

Signetics

Integrated Circuits TTL

GENERAL DESCRIPTION

Standard "Gold Doped" TTL is the industry's longest selling digital logic family still in high volume production. Signetics manufacture the following ranges.

54/7400 Series SSI and MSI types
8200 Series MSI
8T Series Interface

6/49 and BS9400 release procedures are available on special request. Please contact ITT Gemini for price and availability information.

7400 SERIES TTL

MAXIMUM RATINGS

Supply Voltage V_{CC} : 7V
Input Voltage V_{IN} : 5.5V
Interemitter Voltage: 5.5V

OPERATING FREE AIR TEMPERATURE RANGE:

54 Series: -55°C to $+25^{\circ}\text{C}$
74 Series: 0°C to 70°C
Storage Temperature: -65°C to 150°C

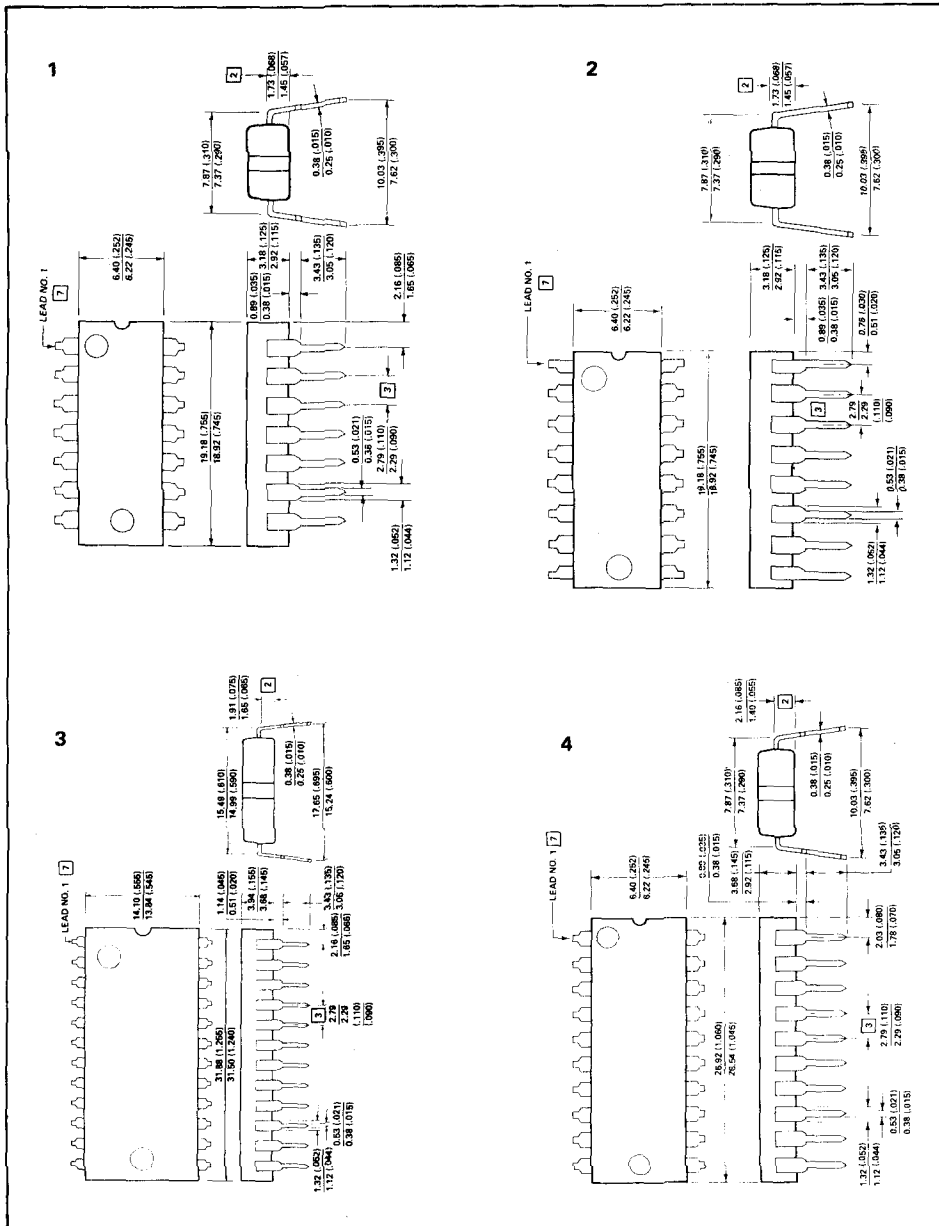
7400 Series TTL -- Dual-In-Line Package

REFERENCE TABLE

TYPE NO.	DESCRIPTION	STOCK NO.	OUTLINE DRWG. NO.	CONNECTION DIAG. NO.
N7400N	Quad 2-input NAND Gate	55181D	1	B1
N7401N	Quad 2-input NAND Gate with o/c	55182B	1	B2
N7402N	Quad 2-input NOR Gate	55184R	1	B3
N7403N	Quad 2-input NAND Gate with o/c	55185G	1	B4
N7404N	Hex inverter	55187C	1	B5
N7405N	Hex Inverter with o/c	55188A	1	B6
N7406N	Hex Inverter w/Buffer/Driver with o/c	55190B	1	B7
N7407N	Hex Buffer/Driver with o/c	55191X	1	B8
N7408N	Quad 2-input AND Gate	55192R	1	B9
N7409N	Quad 2-input AND Gate with o/c	55193G	1	B10
N7410N	Triple 3-input NAND Gate	55195C	1	B11
N7411N	Triple 3-input NAND Gate	55196A	1	B12
N7412N	Triple 3-input NAND Gate with o/c	55197X	1	B13
N7413N	Dual NAND Schmitt Trigger	55198H	1	B14
N7414N	Hex Schmitt Trigger	55199F	1	B15
N7416N	Hex Inverter Buffer/Driver with o/c	55200H	1	B17
N7417N	Hex Buffer/Driver with o/c	55201F	1	B18
N7420N	Dual 4-input NAND Gate	55202D	1	B19
N7421N	Dual 4-input AND Gate	55203B	1	B20
N7426N	Quad 2-input NAND Gate with o/c	55205R	1	B22
N7427N	Triple 3-input NOR Gate	55206G	1	B23
N7428N	Quad 2-input NOR Buffer	55207E	1	B24
N7430N	8-input NAND Gate	55208C	1	B25
N7432N	Quad 2-input OR Gate	55209A	1	B26
N7433N	Quad 2-input NOR Buffer	55210D	1	B27
N7437N	Quad 2-input NAND Buffer	55212X	1	B28
N7438N	Quad 2-input NAND Buffer with o/c	55213R	1	B29
N7440N	Dual 4-input NAND Buffer	55216C	1	B30
N7442N	BCD-to-Decimal Decoder	55217A	2	B31
N7443N	Excess 3-to-Decimal Decoder	55218X	2	B31
N7444N	Excess 3-gray-to-Decimal Decoder	55219H	2	B31
N7445N	BCD-to-Decimal Decoder/Driver with o/c	55220X	2	B34
N7446AN	BCD-to-7 Segment Decoder/Driver	55221R	2	B35
N7447AN	BCD-to-7 Segment Decoder/Driver	55222G	2	B35
N7448N	BCD-to-7 Segment Decoder/Driver	55223E	2	B37
N7450N	Expandable Dual 2-Wide 2-Input AOI	55224C	1	B38
N7451N	Dual 2-Wide 2-Input AOI Gate	55225A	1	B39
N7453N	4-Wide 2-Input AOI Gate (Expandable)	55226X	1	B41
N7454N	4-Wide 2-Input AOI Gate	55227H	1	B42
N7460N	Dual 4-Input Expander	55228F	1	B44
N7470N	J-K F/F	55229D	1	B49
N7472N	J-K Master-Slave F/F	55230G	1	B51
N7473N	Dual J-K Master-Slave F/F	55231E	1	B52
N7474N	Dual D-Type Edge-Triggered F/F	55232C	1	B53
N7475N	Quad Bistable-Latch	55233A	2	B54

ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

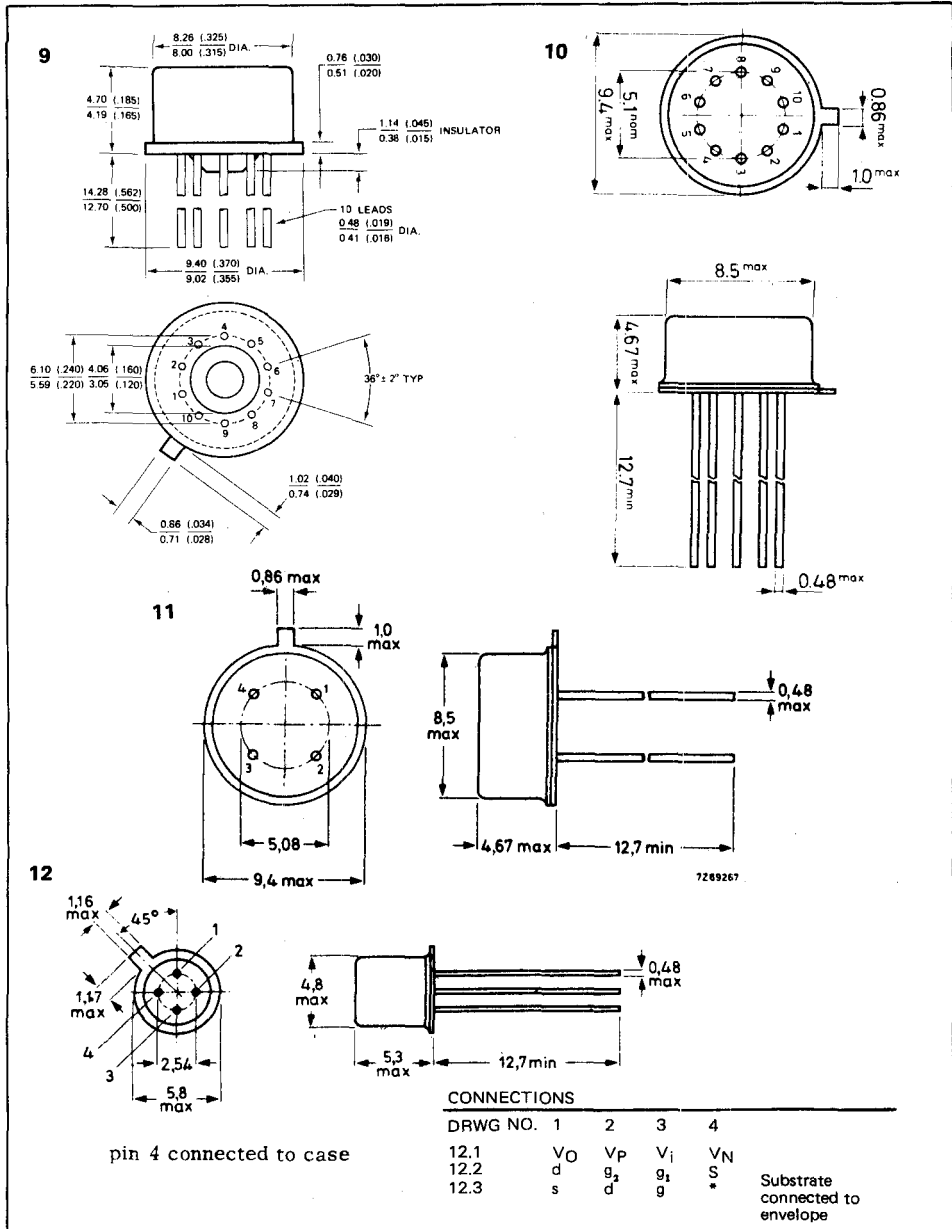


PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

Outline Drawings

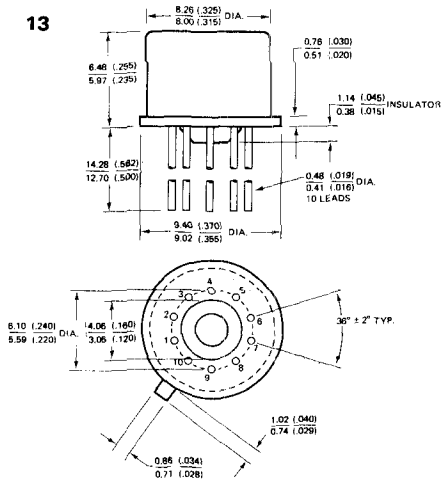




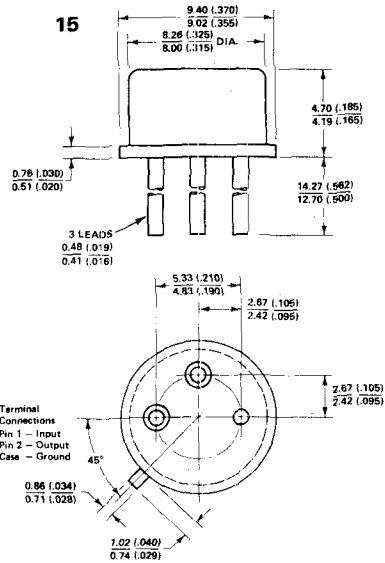
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

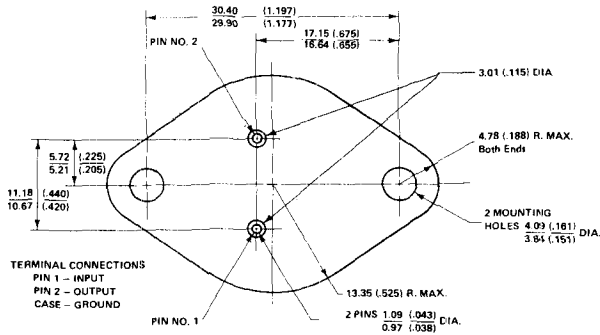
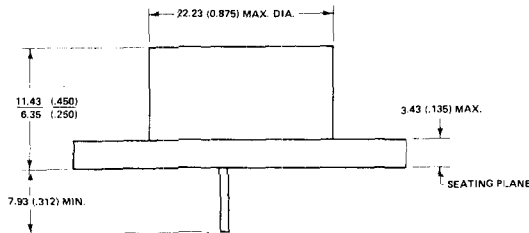
13

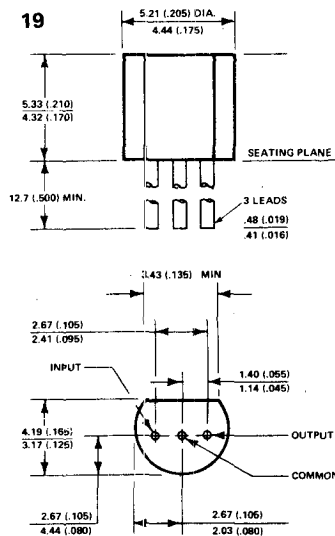
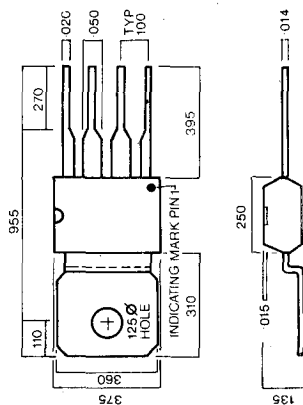
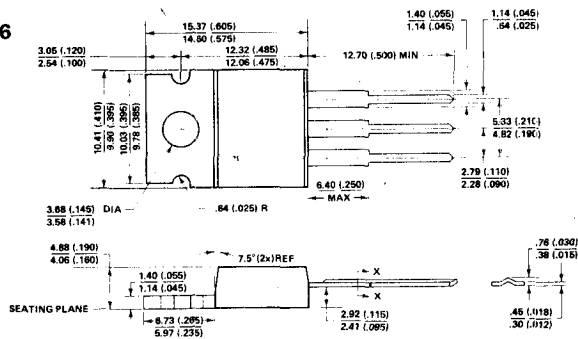


15



14





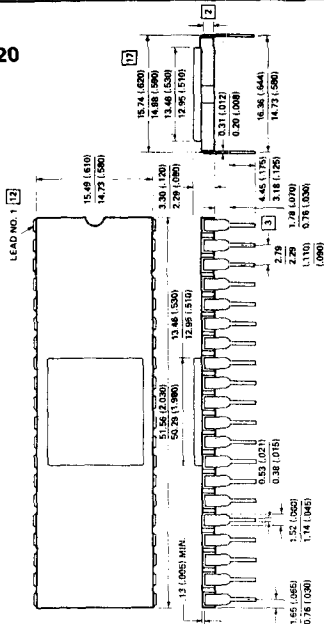
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

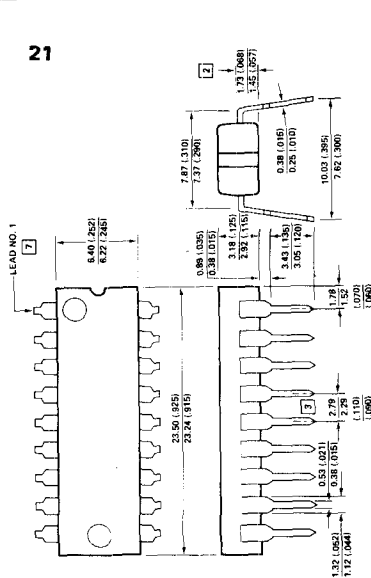
Signetics

Outline Drawings

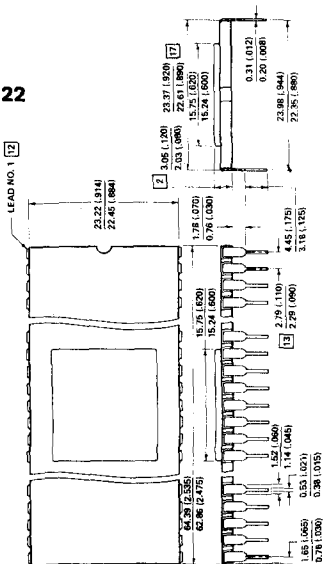
20



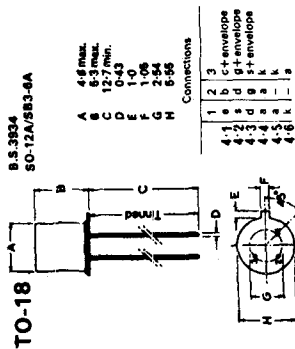
21



22

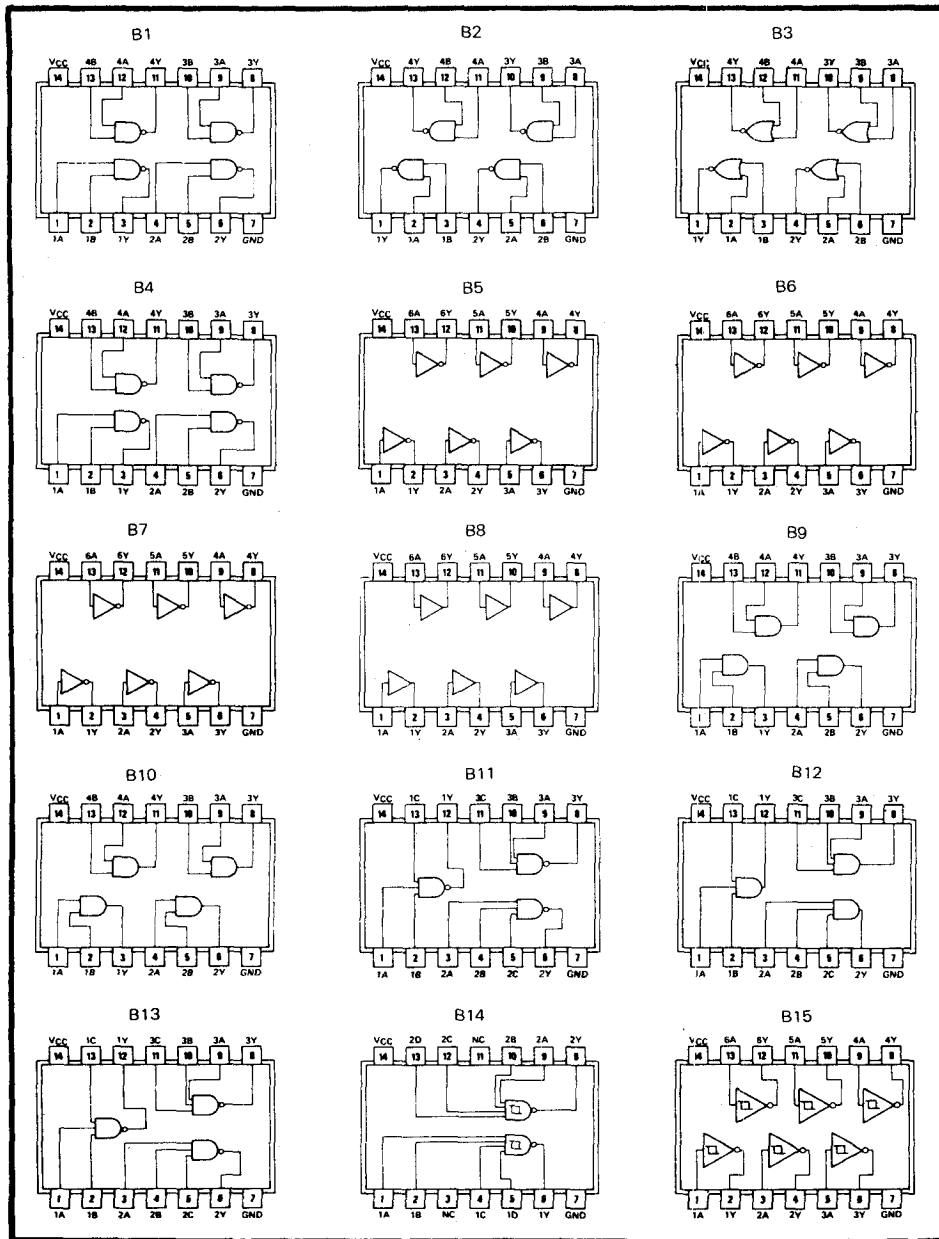


23



ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

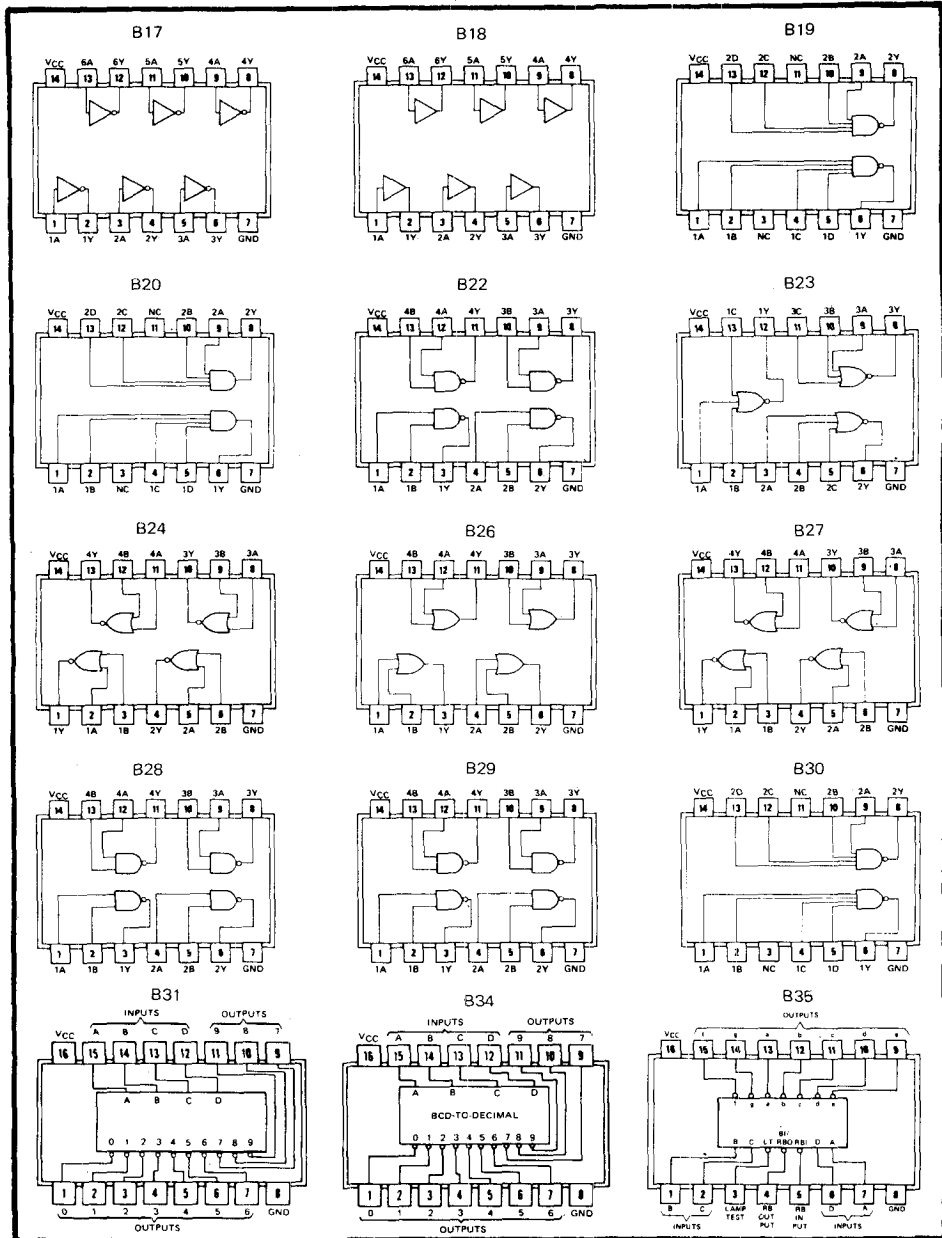


PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

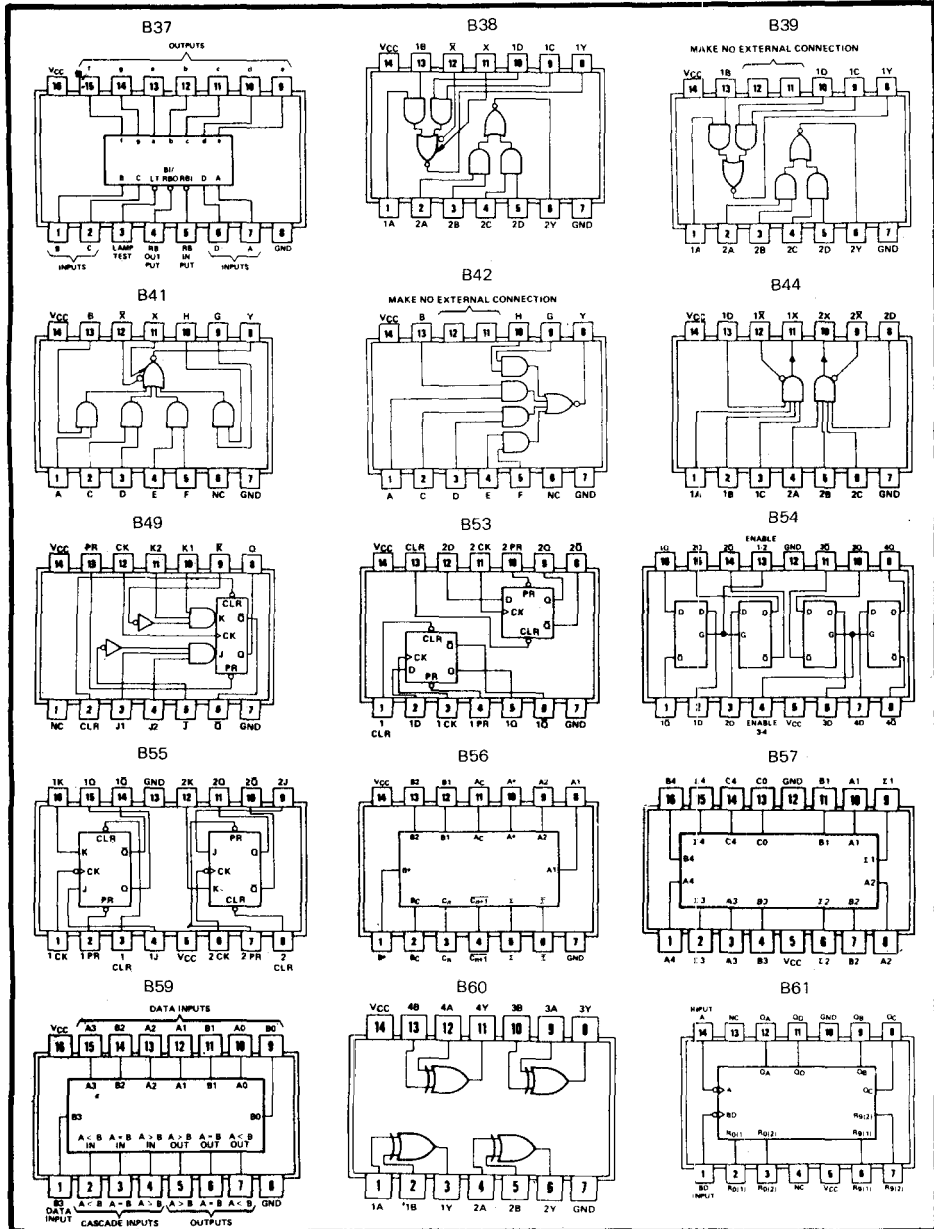
Signetics

Connection Diagram



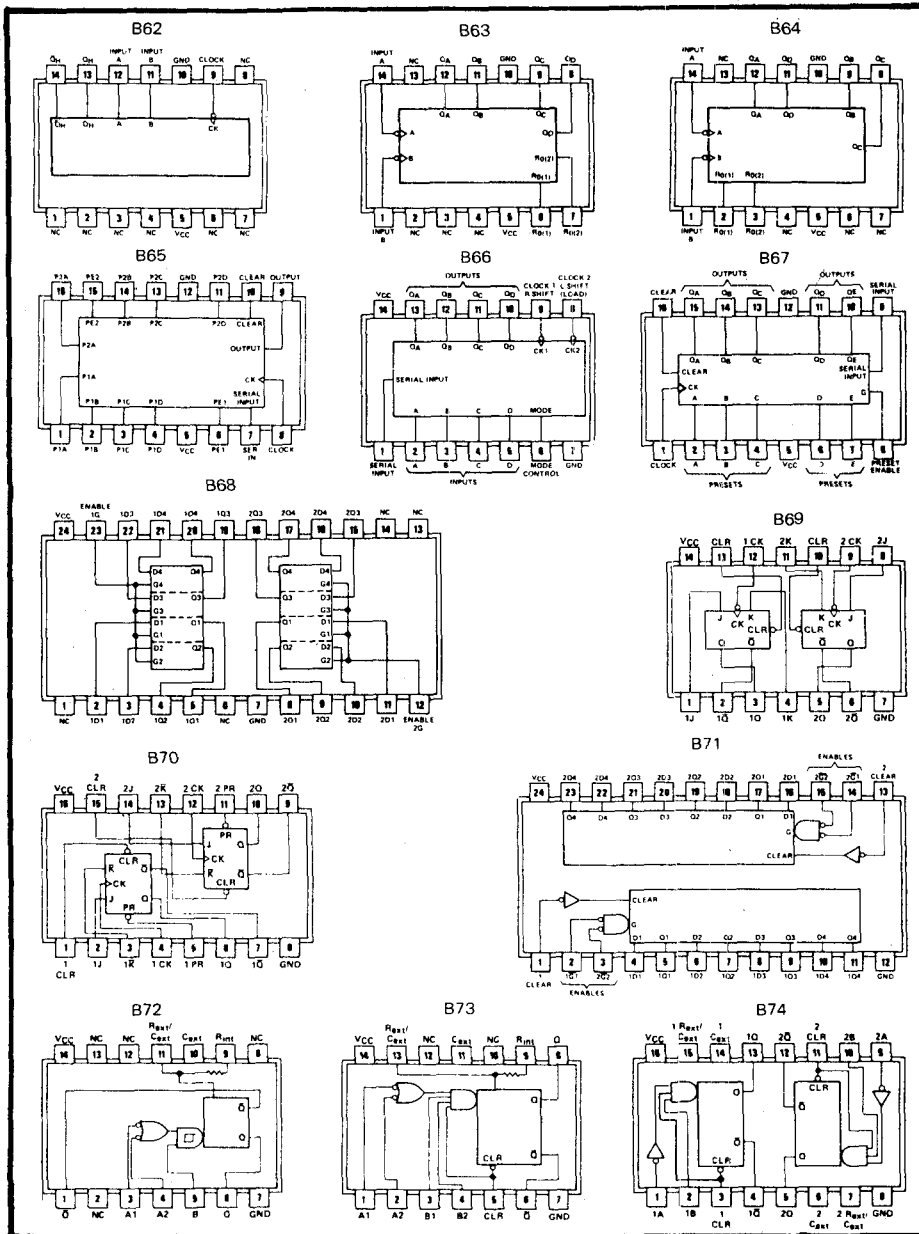
ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644



Signetics

Connection Diagram

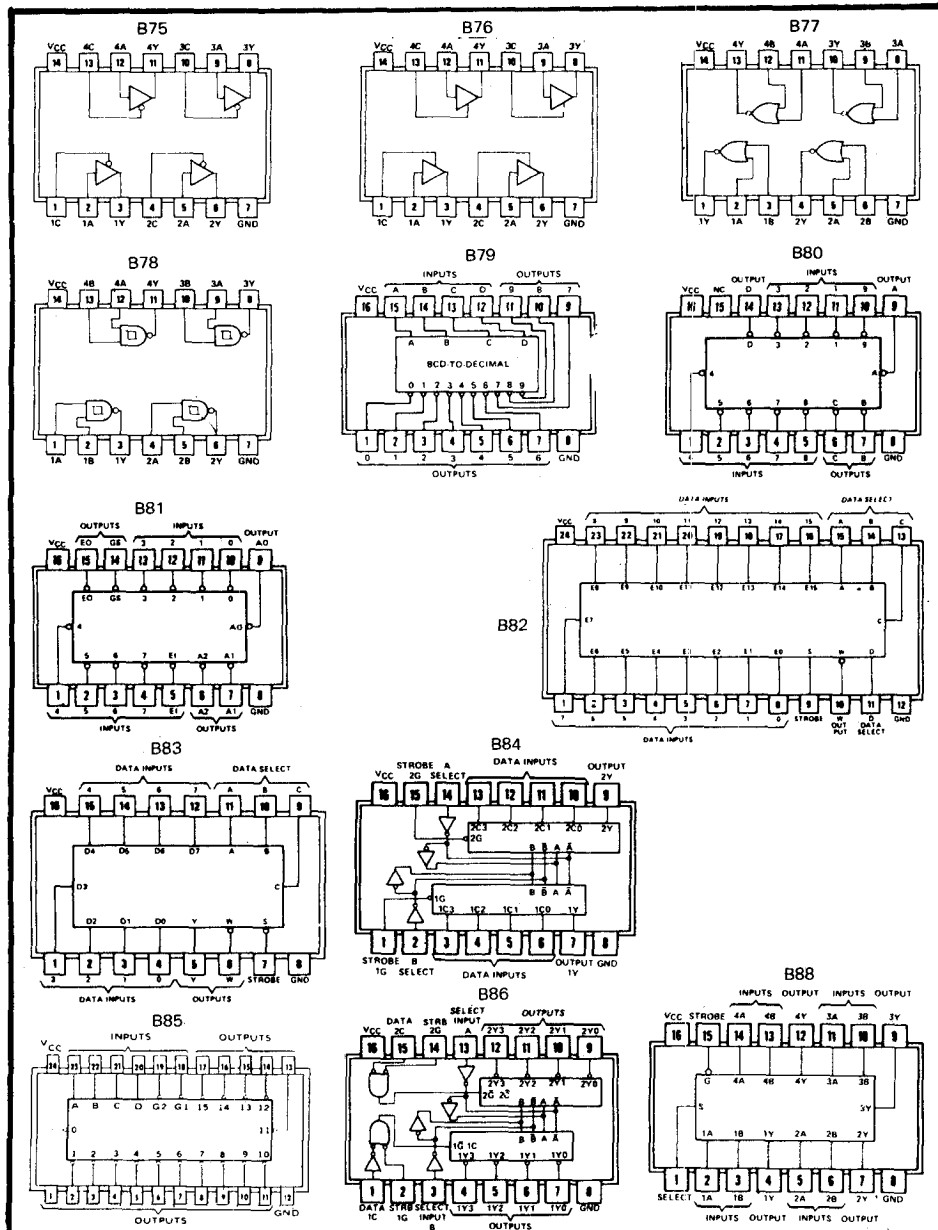


ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

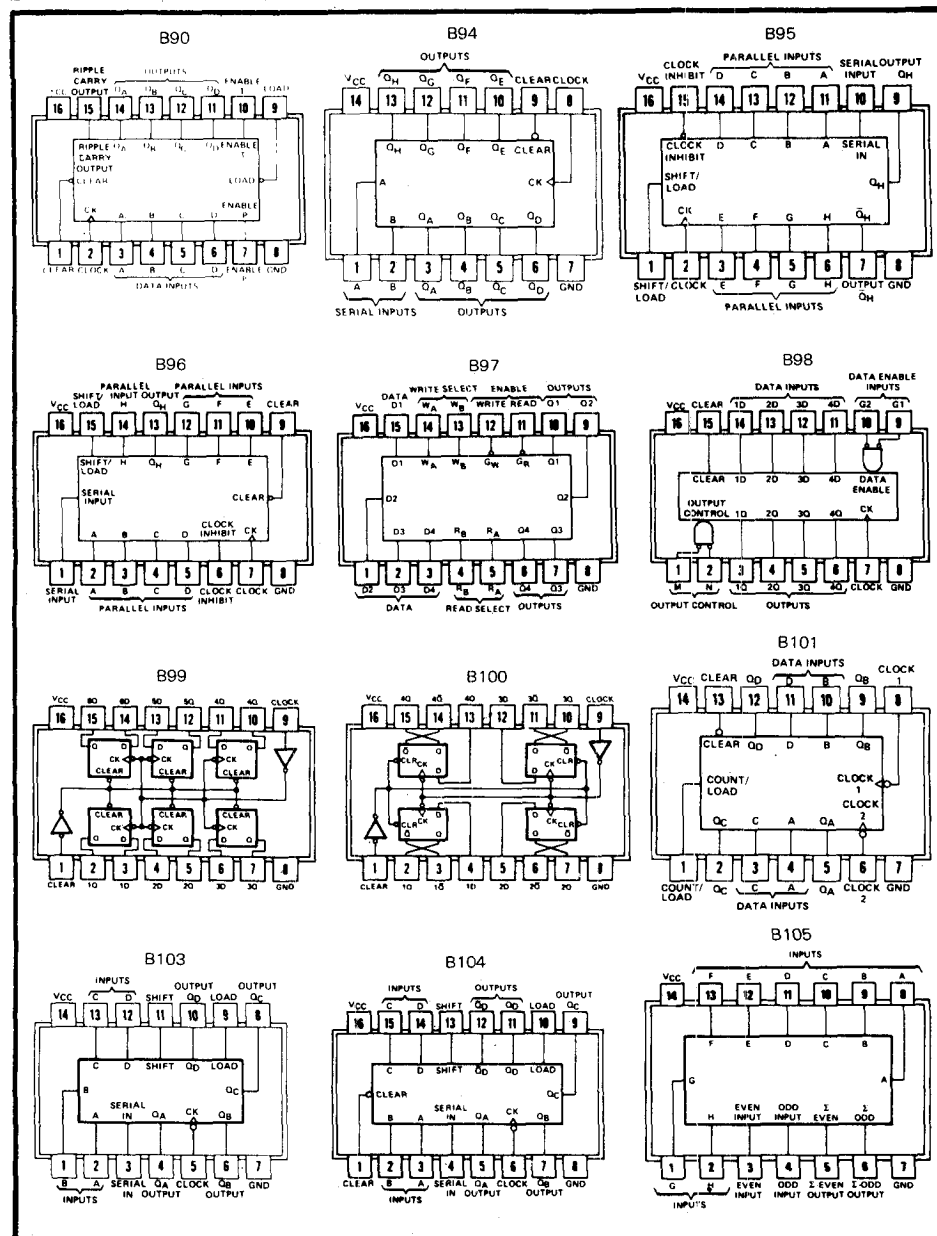
Signetics

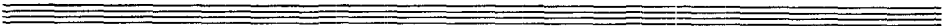
Connection Diagram

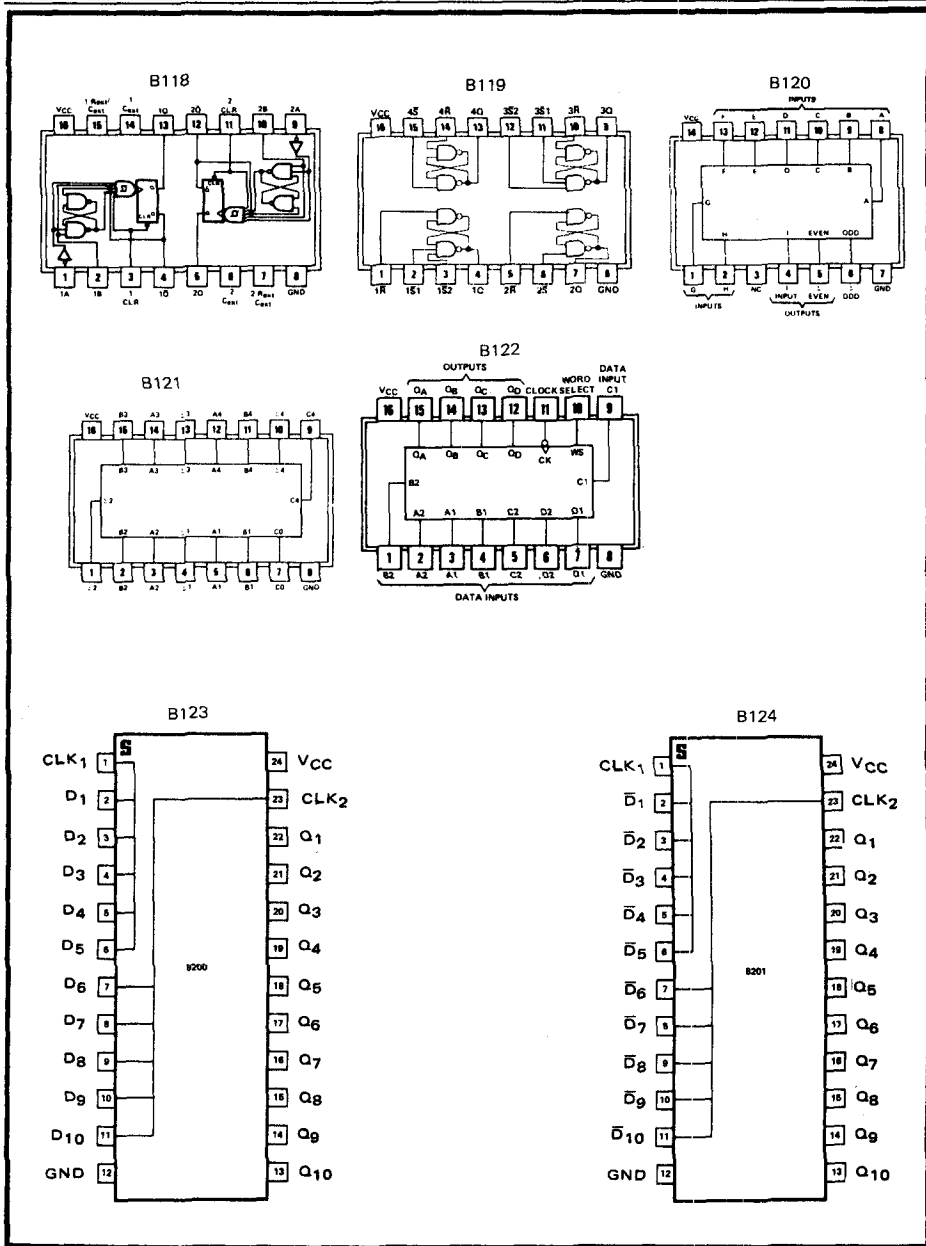


PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

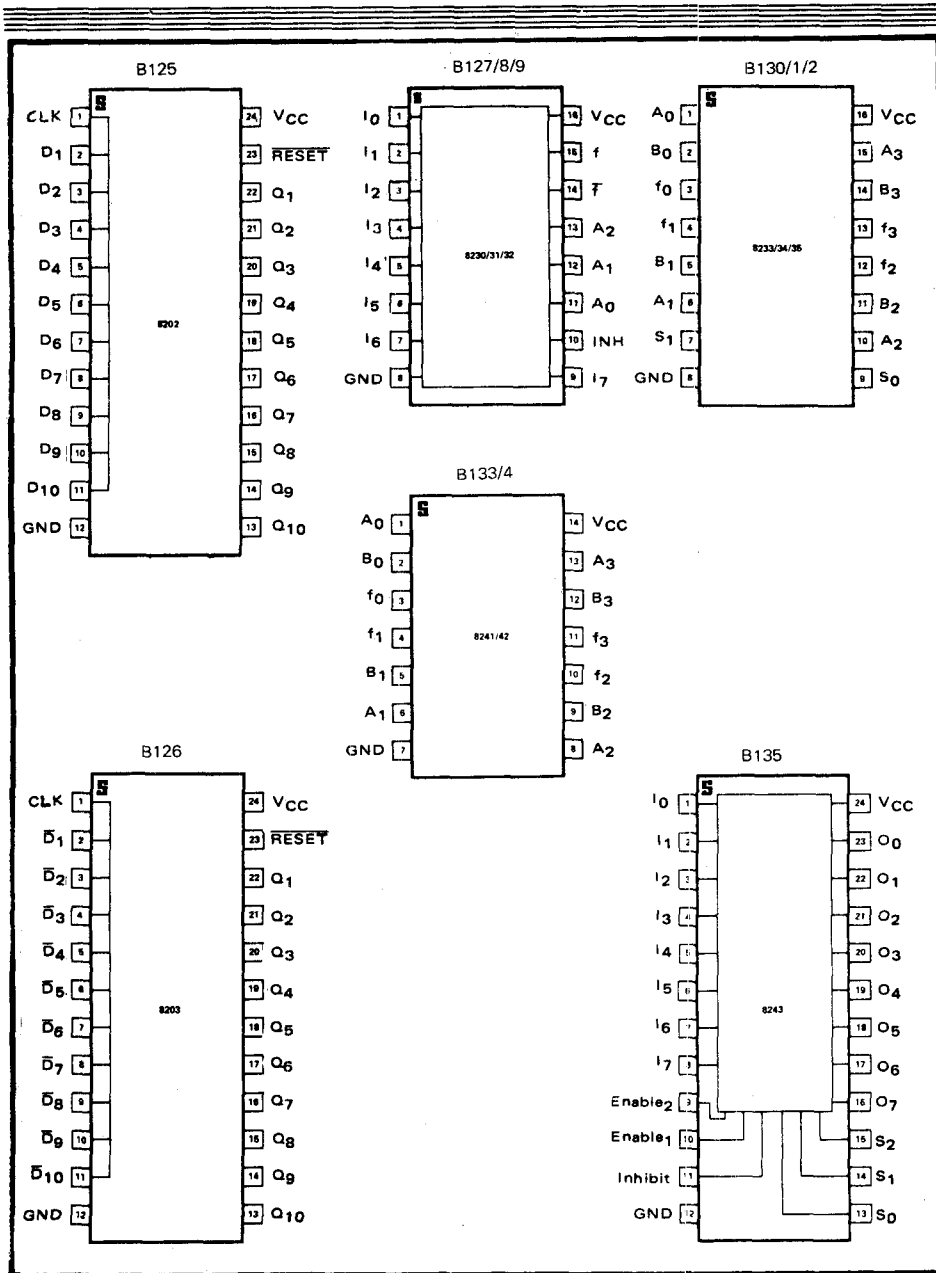


[illegible]**ITT GEMINI**



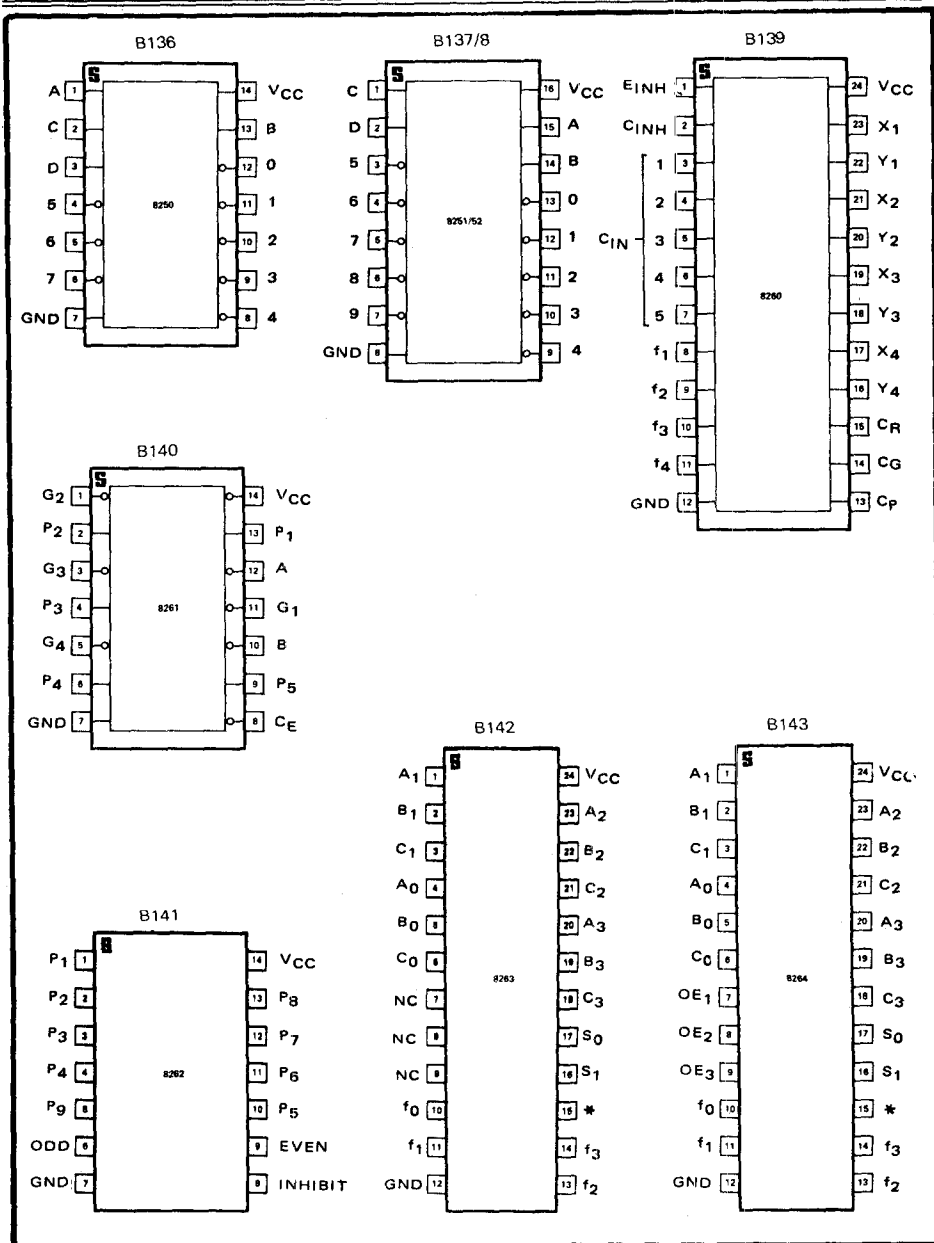
Signetics

Connection Diagram



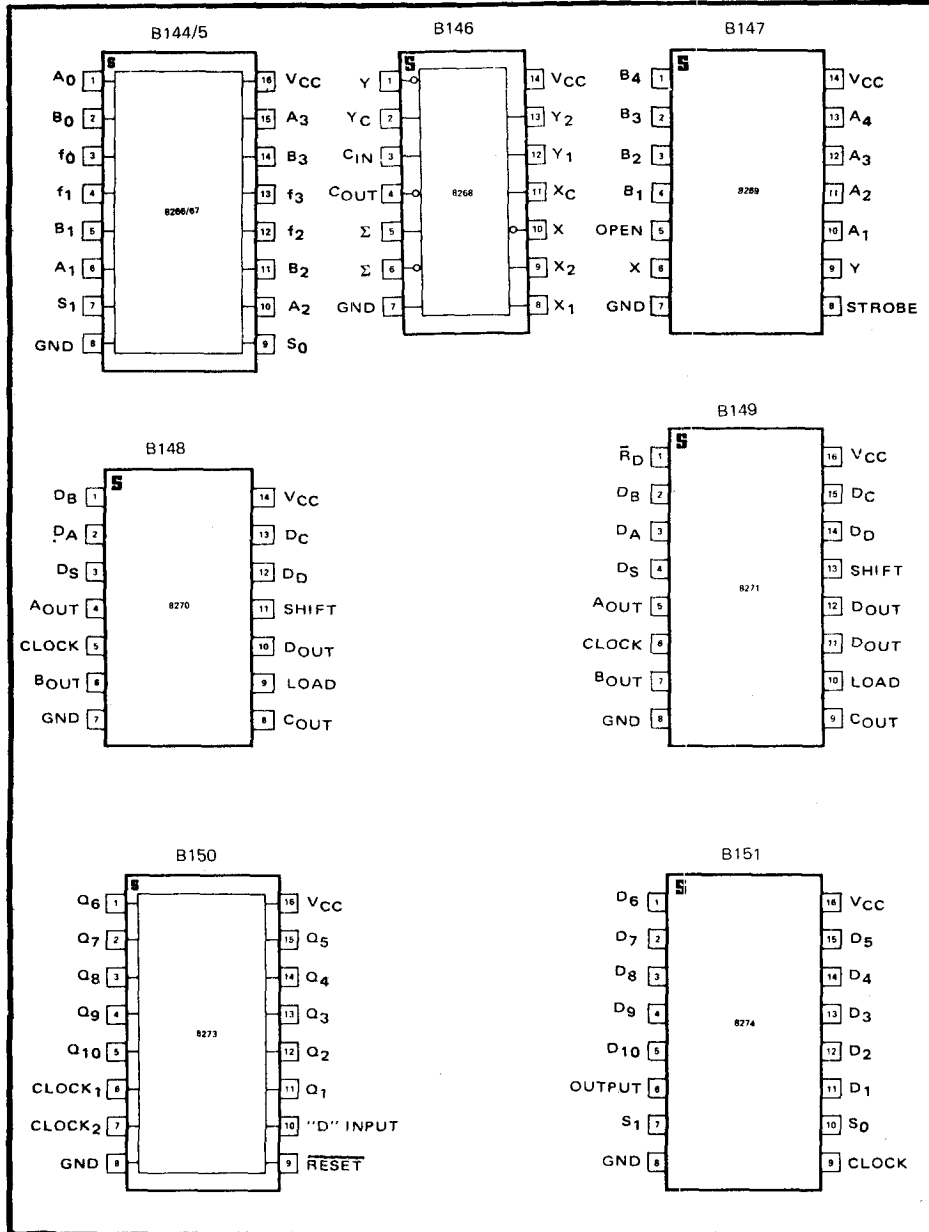
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI



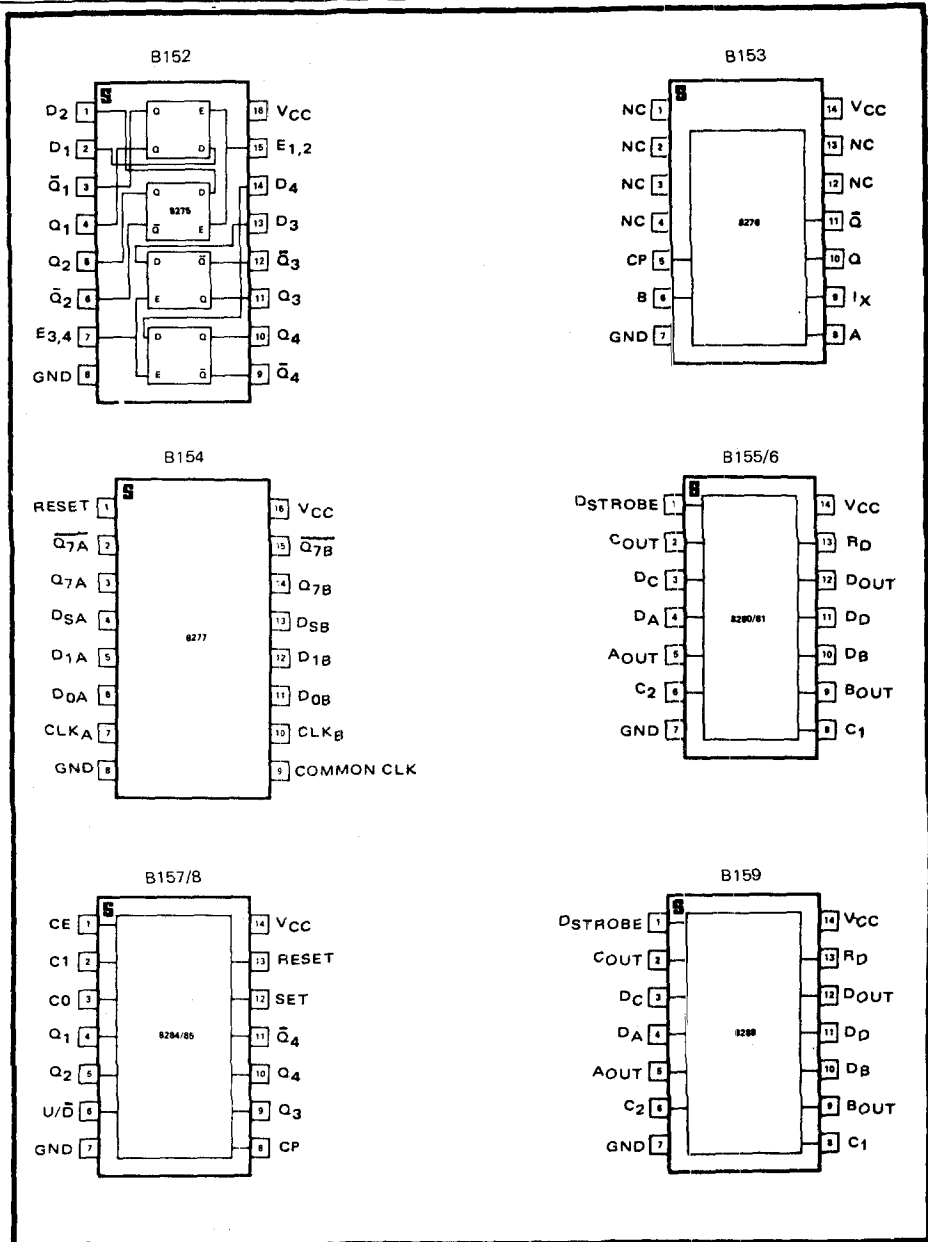
Signetics

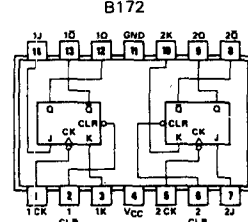
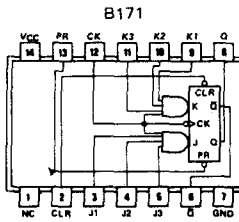
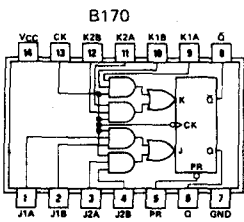
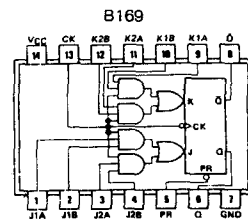
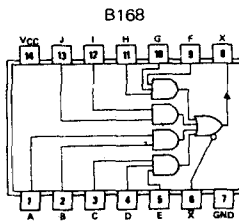
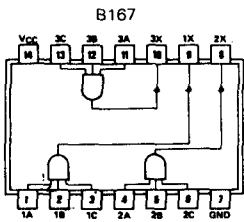
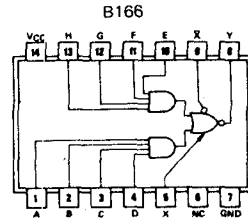
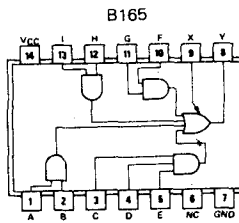
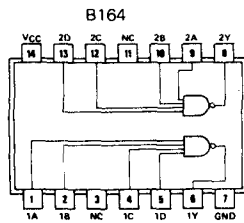
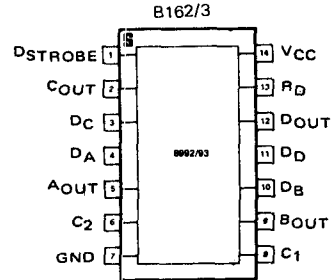
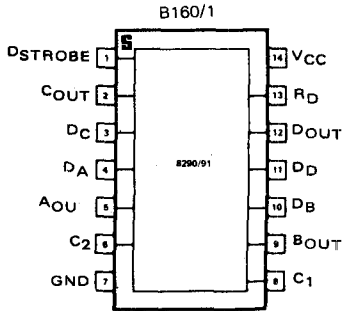
Connection Diagram



PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

LIT GEMINI



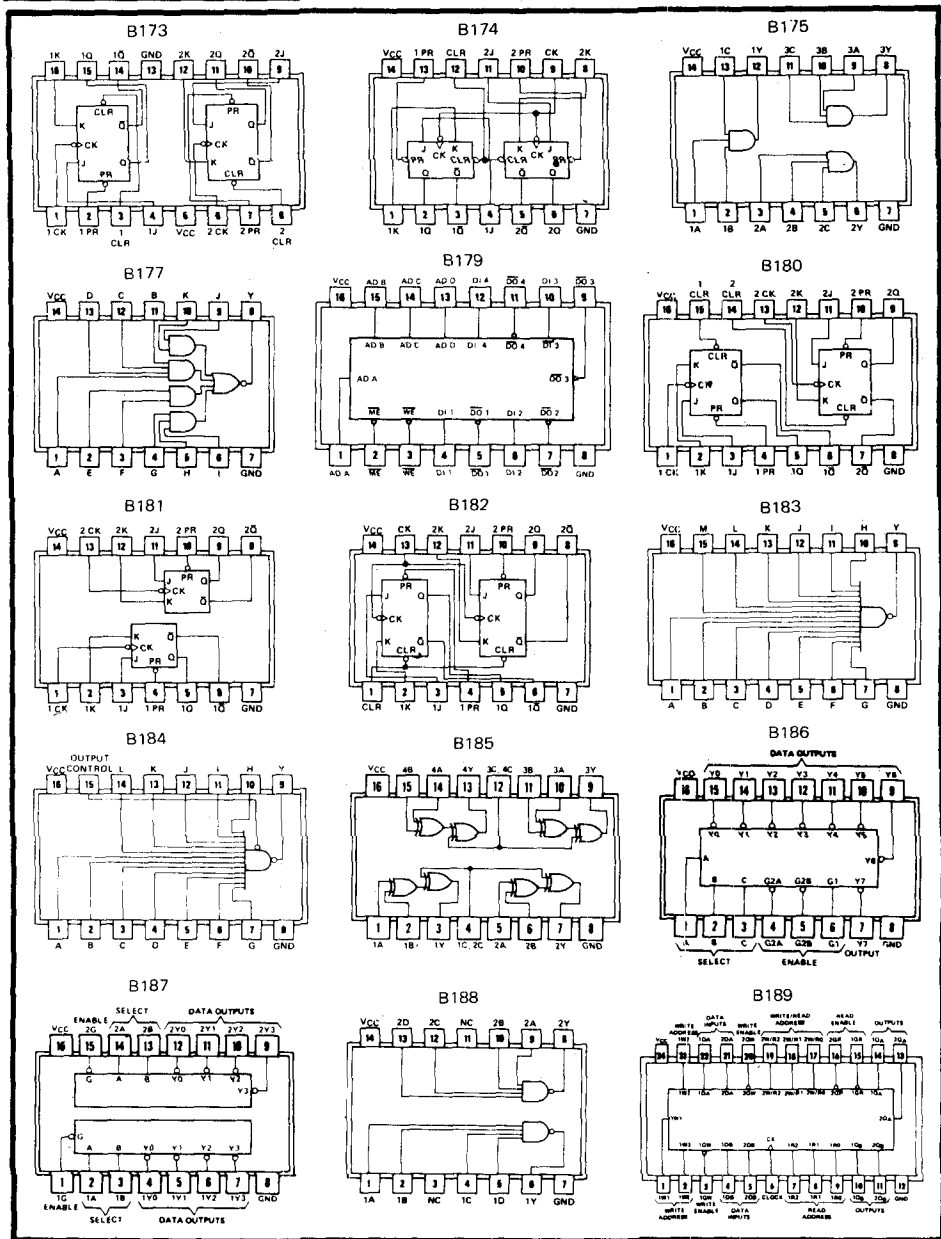


PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

Signetics

Connection Diagram



ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

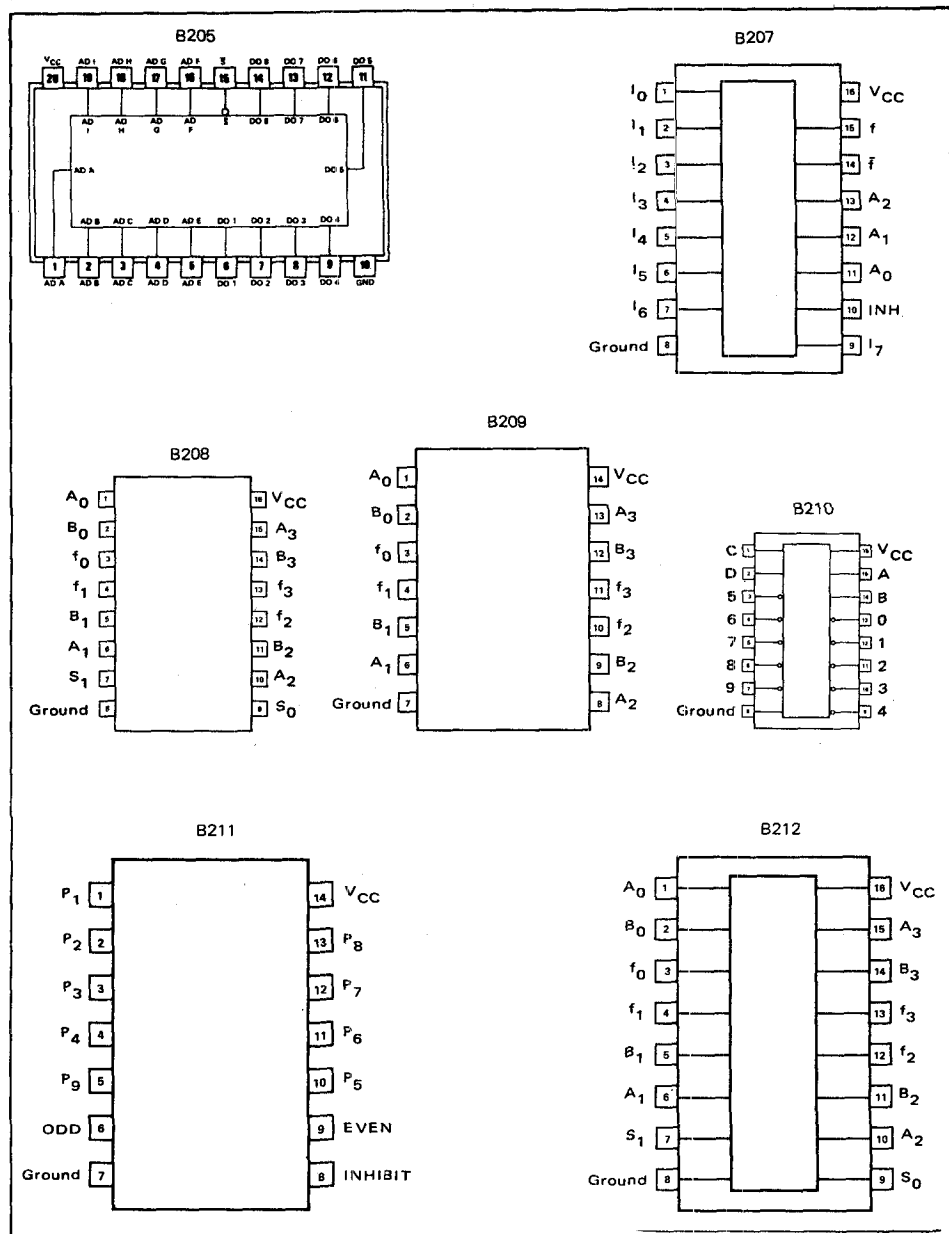
The image displays 16 logic diagrams for integrated circuits, each with a unique pin configuration and internal logic structure. The diagrams are arranged in a grid-like fashion, with each circuit labeled at the top. The pins are numbered 1 through 16, and the internal logic is shown with various gates, flip-flops, and data paths. The diagrams are as follows:

- B190:** A 16-pin IC with VCC, AD 8, AD 7, AD 6, AD 5, DO 4, DO 3, DO 2, DO 1, and GND pins. It features a central data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B191:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B193:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B194:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B195:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B196:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B197:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B198:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B199:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B200:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B201:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B202:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B203:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It features a data path with a 3-to-8 decoder and a 2-to-4 decoder.
- B204:** A 16-pin IC with VCC, AD 7, AD 6, AD 5, AD 4, AD 3, AD 2, AD 1, AD 0, AD F, AD E, AD D, AD C, AD B, AD A, and GND pins. It includes a data path with a 3-to-8 decoder and a 2-to-4 decoder.

ITT GEMINI

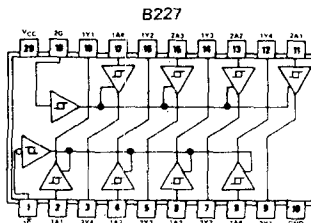
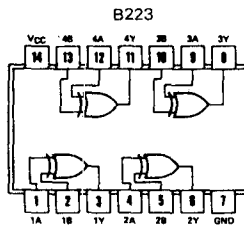
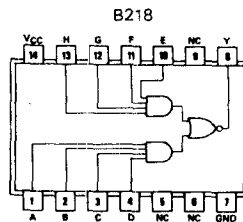
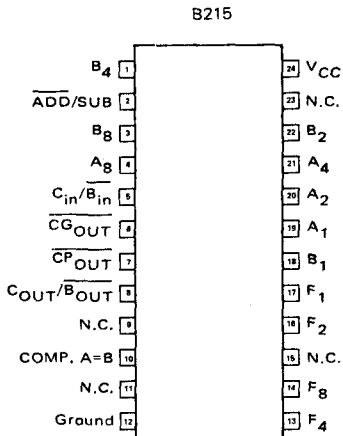
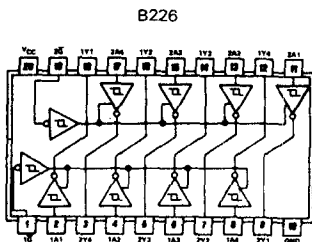
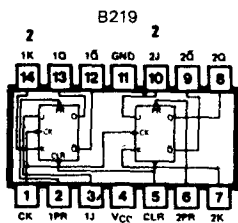
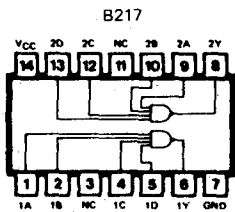
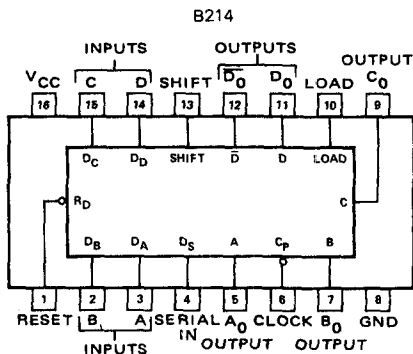
Signetics

Connection Diagram



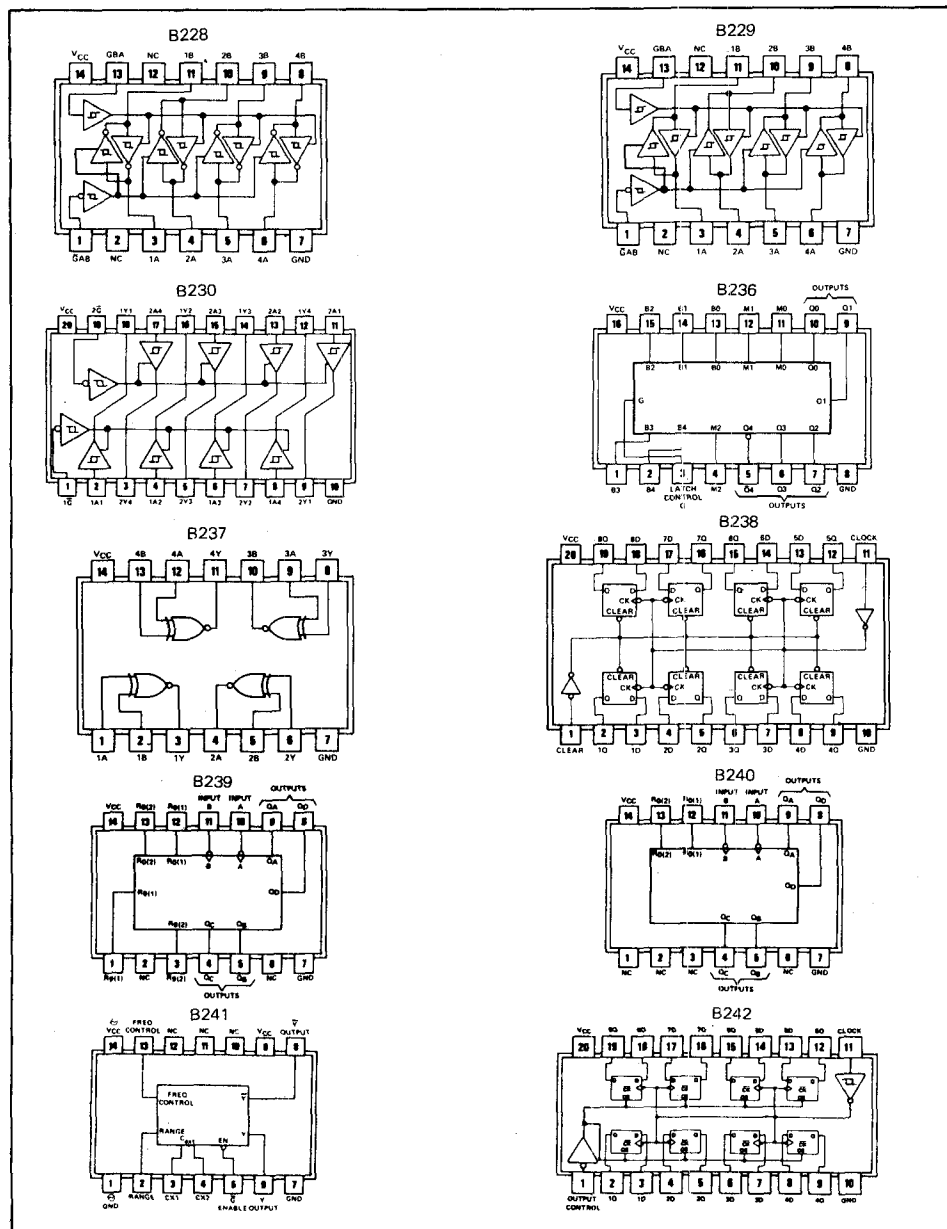
ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644



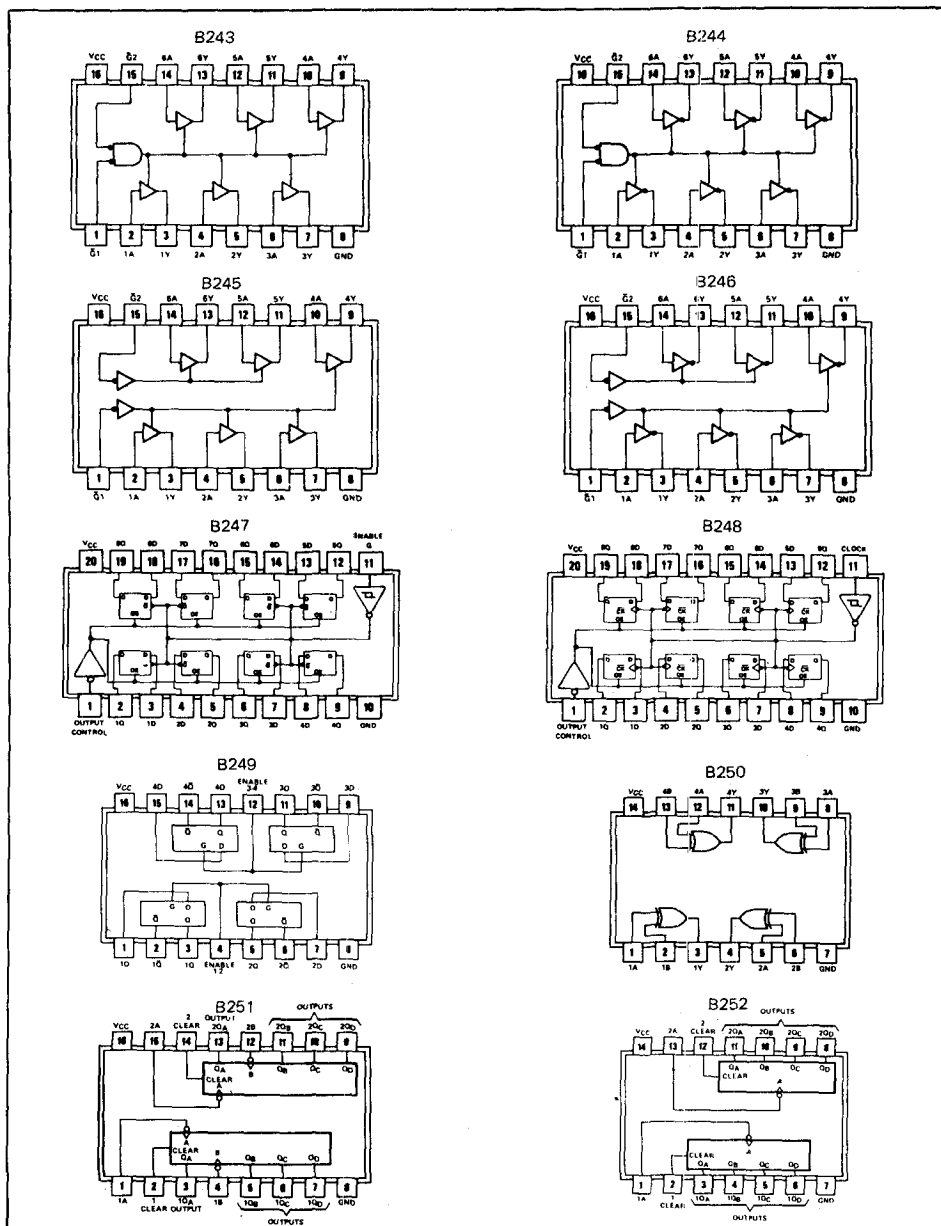
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

THE GEMINI



Signetics

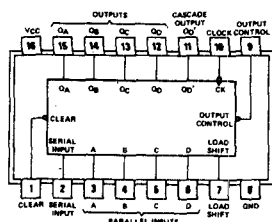
Connection Diagram



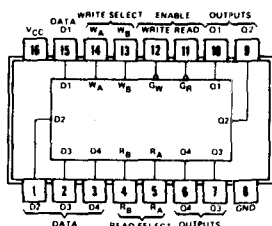
PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

ITT GEMINI

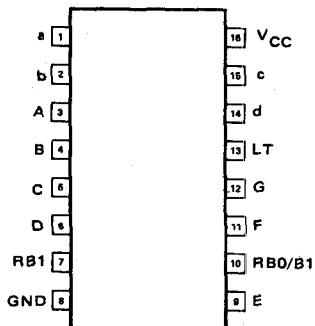
B253



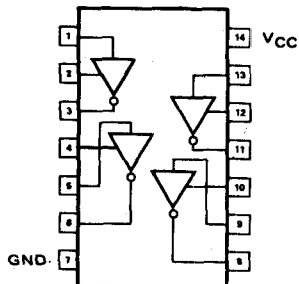
B255



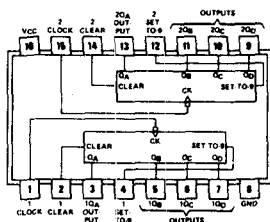
B257



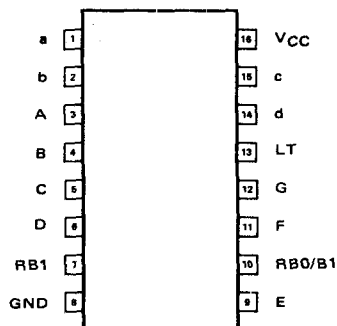
B259



B254



B256



B258

