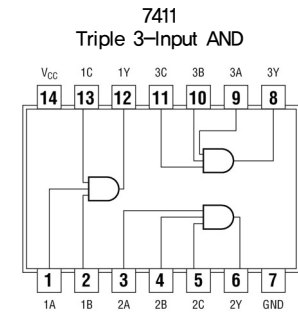
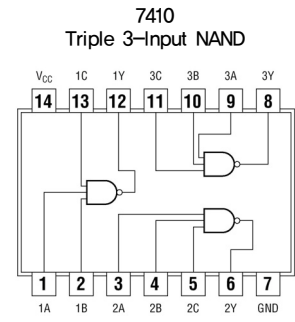
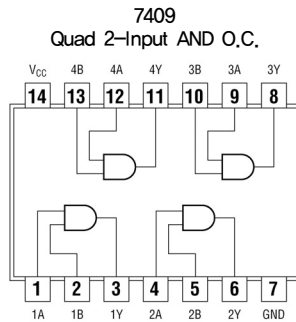
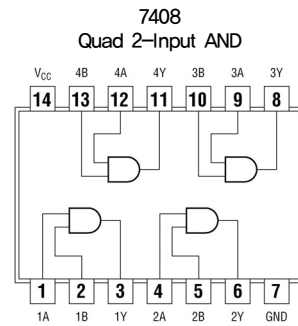
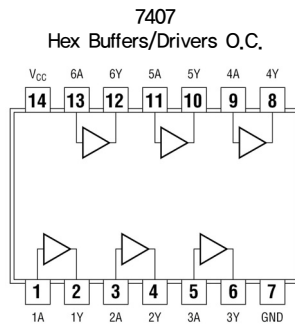
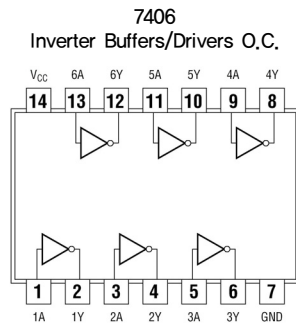
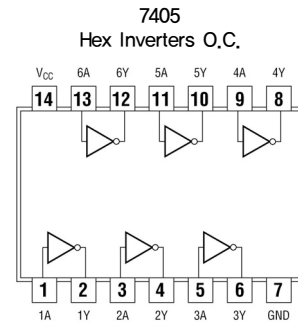
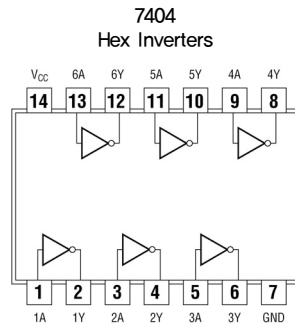
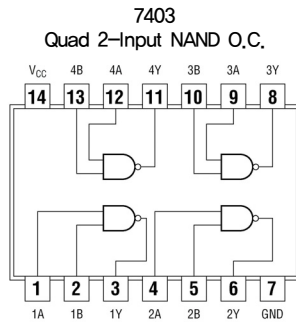
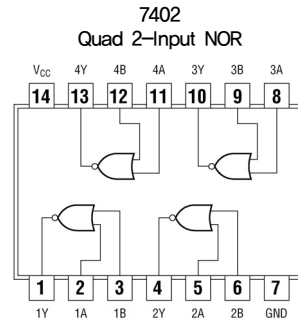
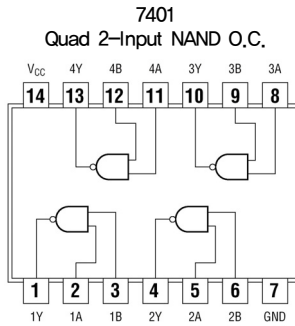
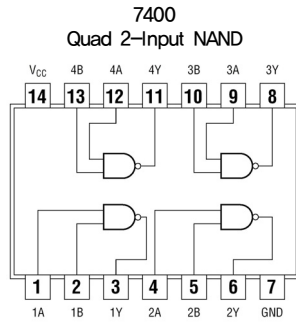
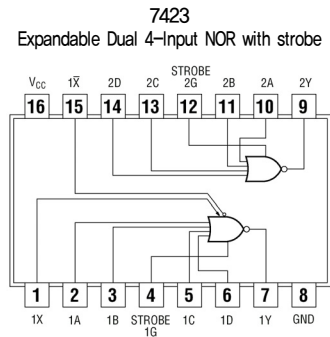
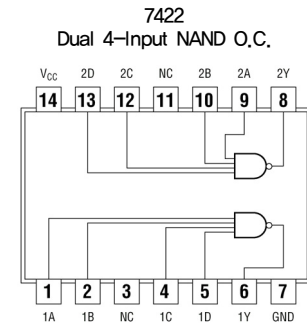
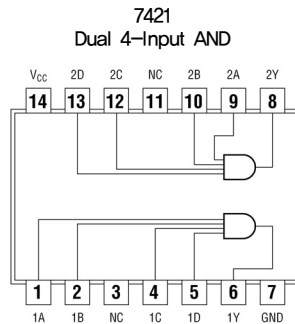
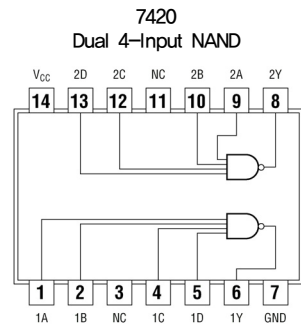
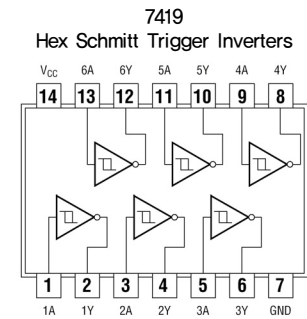
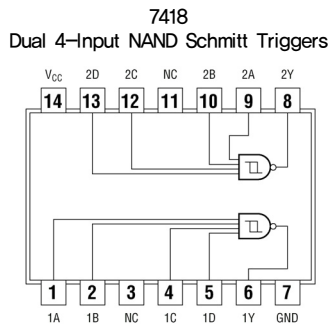
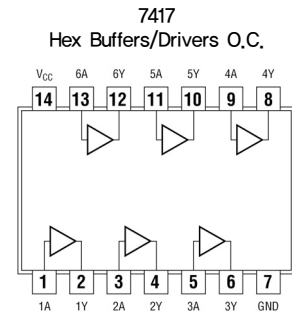
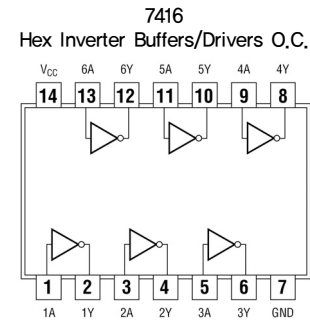
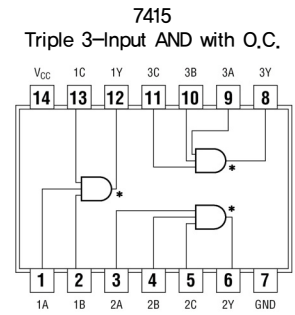
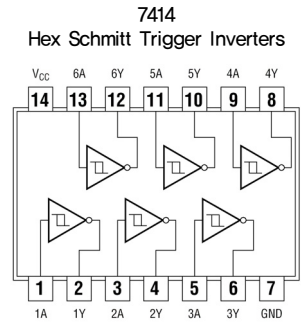
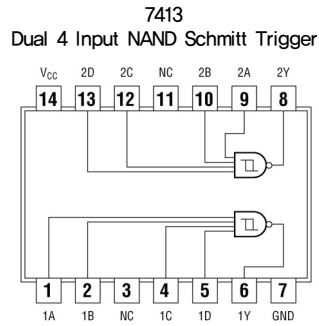
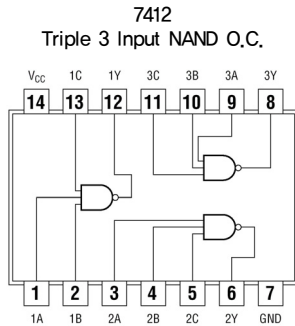
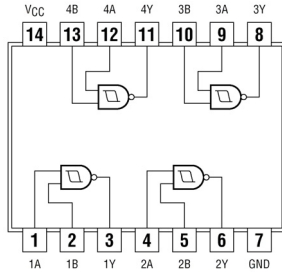


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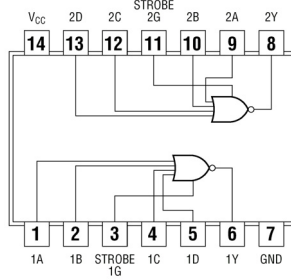




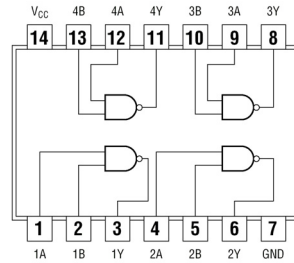
7424
Quad 2-Input NAND Schmitt Triggers



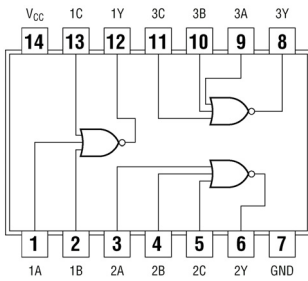
7425
Dual 4-Input NOR with Strobe



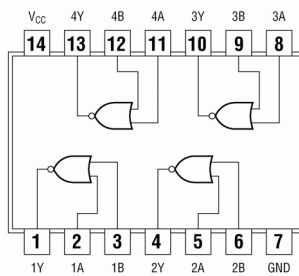
7426
Quad 2-Input High Voltage Interface NAND



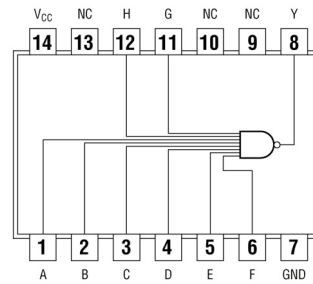
7427
Triple 3-Input NOR



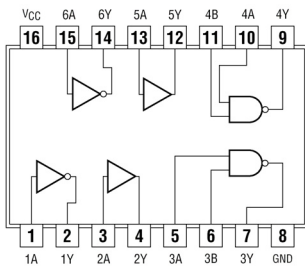
7428
Quad 2-Input NOR Buffer



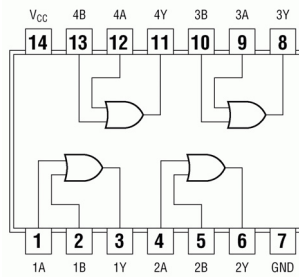
7430
8-Input NAND



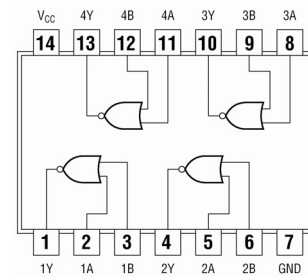
7431
Delay Elements



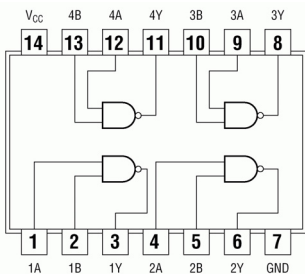
7432
Quad 2-Input OR



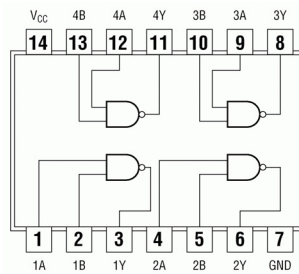
7433
Quad 2-Input NOR Buffers O.C.



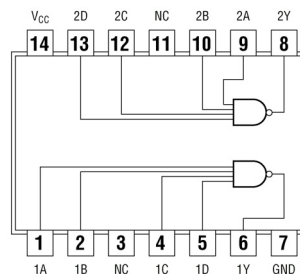
7437
Quad 2-Input NAND Buffers



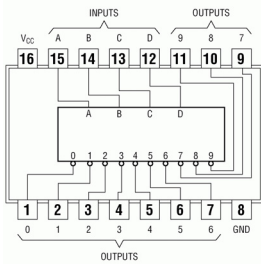
7438
Quad 2-Input NAND Buffers O.C.



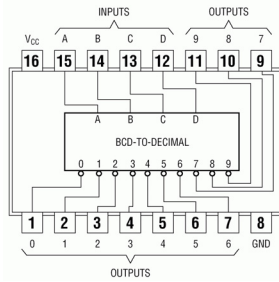
7440
Dual 4-Input NAND Buffers



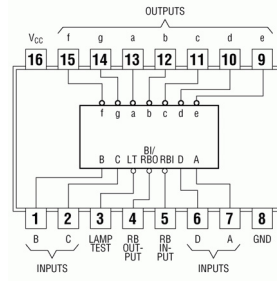
7442, 7443, 7444
4-Line to 10-Line Decoder, Excess-3 to Decimal Decoder, Excess-3 Gray to Decimal Decoder



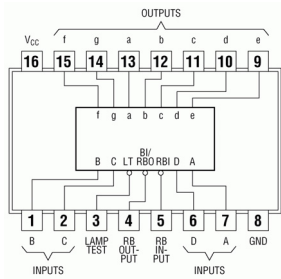
7445
BCD-to-Decimal Decoder/Driver 30V O.C.



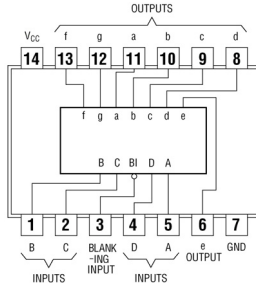
7446, 7447
BCD-to-Seven Segment Decoders/Drivers



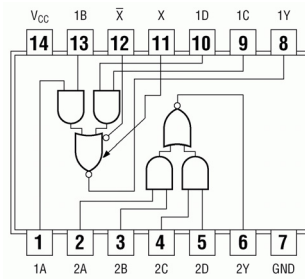
7448
BCD-to-Seven Segment Decoders/Drivers



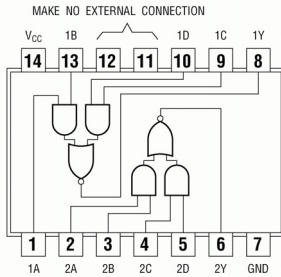
7449
BCD-to-Seven Segment Decoders/Drivers



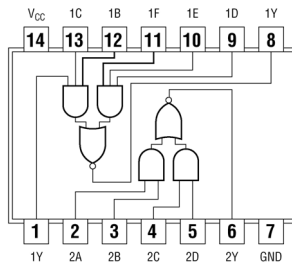
7450
Dual 2 wide 2-Input AND-OR-INVERT



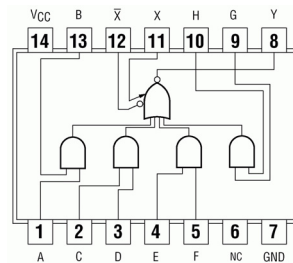
7451(7451, 74S51)
Dual 2 wide 2-Input AND-OR-INVERT



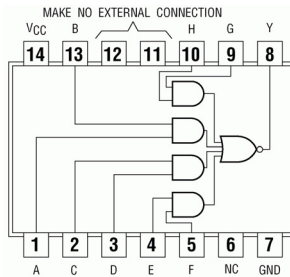
7451(74LS51, 74HC51)
Dual 2 wide 2-Input AND-OR-INVERT



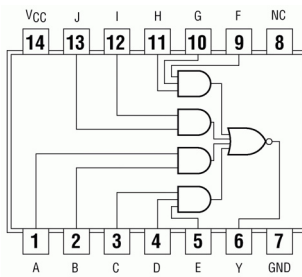
7453
4 wide 2-Input AND-OR-INVERT



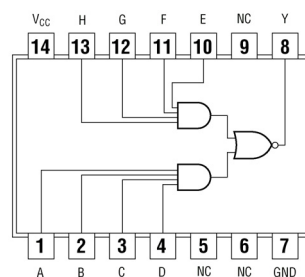
7454
4 wide 2-Input AND-OR-INVERT



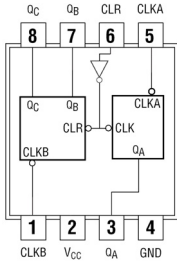
7454(74LS54)
4 wide 2-Input AND-OR-INVERT



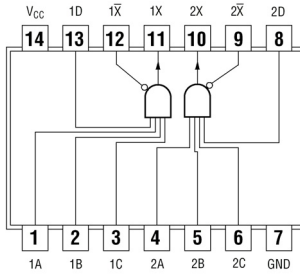
7455
Expandable 2 wide 4-Input AND-OR-INVERT



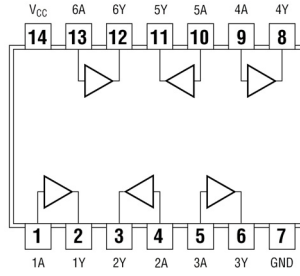
7456, 7457
50 to 1 Frequency Division
60 to 1 Frequency Division



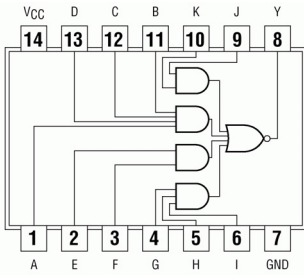
7460
Dual 4-Input Expanders



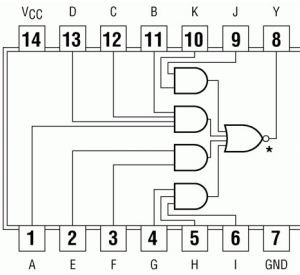
7463
Hex Current Sensing Interface Gates



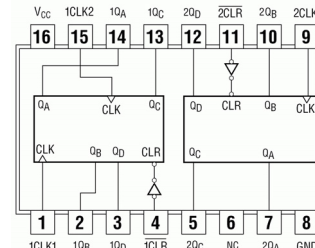
7464
4-2-3-2 Input AND-OR-INVERT



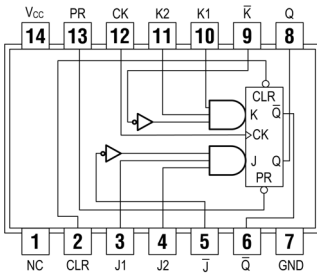
7465
4-2-3-2 Input AND-OR-INVERT O.C.



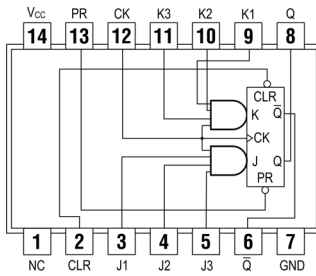
7468, 7469
Dual 4-Bit Decade Counters
Dual 4-Bit Binary Counters



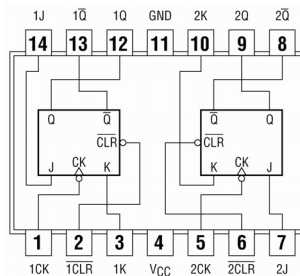
7470
AND-gated J-K Flip Flop with Preset and Clear



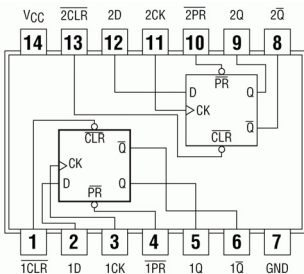
7472
AND-gated J-K Flip Flop with Preset and Clear



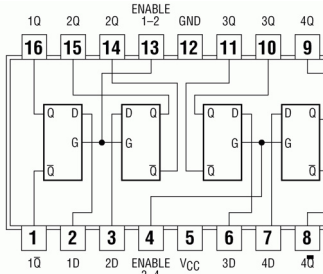
7473
Dual J-K Flip Flops with Clear



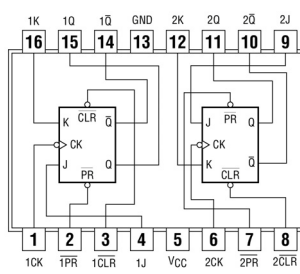
7474
Dual D-Type Flip Flops with Preset and Clear

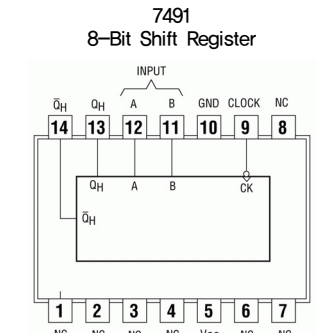
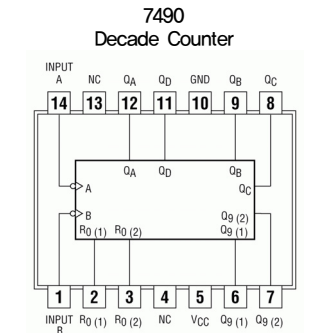
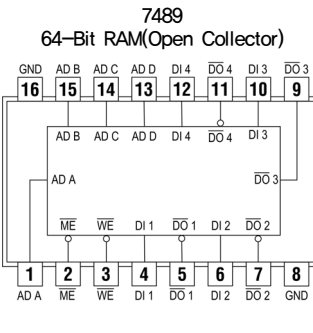
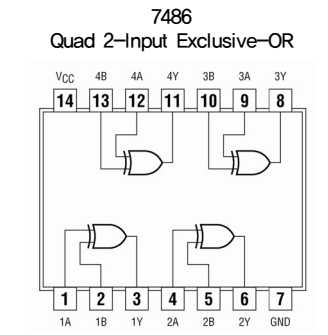
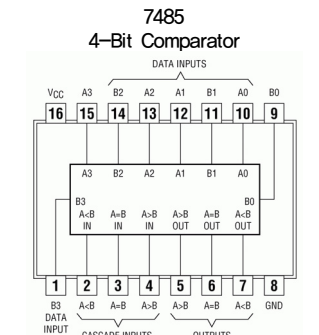
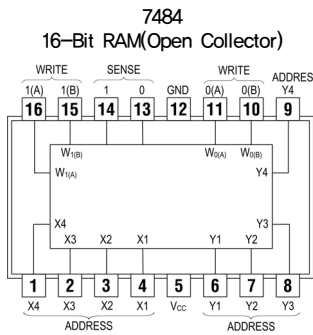
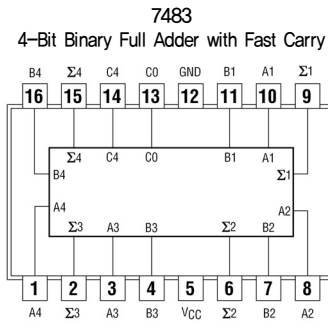
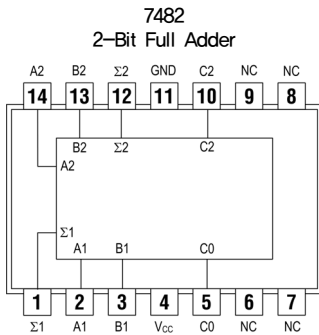
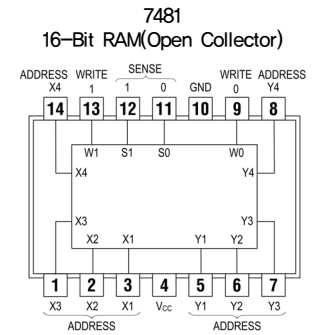
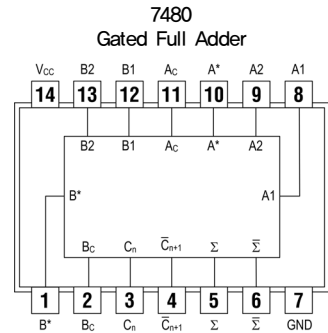
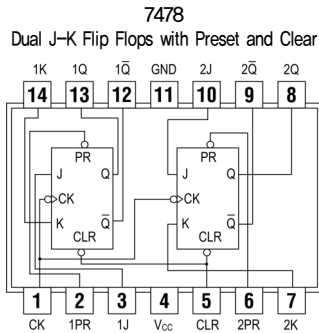
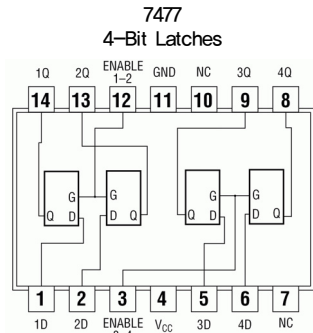


7475
4-Bit Bistable Latches

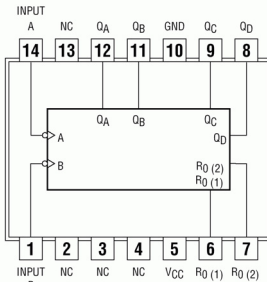


7476
Dual J-K Flip Flops with Preset and Clear

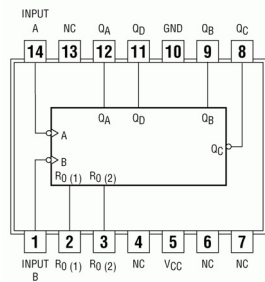




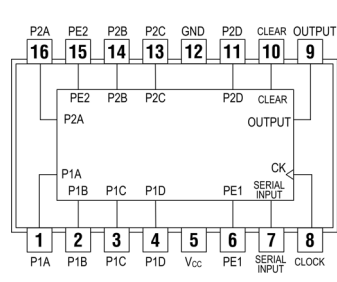
7492
Divide-by-12 Counters



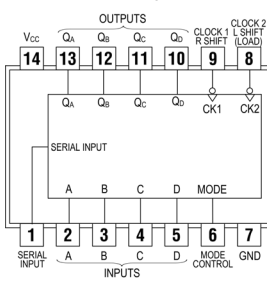
7493
4-Bit Binary Counters



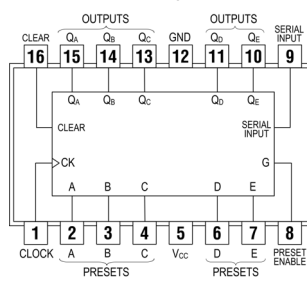
7494
4-Bit Shift Register



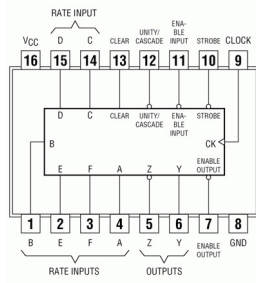
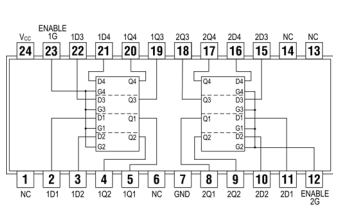
7495
4-Bit Shift Register PIPO



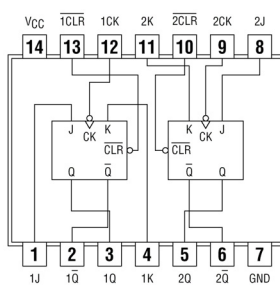
7496
5-Bit Shift Register PIPO



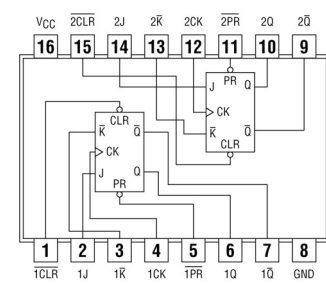
7497
6-Bit Synchronous Binary Rate Multipliers

74100
8-Bit Latches

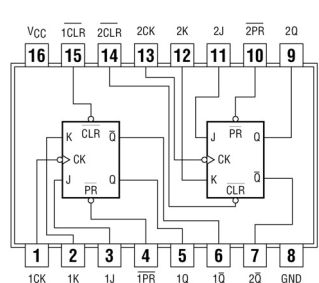
74107
Dual J-K Flip Flops with Clear



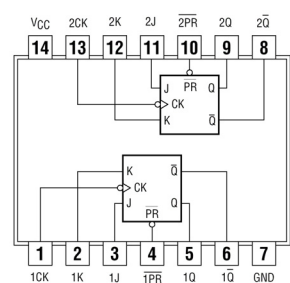
74109
Dual J-K Flip Flops with Preset and Clear



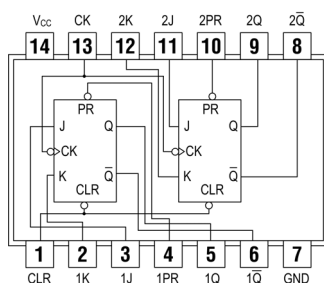
74112
Dual J-K Flip Flops with Preset and Clear



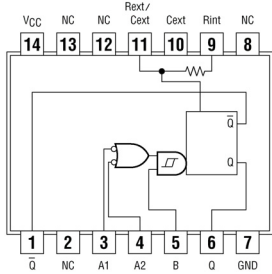
74113
Dual J-K Flip Flops with Preset



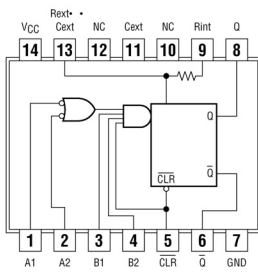
74114
Dual J-K Flip Flops with Preset and Clear



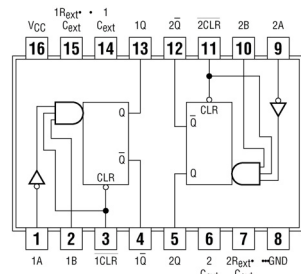
74121
Monostable Multivibrators



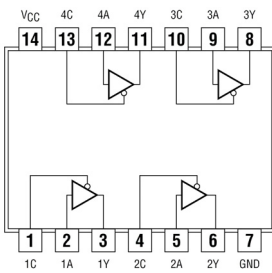
74122
Monostable Multivibrators with Clear



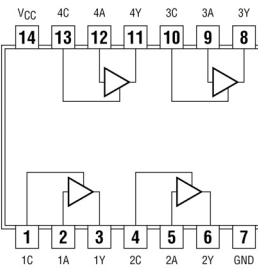
74123
Dual Monostable Multivibrators with Clear



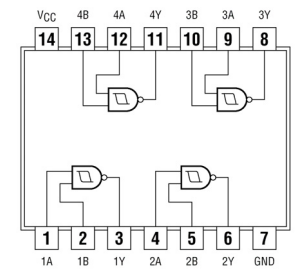
74125
Quad Bus Buffer Gates 3-State



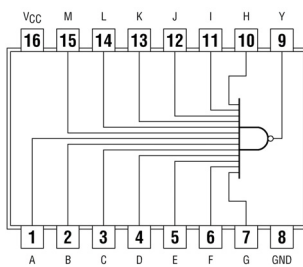
74126
Quad Bus Buffer Gates 3-State



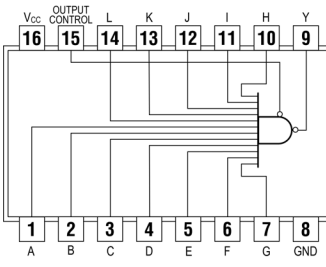
74132
Quad 2-Input NAND Schmitt Triggers



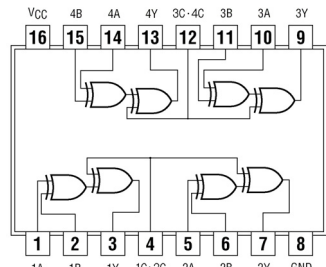
74133
13-Input NAND



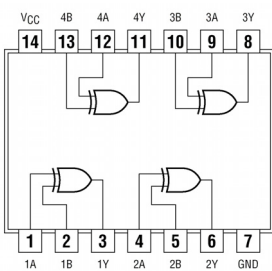
74134
12-Input 3 States NAND



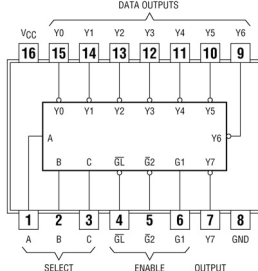
74135
Quad 2-Input XOR/XNOR



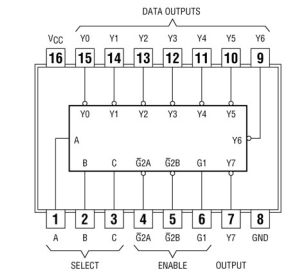
74136
Quad 2-Input XOR O.C.



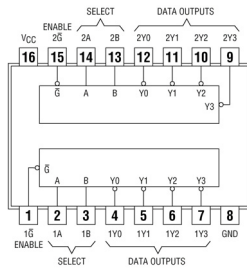
74137
3-to-8 Line Decoders/Demultiplexers Latch



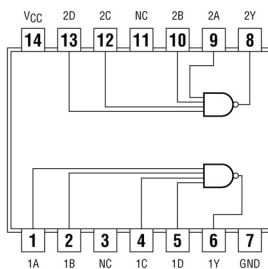
74138
3-to-8 Line Decoders/Demultiplexers



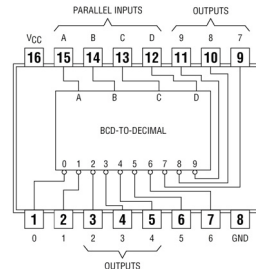
74139
Dual 2-to-4 Line Decoders/Demultiplexers



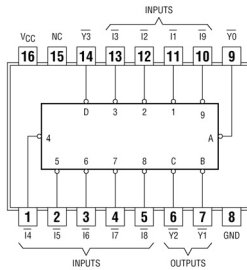
74140
Quad 4-input NAND Line Driver(50Ω)



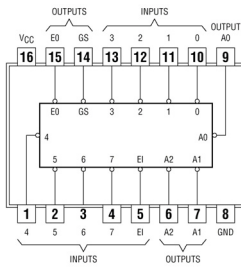
74145
BCD-to-Decimal Decoders/Drivers O.C.



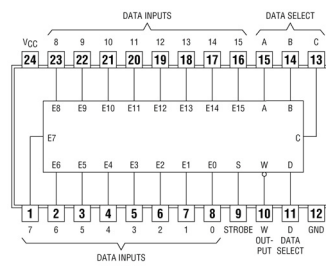
74147
10-to-4 Line Priority Encoder



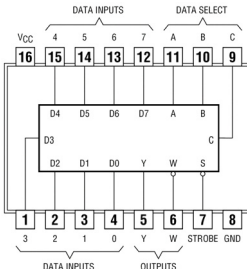
74148
8-to-3 Line Priority Encoders



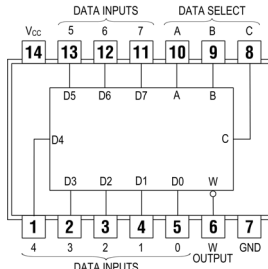
74150
16-to-1 Line Data Selector



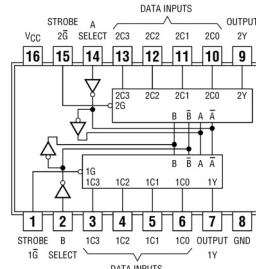
74151
8-to-1 Line Data Selectors/Multiplexers



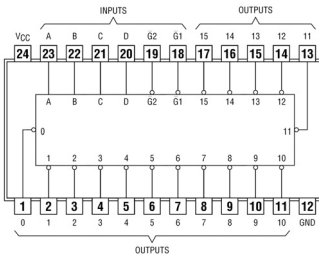
74152
8-to-1 Line Data Selector



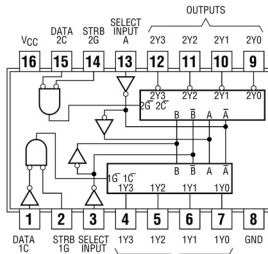
74153
Dual 4-to-1 Line Data Selectors/Multiplexers



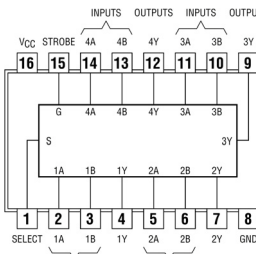
74154
4-to-16 Line Decoders/Demultiplexer



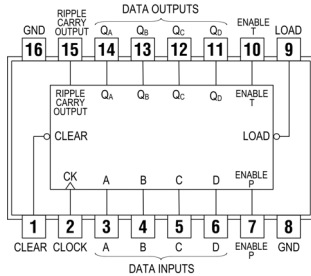
74155, 74156
Dual 2-to-4 Line Decoders/Demultiplexers



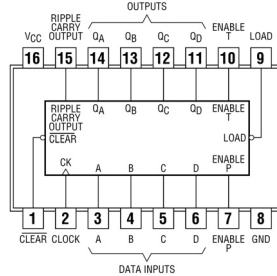
74157, 74158
Quad 2-to-1 Line Data Selectors/Multiplexers



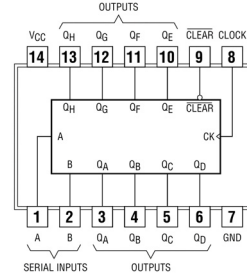
74160, 74162
Synchronous Presettable BCD Counter with Clear



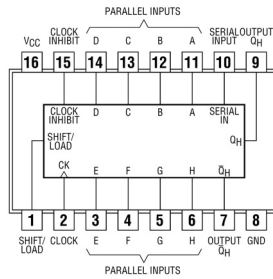
74161, 74163
Synchronous 4-bit Binary Counters



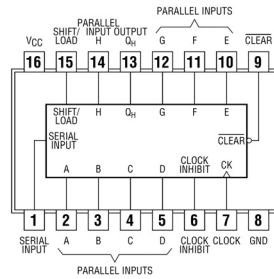
74164
8-Bit Shift Registers(P-Out Serial)



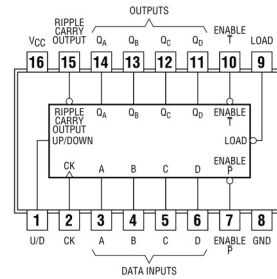
74165
8-Bit Shift Registers(P-Load)



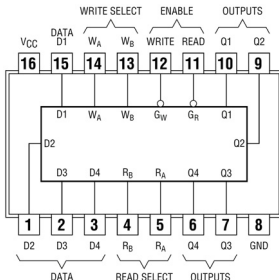
74166
8-Bit Shift Registers(P-Load)



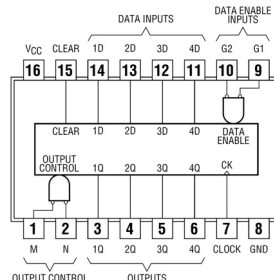
74168, 74169
BCD/Decade Synchronous Up-Down Counters



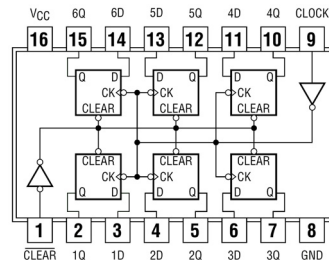
74170
4-by-4 Register Files NC-ND internal connection



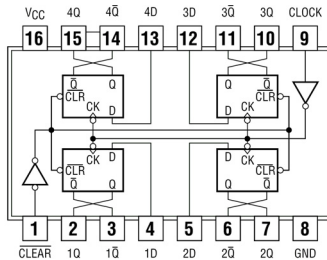
74173
4-Bit D-Type Registers



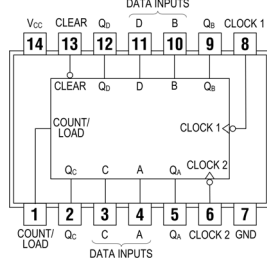
74174
Hex D-Type Flip Flops



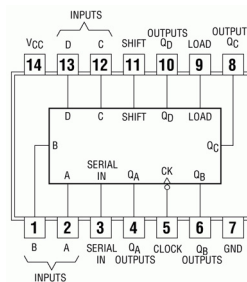
74175
Quad D-Type Flip Flops



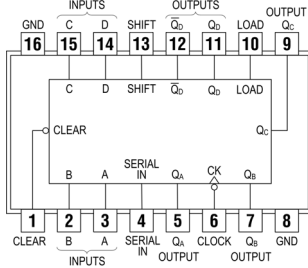
74176, 74177
Presettable Decade Counter
Presettable Binary Counter



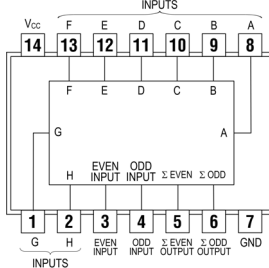
74178
4-Bit Register PIPO



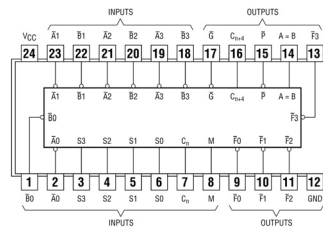
74179
4-Bit Shift Register PIPO



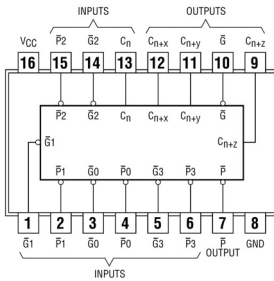
74180
8-Bit Parity Generator



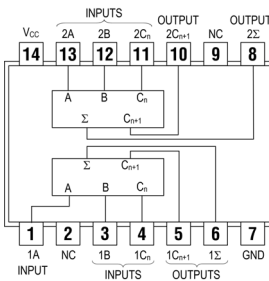
74181
4-Bit ALU/Function Generators



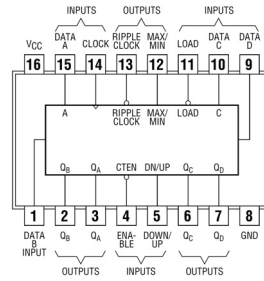
74182
Look-Ahead Carry Generators



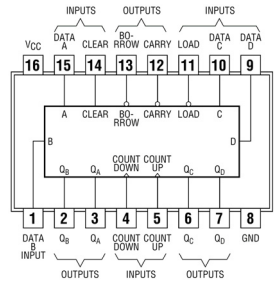
74183
Dual Carry Save Full Adders



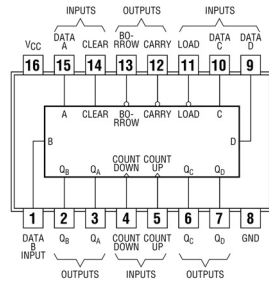
74190, 74191
Presettable Synchronous Up/Down Decade Counter



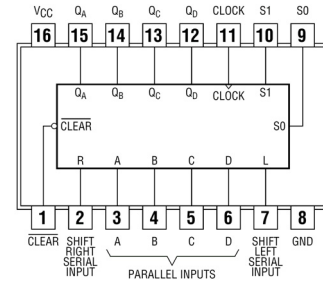
74192
Presettable Synchronous 4-Bit Up/Down Counters



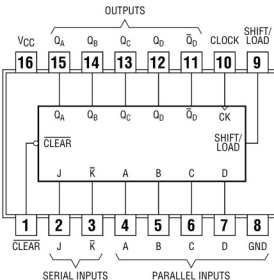
74193
Presettable Synchronous Up/Down Dual Clock Counters



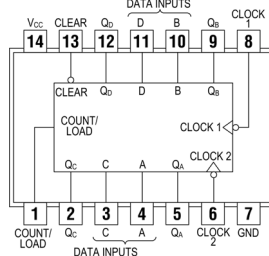
74194
4-Bit Bidirectional Universal Shift Registers



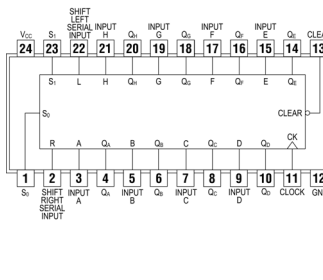
74195
4-Bit Parallel Access Shift Registers



74196, 74197
Presettable Decade Counter
Presettable Binary Counter



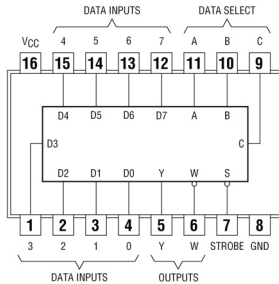
74198
8-Bit Bidirectional Shift Register PIPO



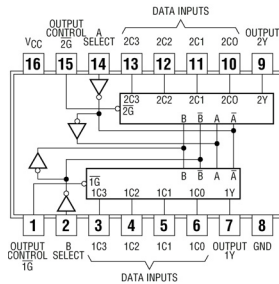
Pin diagram of the 74VHC163 4-bit binary counter. The diagram shows 14 pins. Pin 1 is labeled 'SERIAL INPUTS' and 'J'. Pin 2 is labeled 'K'. Pin 3 is labeled 'INPUT A' and 'A'. Pin 4 is labeled 'INPUT B' and 'B'. Pin 5 is labeled 'INPUT C' and 'C'. Pin 6 is labeled 'INPUT D' and 'D'. Pin 7 is labeled 'CLOCK INHIBIT' and 'CK'. Pin 8 is labeled 'CLEAR' and 'CLR'. Pin 9 is labeled 'CLOCK' and 'CLK'. Pin 10 is labeled 'Q0' and 'Q0'. Pin 11 is labeled 'Q1' and 'Q1'. Pin 12 is labeled 'Q2' and 'Q2'. Pin 13 is labeled 'Q3' and 'Q3'. Pin 14 is labeled 'Vcc' and 'Vcc'. Pin 15 is labeled 'GND' and 'GND'. The diagram also shows internal logic connections between pins and the counter's internal structure.

Pin diagram of the 74VHC163 4-bit binary counter. The chip has 16 pins. Pin 16 is Vcc, Pin 15 is UNLOAD CLOCK, Pin 14 is OUTPUT READY, Pin 13 is Q₀, Pin 12 is Q₁, Pin 11 is Q₂, Pin 10 is Q₃, and Pin 9 is CLEAR. On the bottom, Pin 1 is OUTPUT ENABLE, Pin 2 is INPUT READY, Pin 3 is LOAD, Pin 4 is D₀, Pin 5 is D₁, Pin 6 is D₂, Pin 7 is D₃, and Pin 8 is GND.

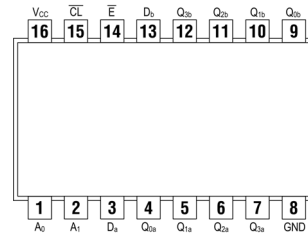
74251
Data Selectors/Multiplexers 3-State



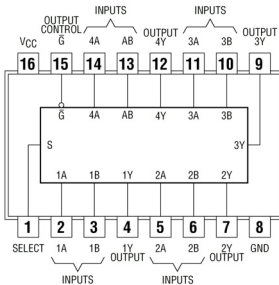
74253
Dual 4-to-1 Line Data Selector/Multiplexers 3-State



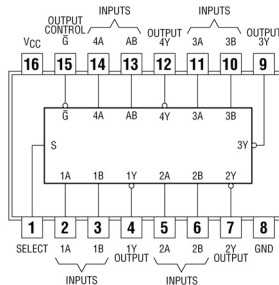
74256
Dual 4-Bit Addressable Latch



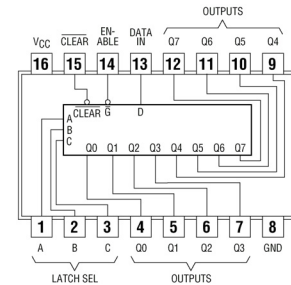
74257
Quad 2-to-1 Data Selector/Multiplexers 3-State



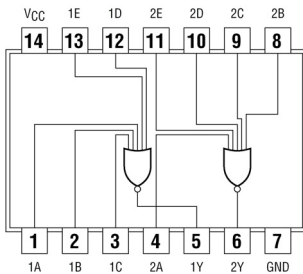
74258
Quad 2-to-1 Data Selector/Multiplexers 3-State



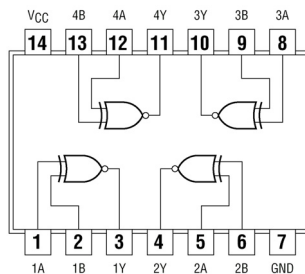
74259
8-Bit Addressable Latches



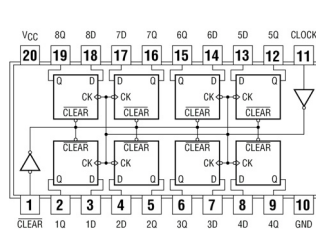
74260
Dual 5-Input NOR Gates



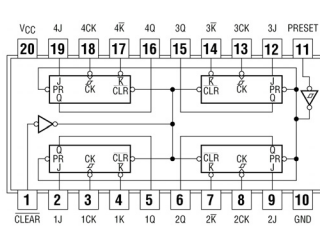
74266
Quad 2-Input XNOR O.C.



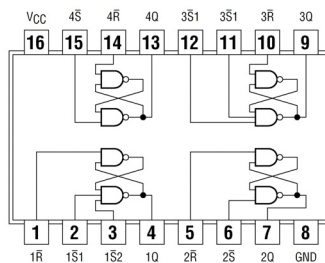
74273
Octal D-Type Flip Flops



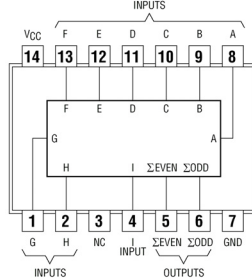
74276
Quad J-K Flip Flops

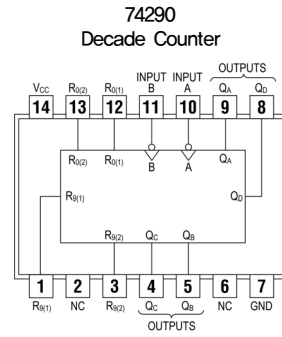
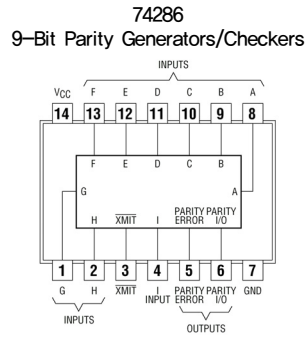
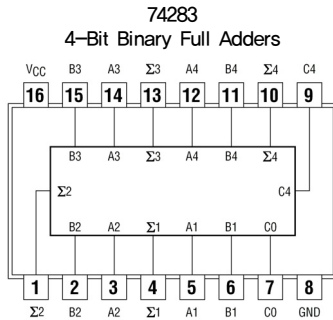


74279
Quad S-R Latches

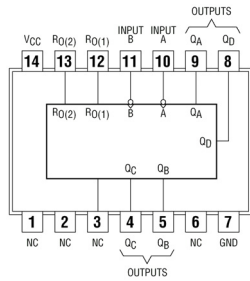


74280
9-Bit Parity Generators/Checkers

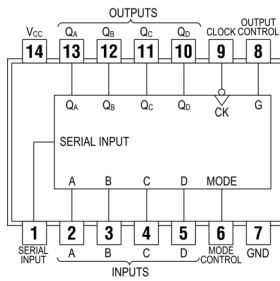




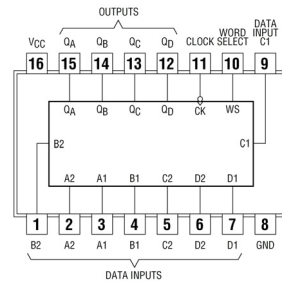
74293
4-Bit Binary Counters



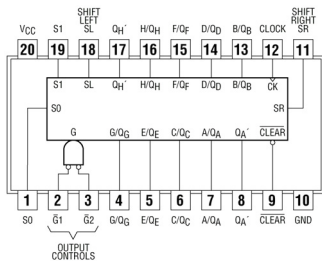
74295
4-Bit Shift PIPO 3-State



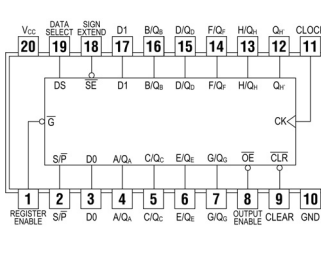
74298
Quad 2-Input Multiplexers with Storage



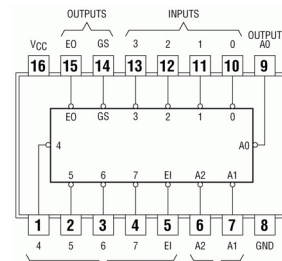
74299, 74323
8-Bit bidirectional Universal Shift/Storage Registers



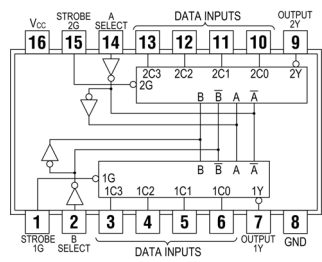
74322
8-Bit Shift Register with Sign Extend



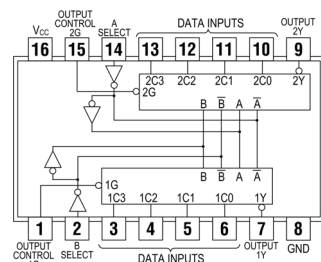
74348
8-to-3 Line Priority Encoder



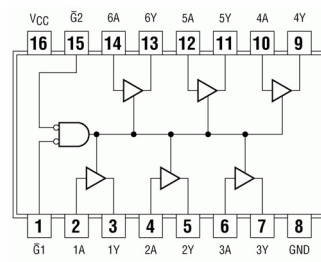
74352
Dual 4-to-1 Line Data Selector



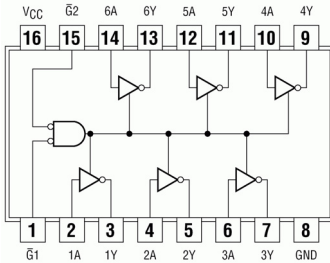
74353
Dual 4-to-1 Line Data Selector 3-State



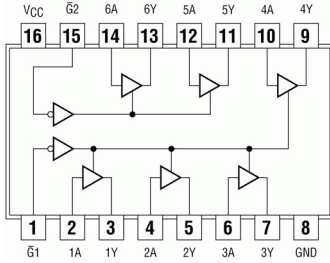
74365
Hex Bus Drivers Hex Buffers/Line Drivers 3-State



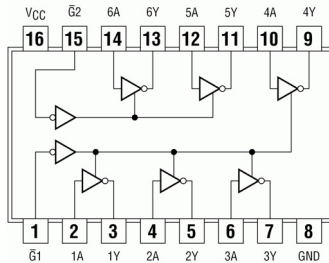
74366
Hex Bus Drivers Hex inverters/Line Drivers 3-State



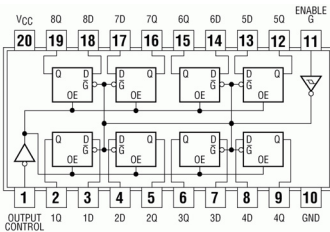
74367
Hex Bus Drivers Hex Buffers/Line Drivers 3-State



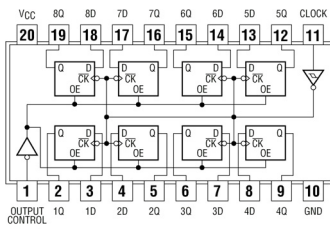
74368
Hex Bus Drivers Hex inverters/Line Drivers 3-State



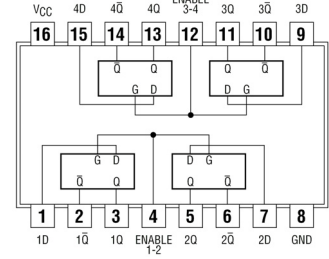
74373
Octal D-Type Latches 3-State



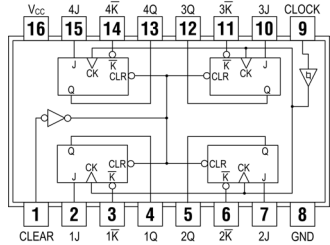
74374
Octal D-Type Flip Flops 3-State



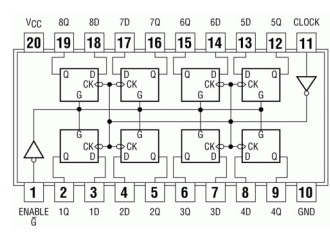
74375
Quad Latches



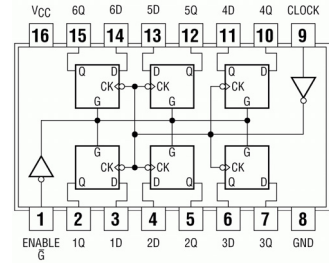
74376
Quad J-K Flip Flops



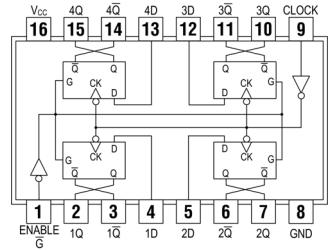
74377
Octal D-Type Flip Flops with Enable



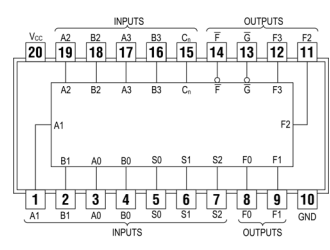
74378, 74174
Hex D-Type Flip Flops Clock with Enable



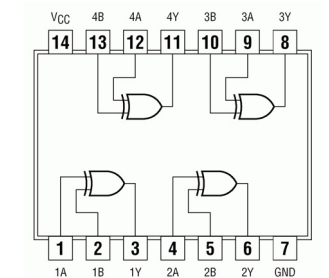
74379, 74175
Quad D-Type Flip Flops with Enable



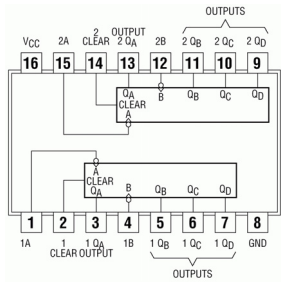
74381, 74382
ALU/Function Generator



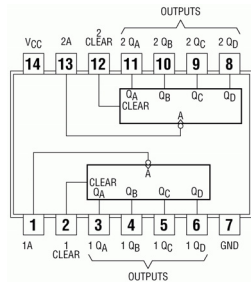
74386
Quad 2-Input XOR



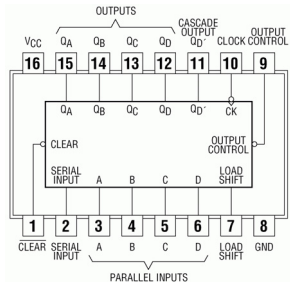
74390
Dual Decade Counters



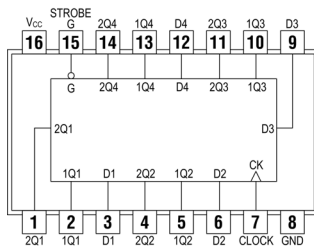
74393
Dual 4-Bit Binary Counters



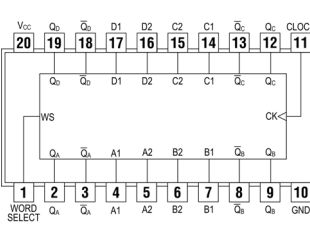
74395
4-Bit Shift Register PIPO



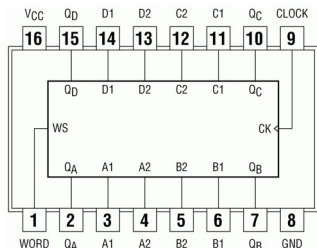
74396
Octal Storage Register



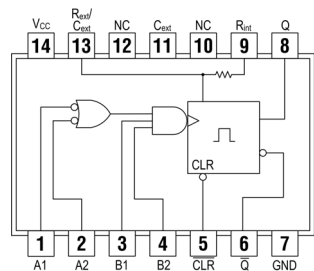
74398
Quad 2-Input Multiplexer with Storage



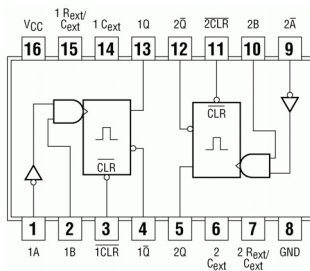
74399
Quad 2-Input Multiplexer with Storage



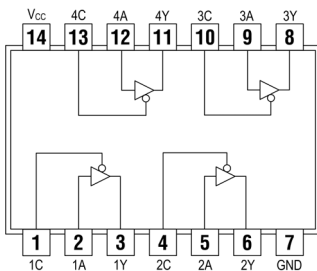
74422
Monostable Multivibrator



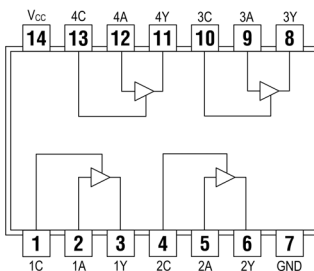
74423
Mono Stable Multivibrator



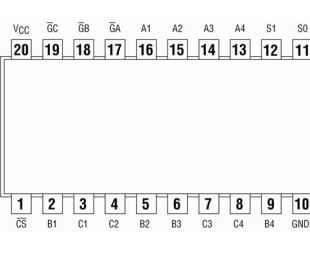
74425
Quad 3-State Buffers



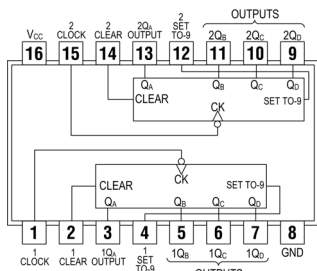
74426
Quad 3-State Buffers



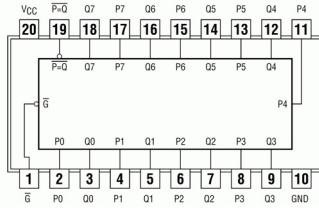
74440, 74441, 74442, 74443, 74444
Quadruple Tridirectional Bus Transceivers



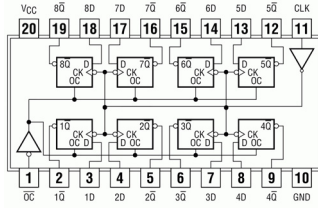
74490
Dual Decade Counters



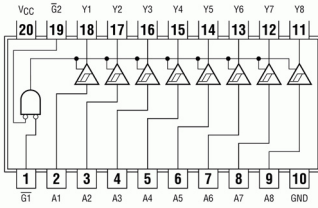
74520, 74521, 74688, 74689
8-Bit Identity Comparator



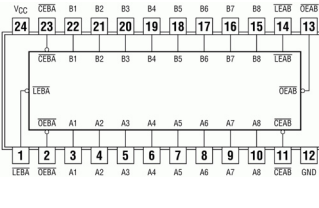
74534
Octal D-Type Edge-triggered Flip Flops



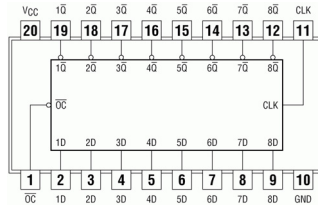
74540, 74541
Octal Buffers/Drivers 3-State



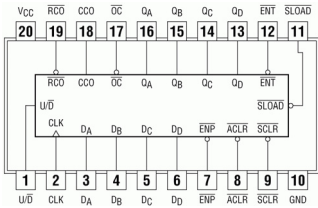
74543
Octal Registered Transceivers



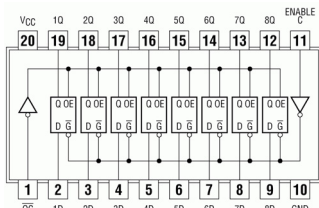
74564
Octal D-Type Flip Flops



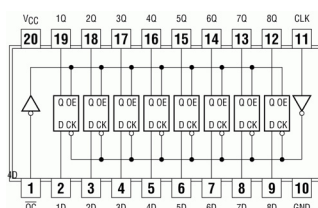
74569
Synchronous Binary Counter 3-State



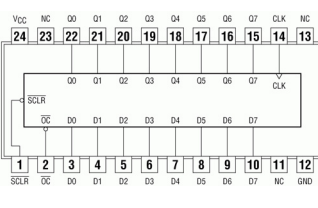
74573
Octal D-Type Latches



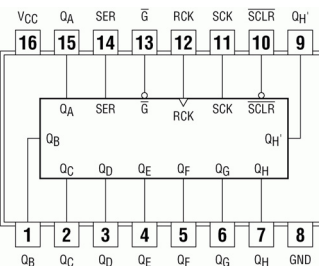
74574
Octal D-Type Edge-triggered Flip Flops



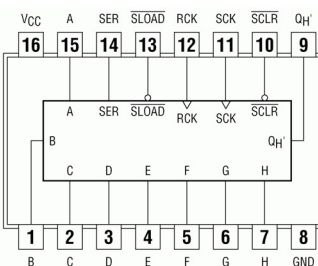
74575
Octal D-Type Edge-triggered Flip Flops



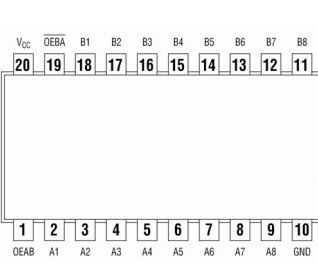
74595, 74596
8-Bit Shift Registers



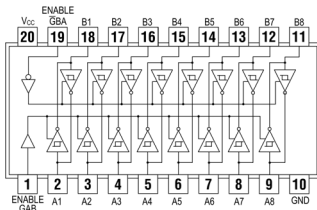
74597
8-Bit Shift Registers



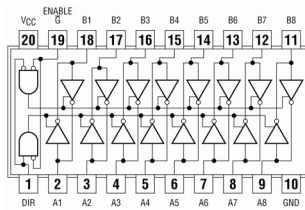
74620, 74621, 74623
Octal Bus Transceivers 3-State



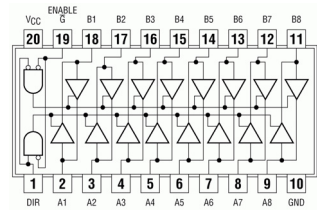
74622
Octal Bus Transceiver O.C.



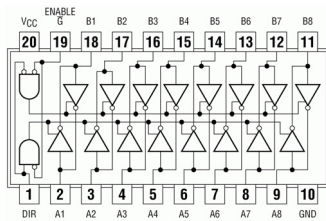
74638
Octal Bus Transceivers



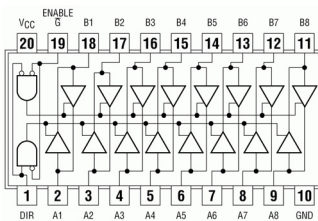
74639
Octal Bus Transceivers



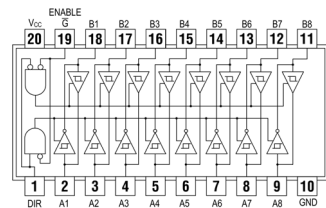
74640, 74642
Octal Bus Transceivers 3-State



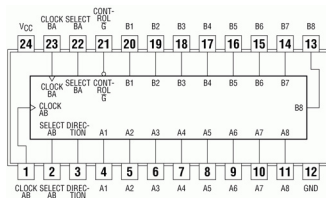
74641, 74645
Octal Bus Transceivers O.C.



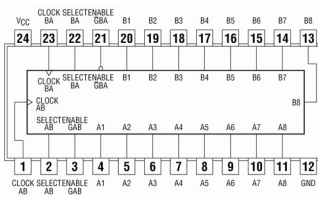
74643, 74644
Octal 3-State Bus Transceivers



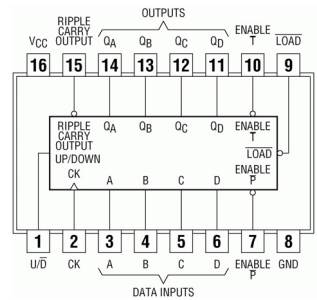
74646, 74647, 74648
Octal Bus Transceivers and Registers



74651, 74652, 74653, 74654
Octal Bus Transceivers and Registers



74668, 74669
Presettable Synchronous 4-Bit
Up/Down Binary Counter



Pin diagram of the 74VHC04 hex inverters. The chip has 16 pins. Pin 16 is VCC, pin 1 is GND. Pins 2, 3, 4, 5, 6, 7 are inputs, and pins 8, 9, 10, 11, 12, 13 are outputs. The internal circuit shows six inverters, each with an input (D1-D6) and an output (Q1-Q6).

Figure 1: Block diagram of the 16C45 I2C interface. The diagram shows a 16C45 chip connected to an I2C bus. The chip has pins for VCC, Y15, Y14, Y13, Y12, Y11, Y10, Y9, Y8, Y7, Y6, Y5, Y4, Y3, Y2, Y1, Y0, and GND. The I2C bus has pins for SDA, SCL, and GND. The chip also has pins for SH, CK, R/W, STORE CLR, STORE IO, DATA IO, Y0, Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, Y11, Y12, Y13, Y14, Y15, and GND. The chip is labeled '16C45' and 'I2C'.