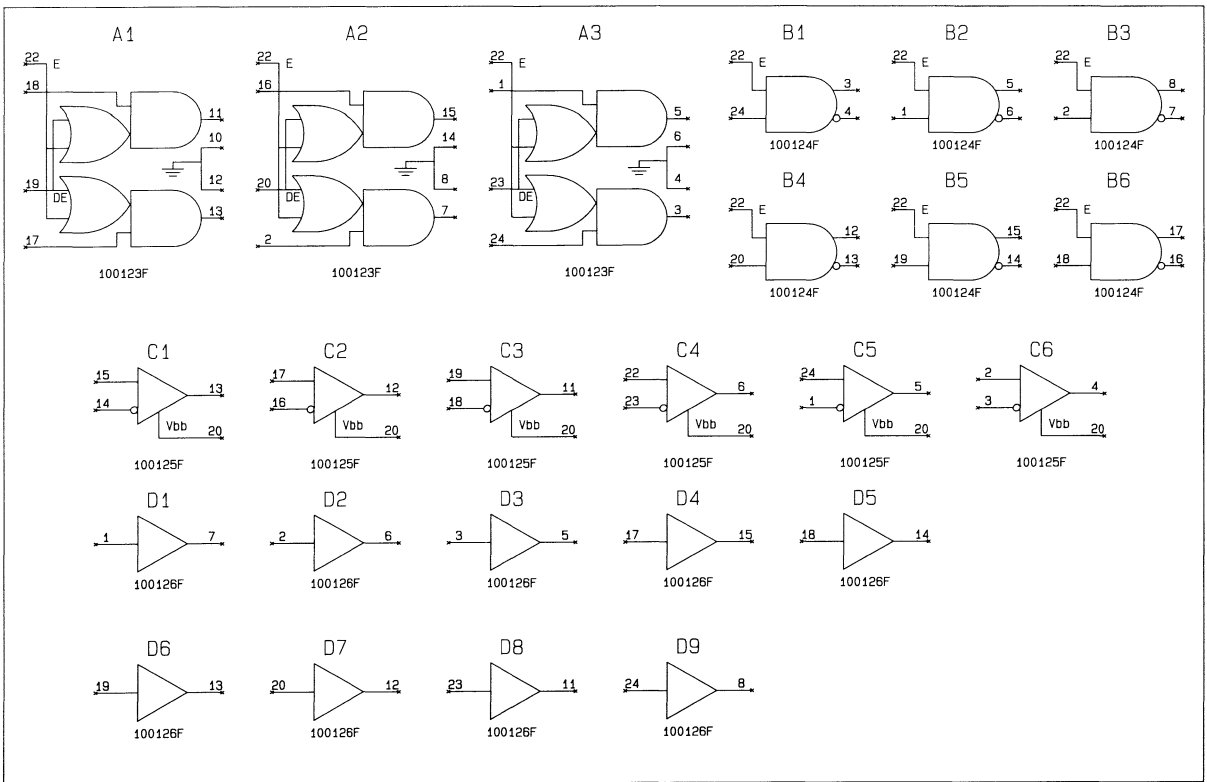


COMPONENT PLOTS

Plot 9

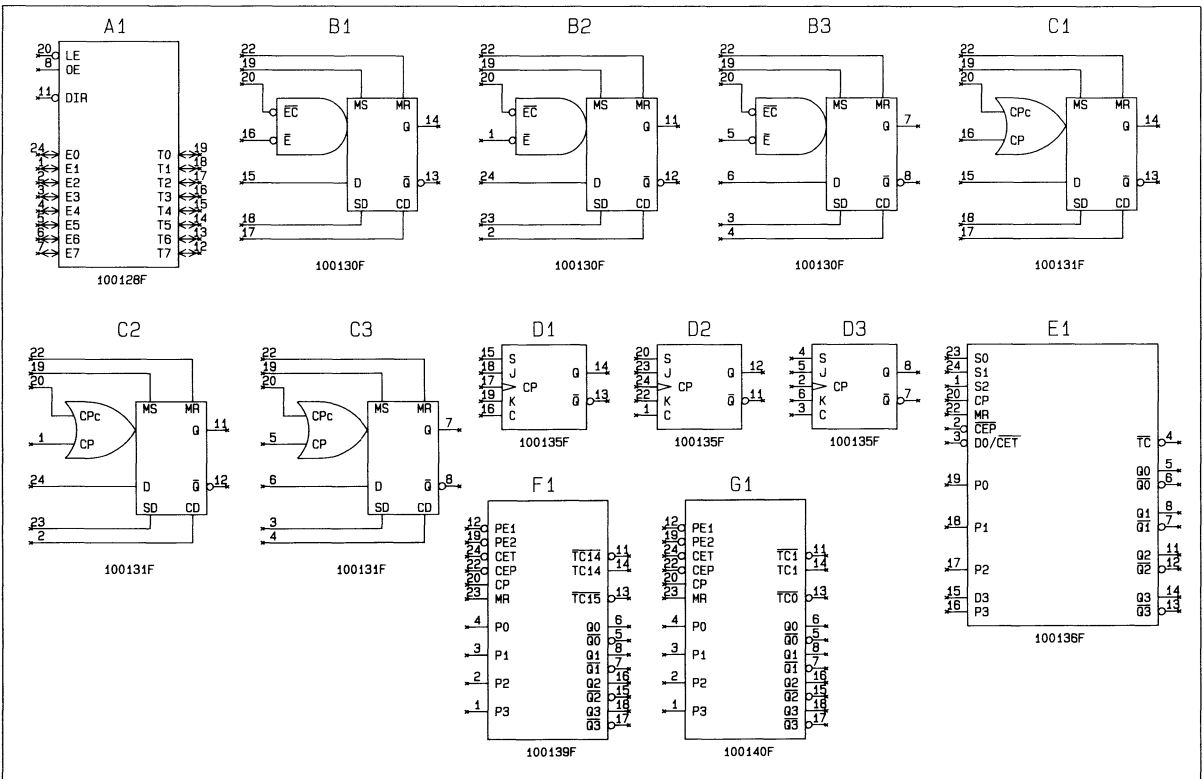
COMPONENT PLOTS

Plot 10



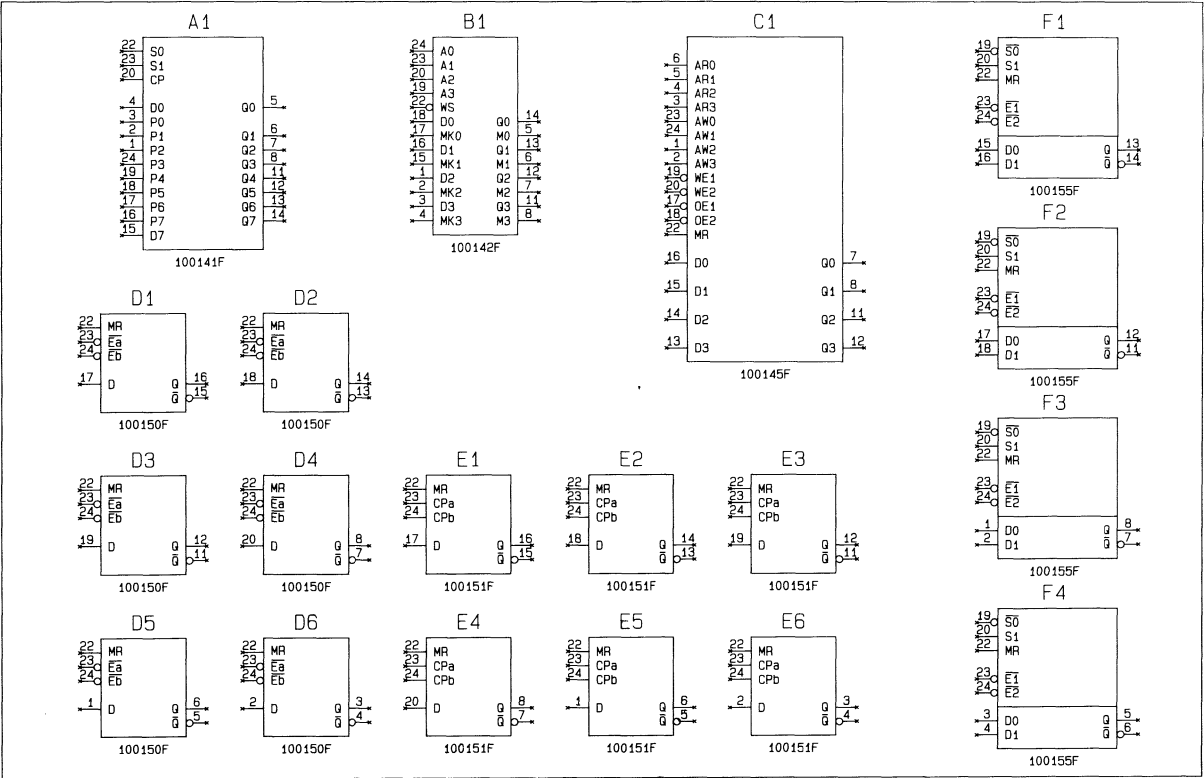
COMPONENT PLOTS

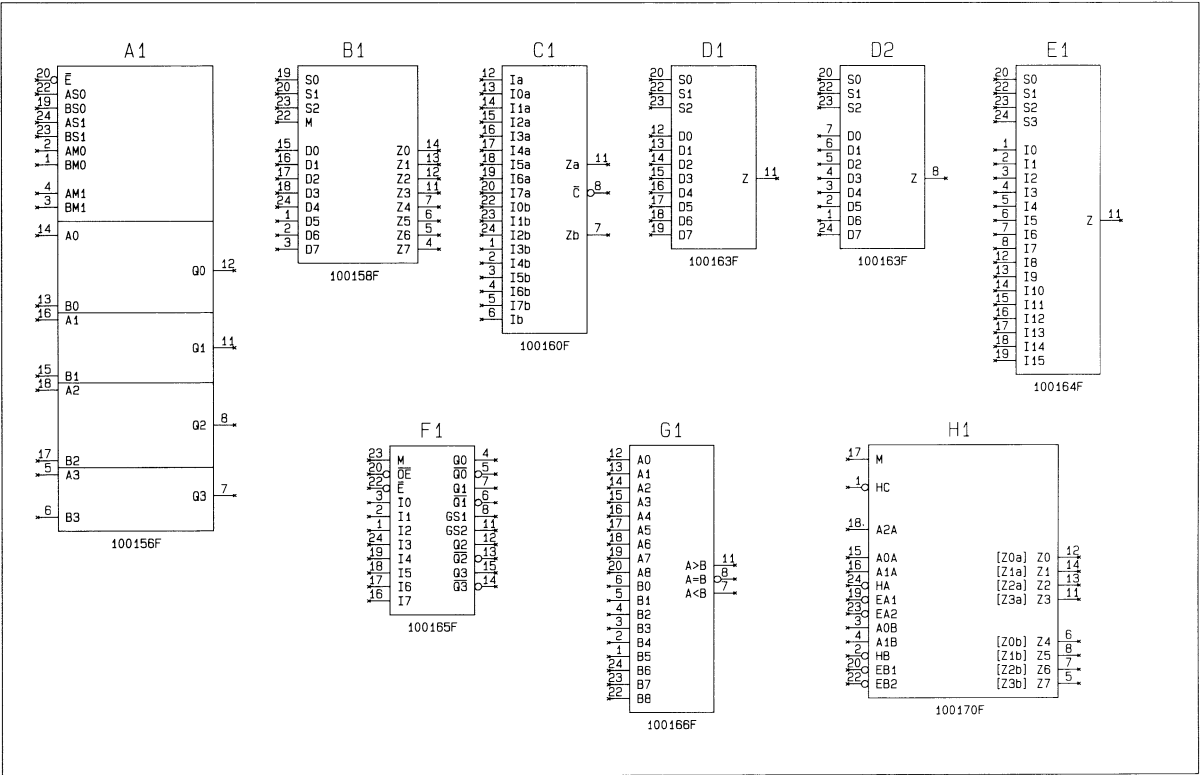
Plot 11



COMPONENT PLOTS

Plot 12



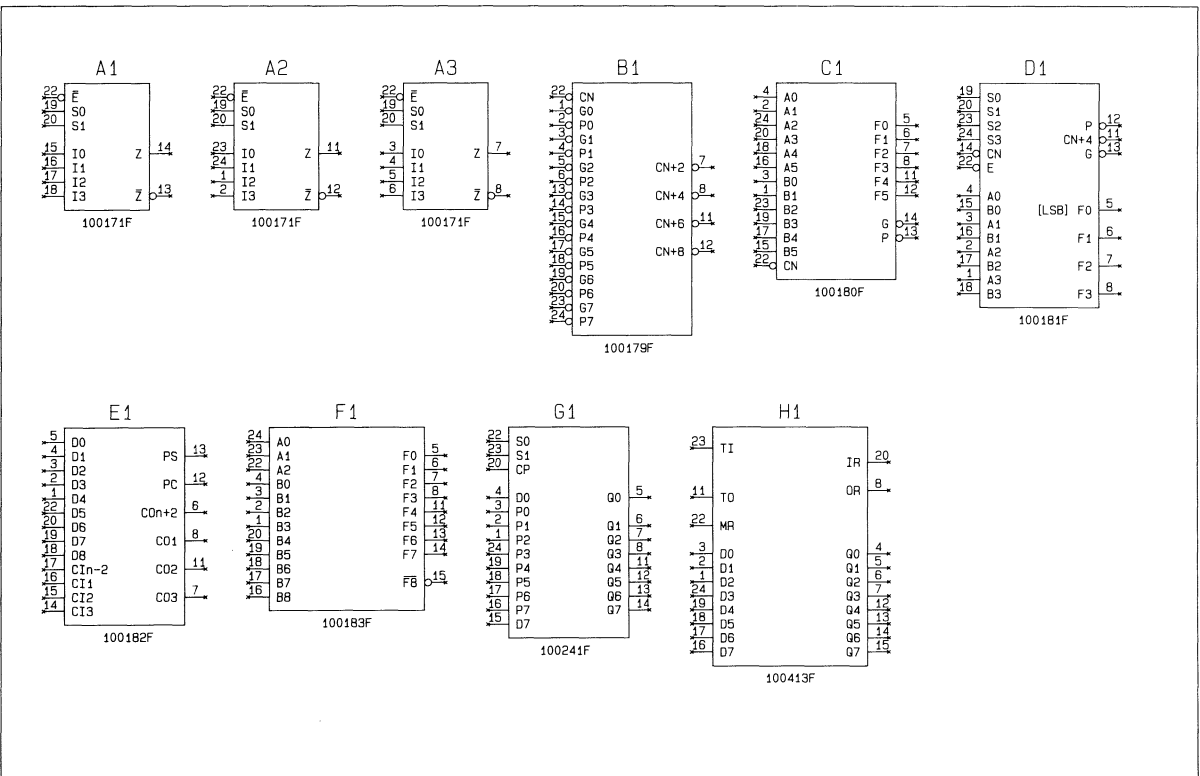


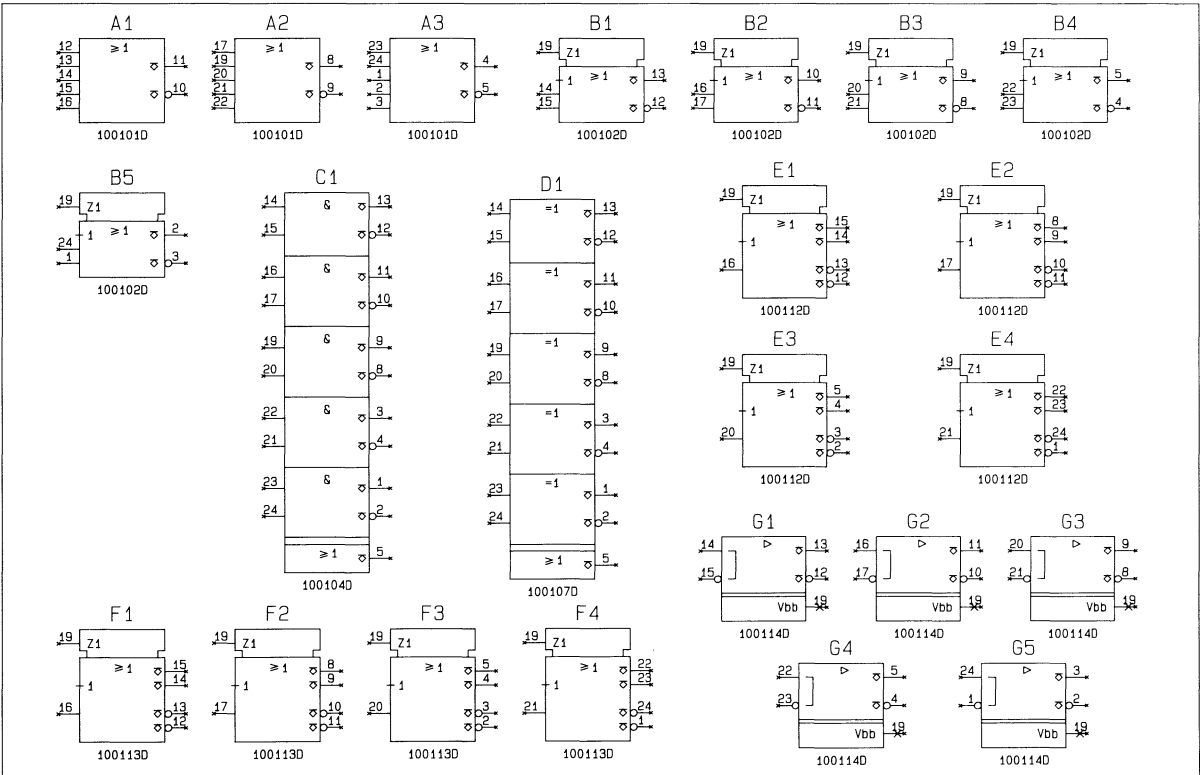
COMPONENT PLOTS

Plot 13

COMPONENT PLOTS

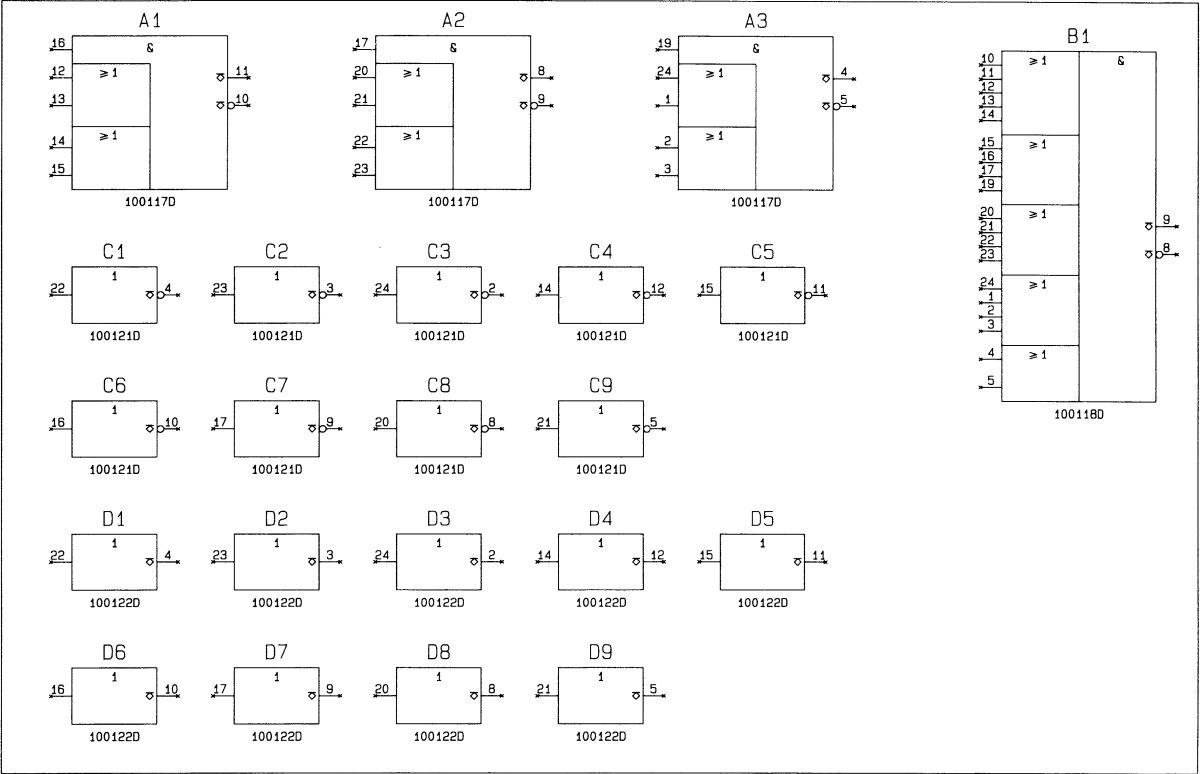
Plot 14

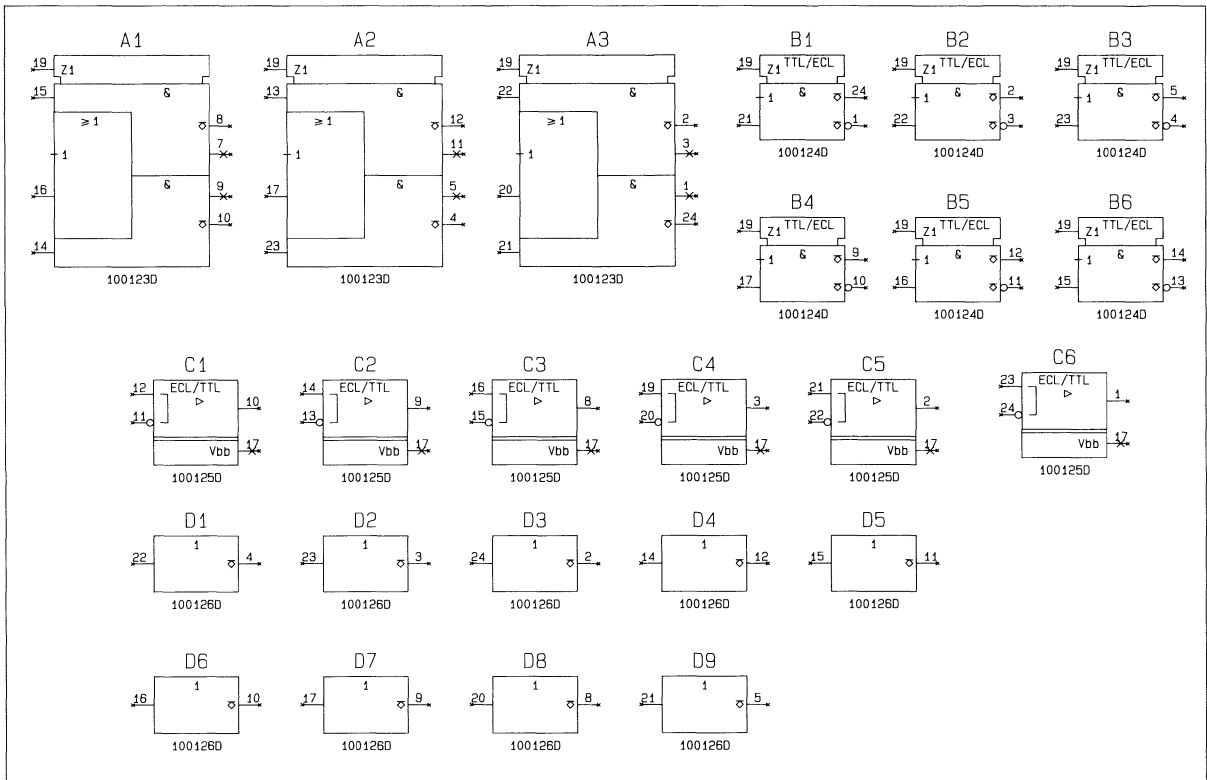




COMPONENT PLOTS

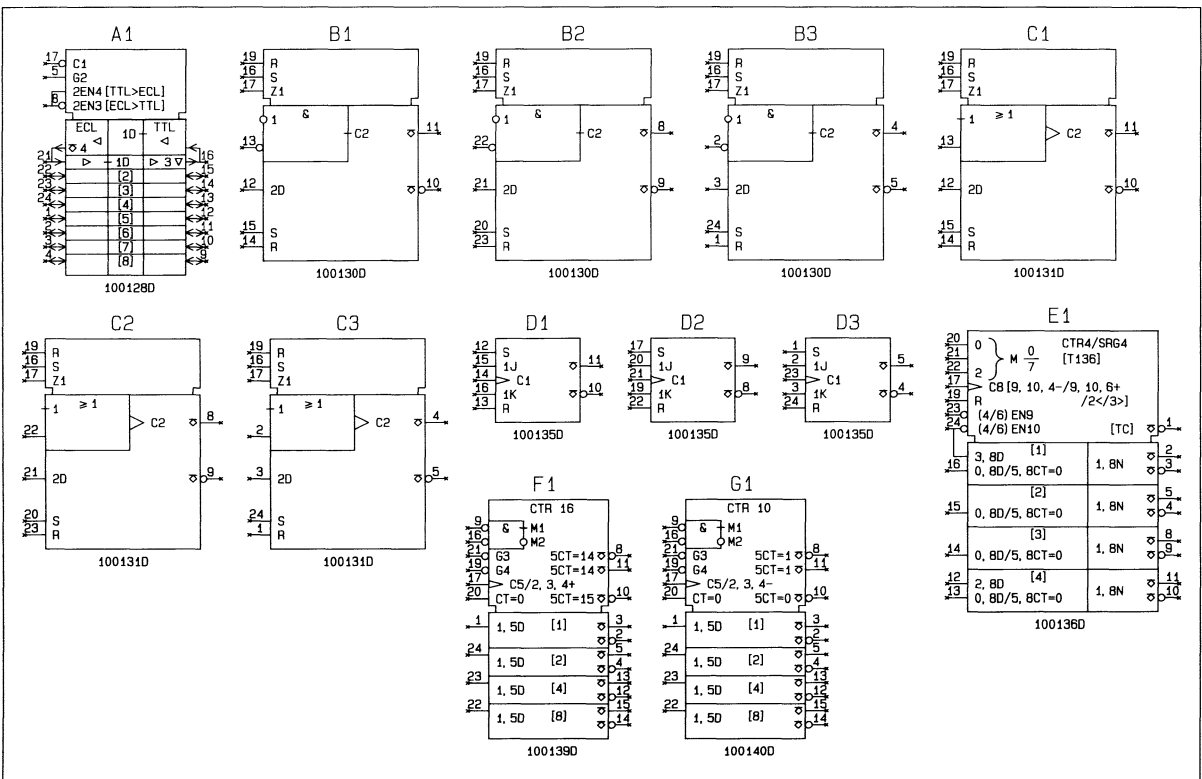
Plot 2A



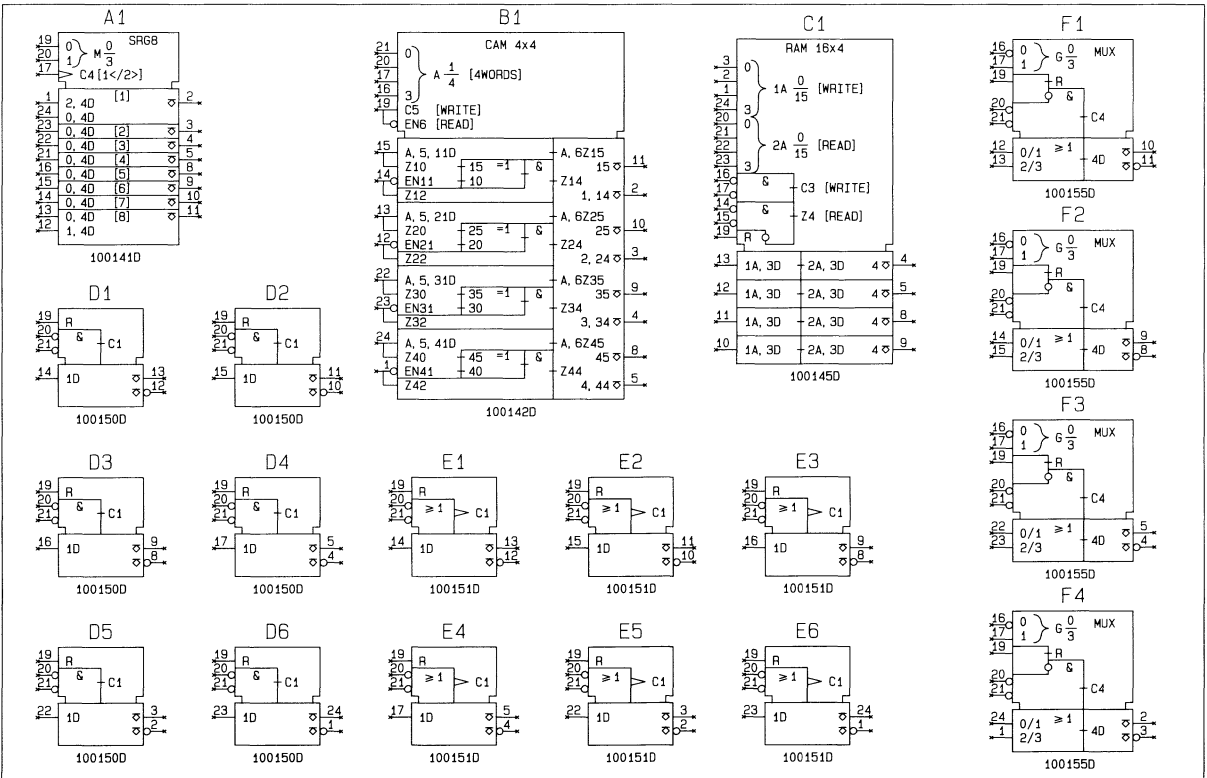


COMPONENT PLOTS

Plot 4A



000-0147-00

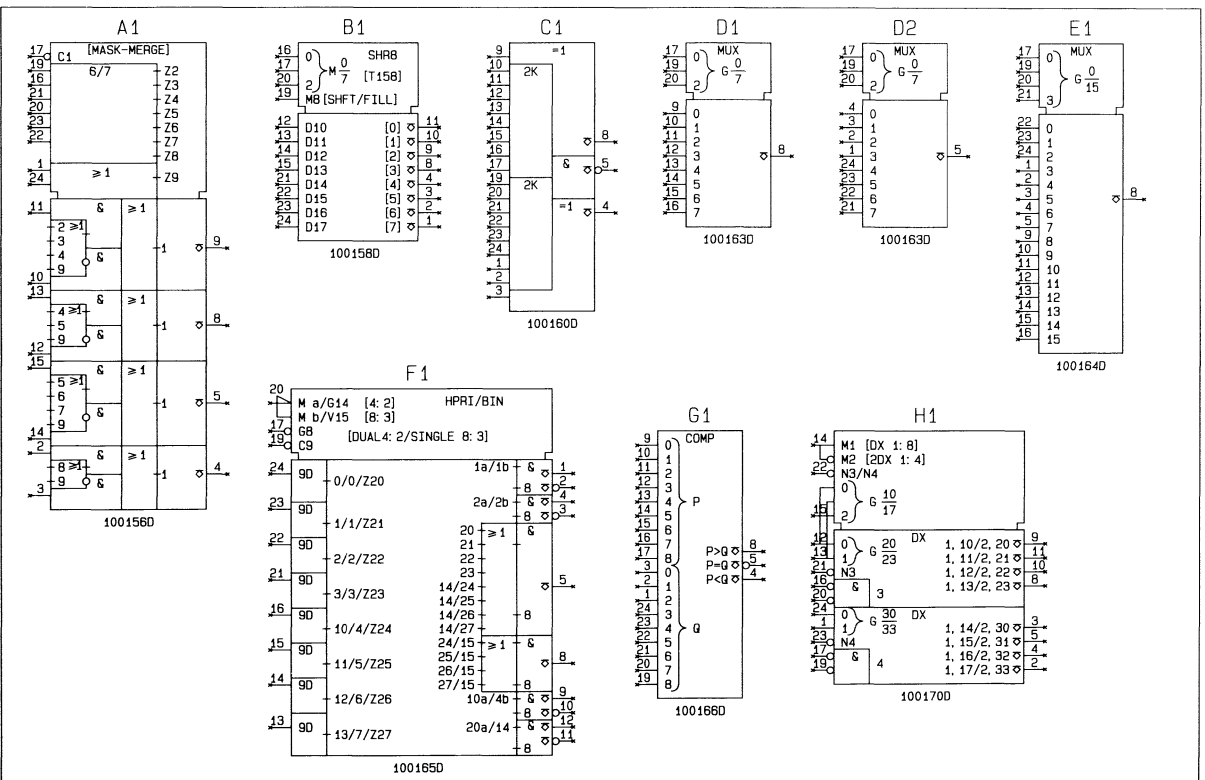


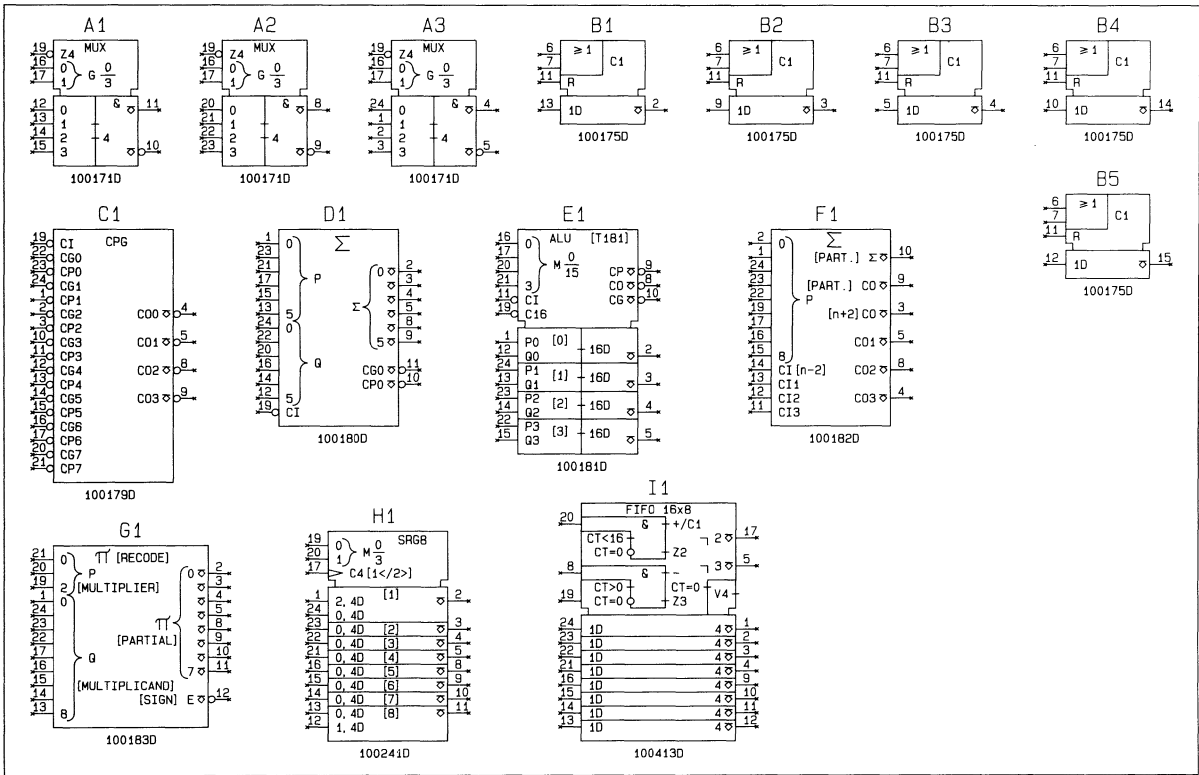
COMPONENT PLOTS

Plot 5A

COMPONENT PLOTS

Plot 6A



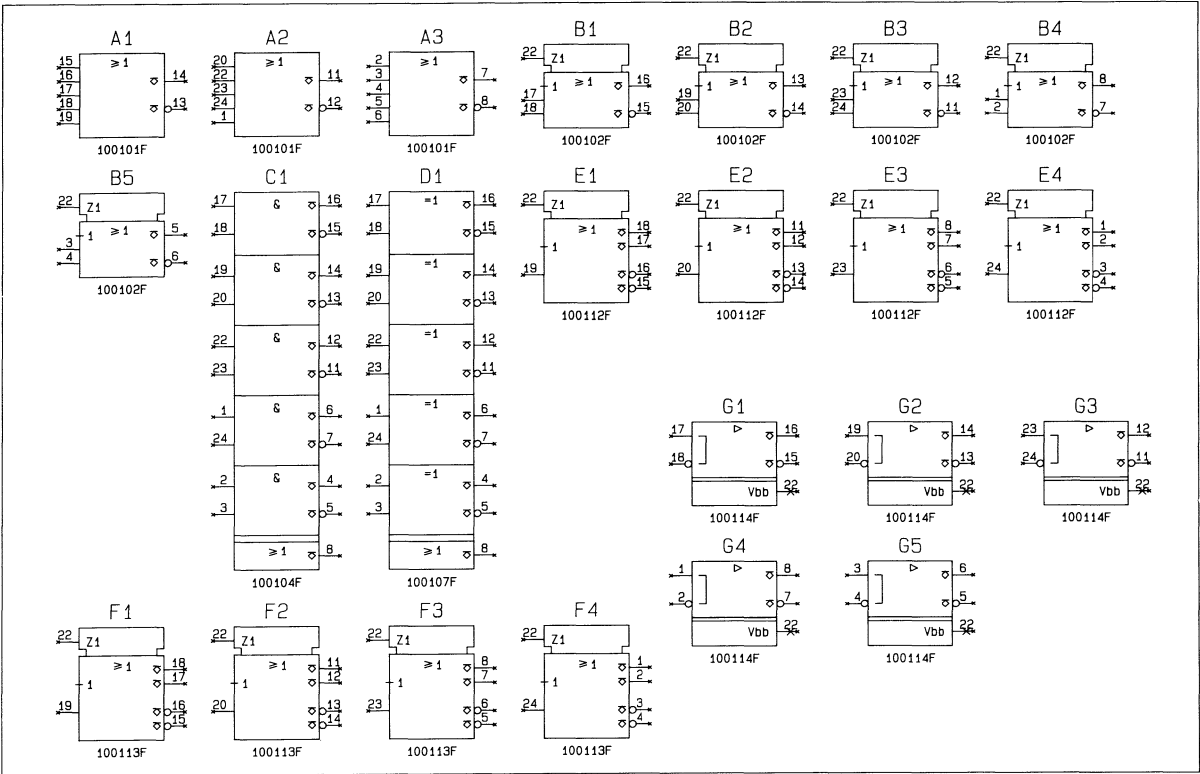


COMPONENT PLOTS

Plot 7A

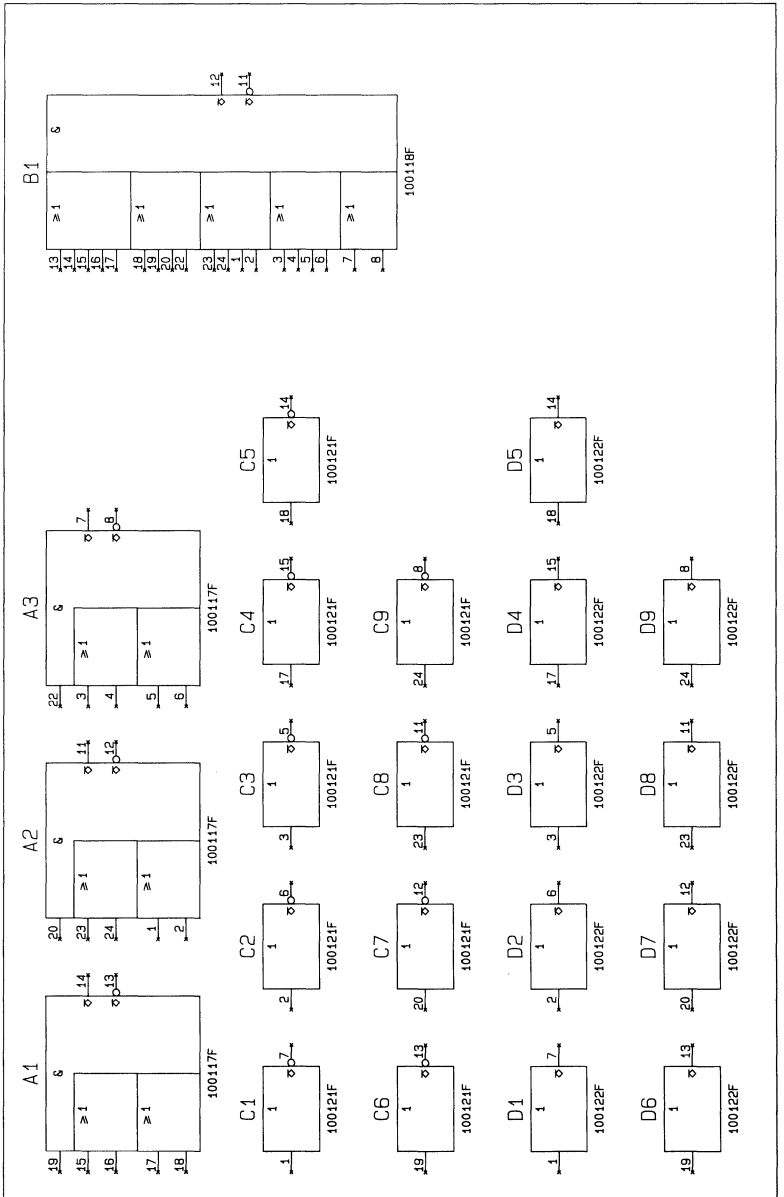
COMPONENT PLOTS

Plot 8A



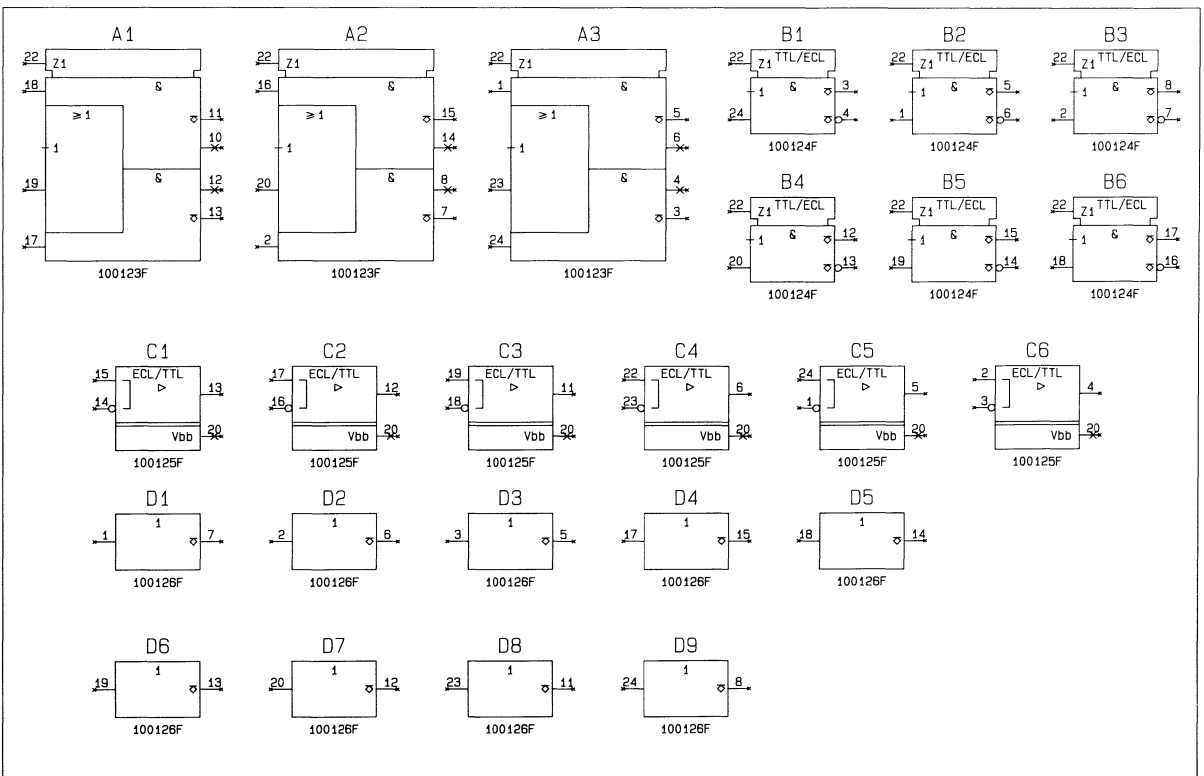
COMPONENT PLOTS

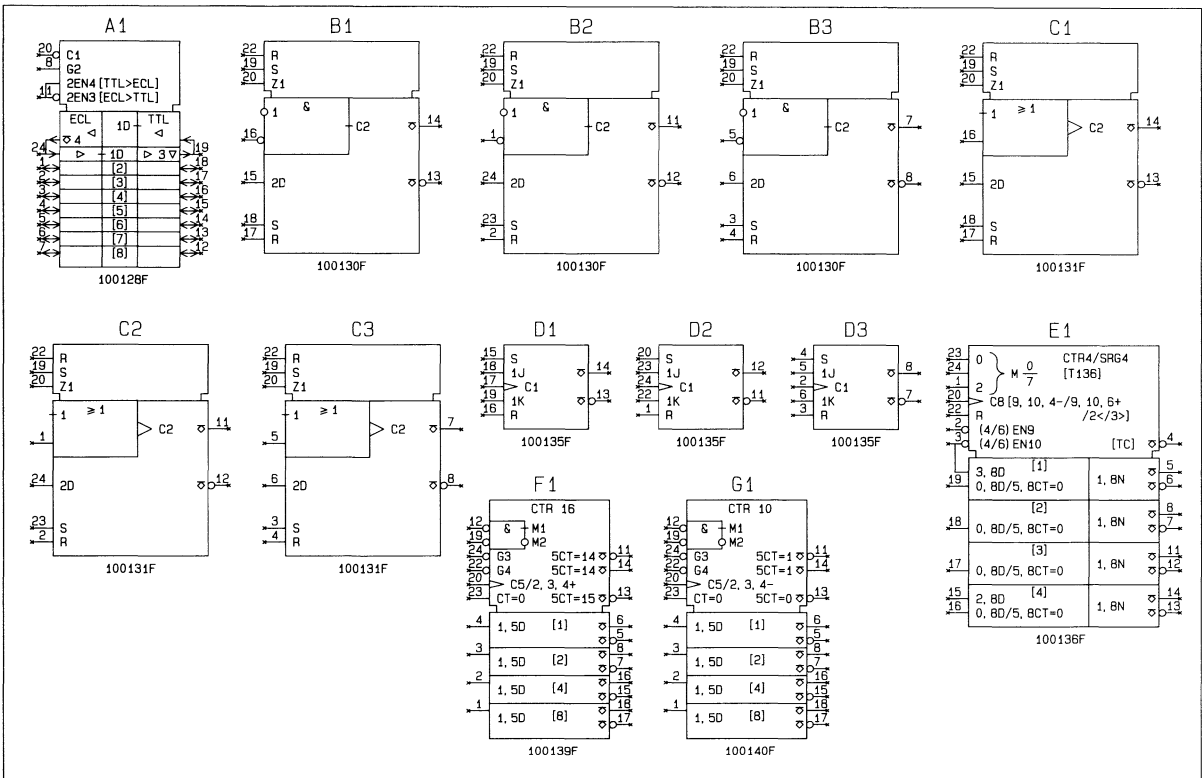
Plot 9A



COMPONENT PLOTS

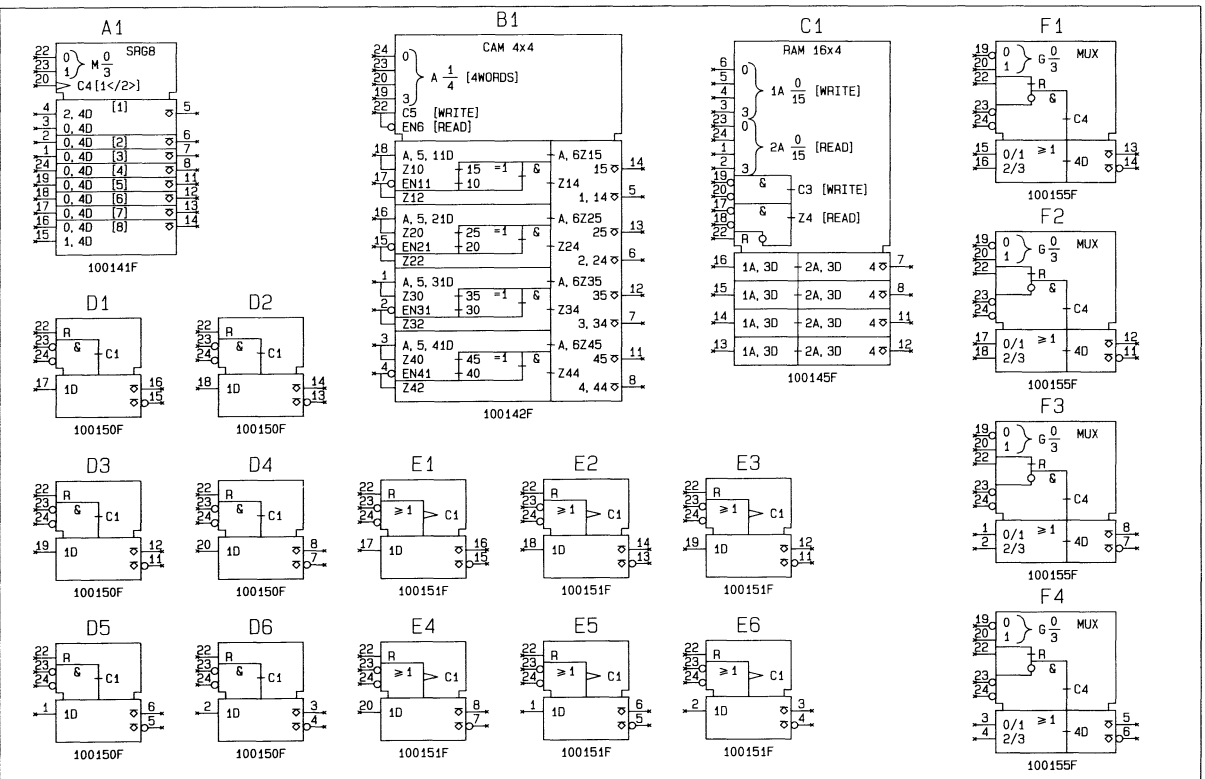
Plot 10A





COMPONENT PLOTS

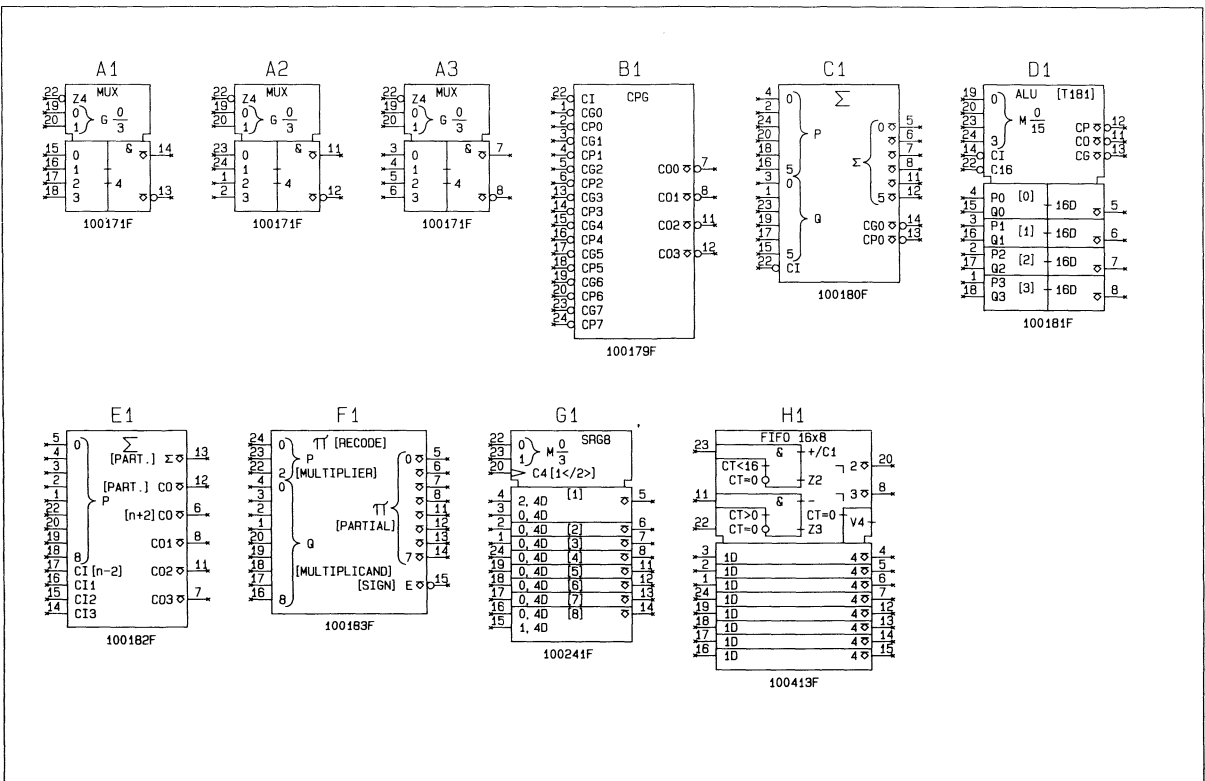
Plot 12A



000-0147-00

COMPONENT PLOTS

Plot 14A





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