

Mitsubishi DTL IC M5930P series pin configurations 1/4

Description
 The Mitsubishi DTL M5930P series is compatible with the DTL 830 series and the DTL 930 series.
 And some additional devices are included.
 These devices in DTL M5930P series are packaged in plastic slim 600mil DIP.
 Electrical specifications are similar to the DTL 830 series and the DTL 930 series.

Features

Parameters	Standard series gate	Fast series gate	Unit
Average propagation delay time	31	23	ns
Power consumption	8.5	12.5	mW/gate
Fan outs	8	7	

- + Noise margin: 1V typ.
- + Supports wired OR circuits
- + Vcc = 5V +, -10%
- + Operating Temperature: -20 to +75 °C

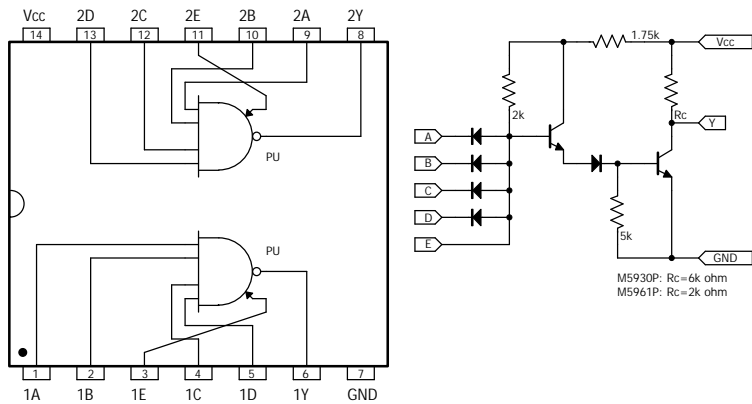
Absolute Maximum Ratings Ta = 25 °C, unless otherwise specified

Parameters	Symbol	Condition	Min	Max	Unit
Supply Voltage	Vcc	Ta = -20 to 75 °C		8	V
Input Voltage	Vi			6	V
Input Current	Ii		-10	1	mA
Output Voltage	Vo	Level High		6	V
Output Current	Io	Level Low		30	mA
		Others		150	mA
Power Dissipation	Pd			250	mW
Operating Temperature	Topr		-20	+75	°C
Storage Temperature	Tstg		-30	+100	°C

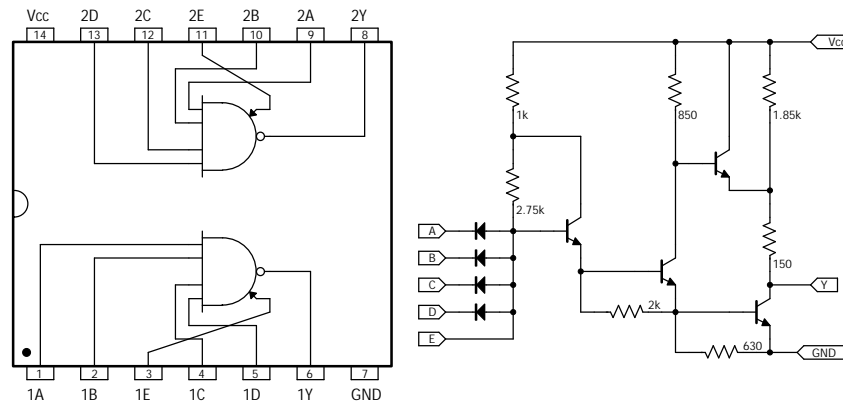
Device Lists

Number	Function	Page
M5930P	Dual 4-Input Expandable NAND Gate	1
M5932P	Dual 4-Input Expandable Buffer	1
M5933P	Dual 4-Input Expander	1
M5935P	Hex Inverter Without Input Diode	2
M5936P	Hex Inverter	2
M5937P	Fast Hex Inverter	2
M5944P	Dual 4-Input Expandable NAND Power Gate	1
M5945P	Single R-S/J-K Clocked Flip Flop	2
M5946P	Quadruple 2-Input NAND Gate	3
M5948P	Fast Single R-S/J-K Clocked Flip Flop	2
M5949P	Fast Quadruple 2-Input NAND Gate	3
M5952P	Dual J-K Clocked Flip Flop (Common Clock and Reset)	3
M5953P	Dual J-K Clocked Flip Flop (Separate Clock Input)	4
M5955P	Fast Dual J-K Clocked Flip Flop (Common Clock and Reset)	3
M5956P	Fast Dual J-K Clocked Flip Flop (Separate Clock Input)	4
M5961P	Fast Dual 4-Input Expandable NAND Gate	1
M5962P	Triple 3-Input NAND Gate	4
M5963P	Fast Triple 3-Input NAND Gate	4

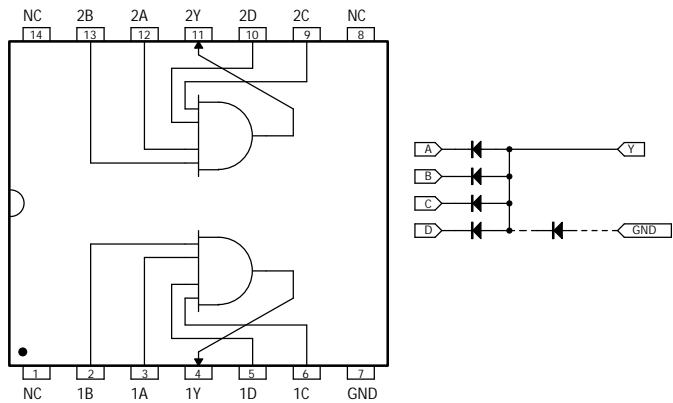
M5930P Dual 4-Input Expandable NAND Gate
M5961P Fast Dual 4-Input Expandable NAND Gate



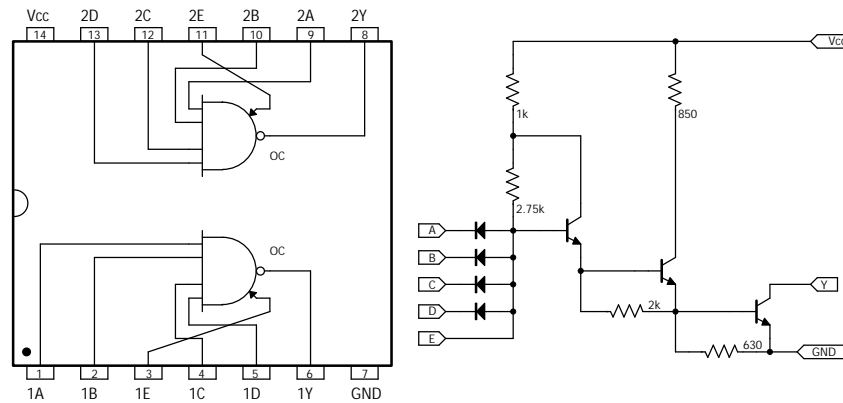
M5932P Dual 4-Input Expandable Buffer



M5933P Dual 4-Input Expander

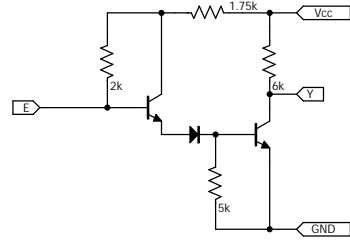
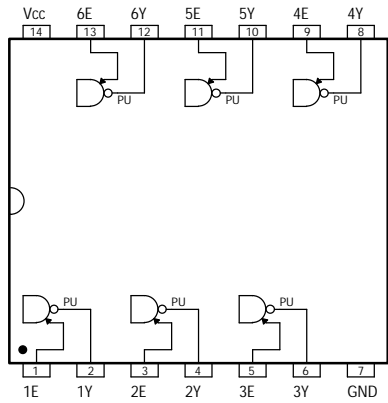


M5944P Dual 4-Input Expandable NAND Power Gate

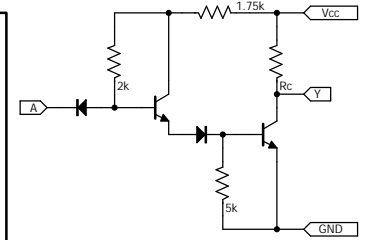
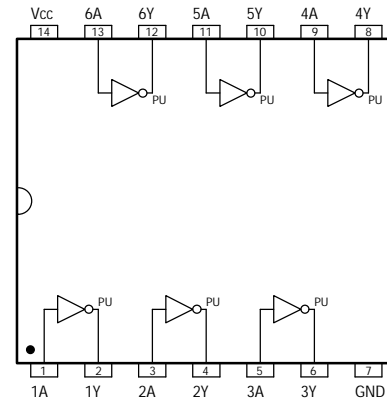


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M5935P Hex Inverter Without Input Diode

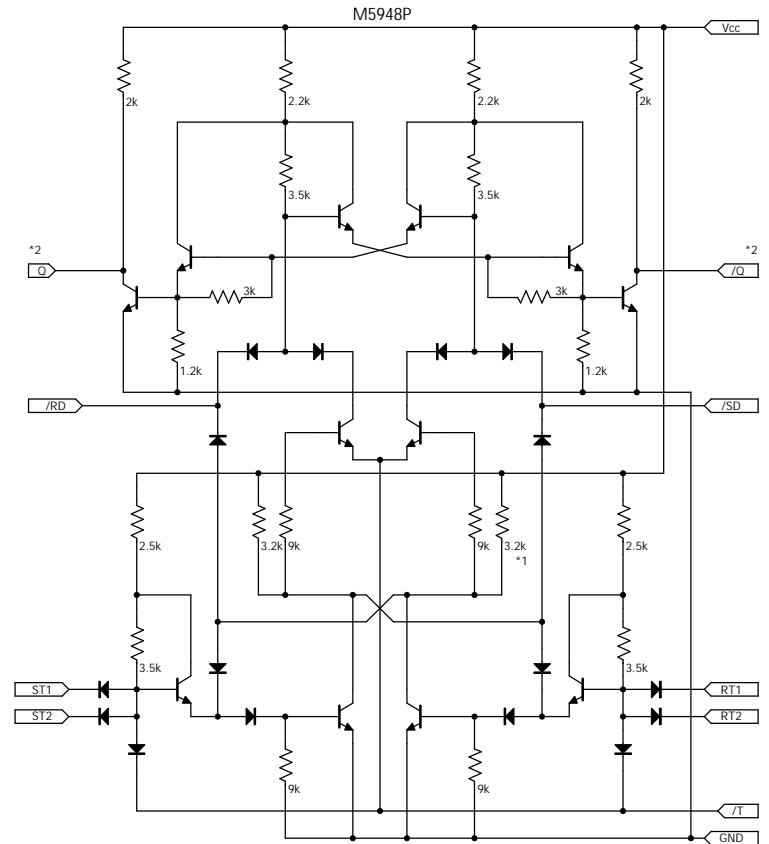
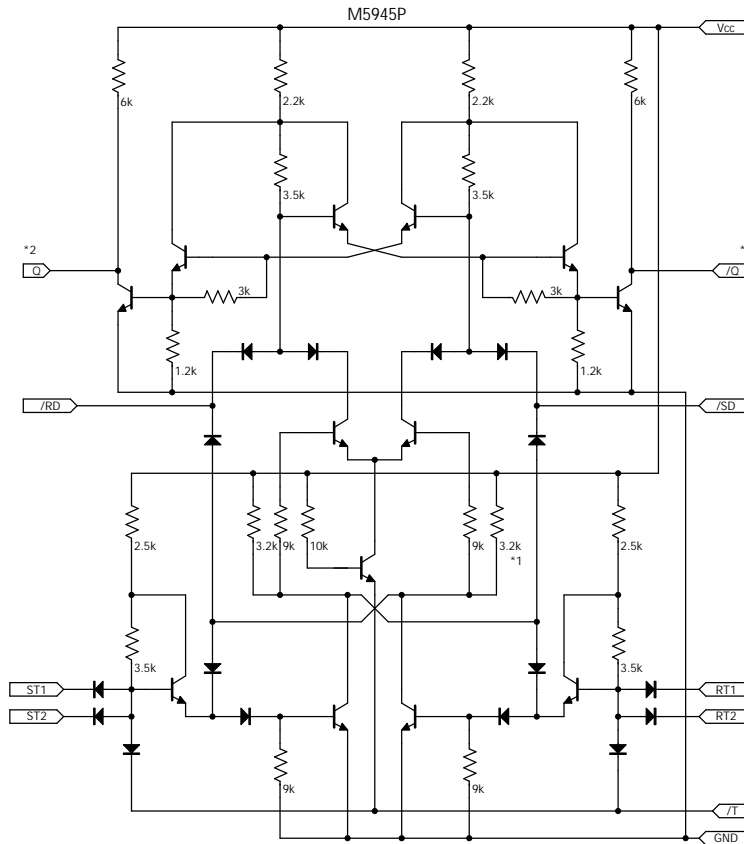
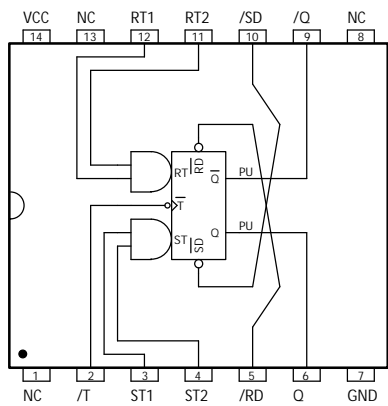


M5936P Hex Inverter
M5937P Fast Hex Inverter



M5936P: Rc=6k ohm
M5937P: Rc=2k ohm

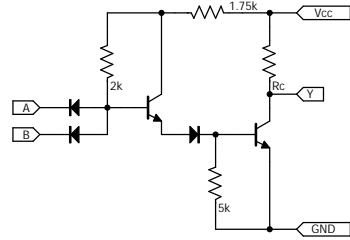
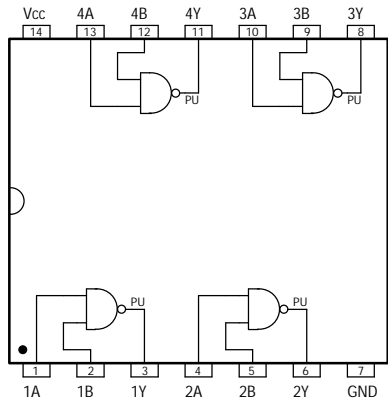
M5945P Single R-S/J-K Clocked Flip Flop
M5948P Fast Single R-S/J-K Clocked Flip Flop



*1: Guessed value, not described in datasheet
*2: Collect Mitsubishi datasheet signal names, refer to FAIRCHILD DTuL945

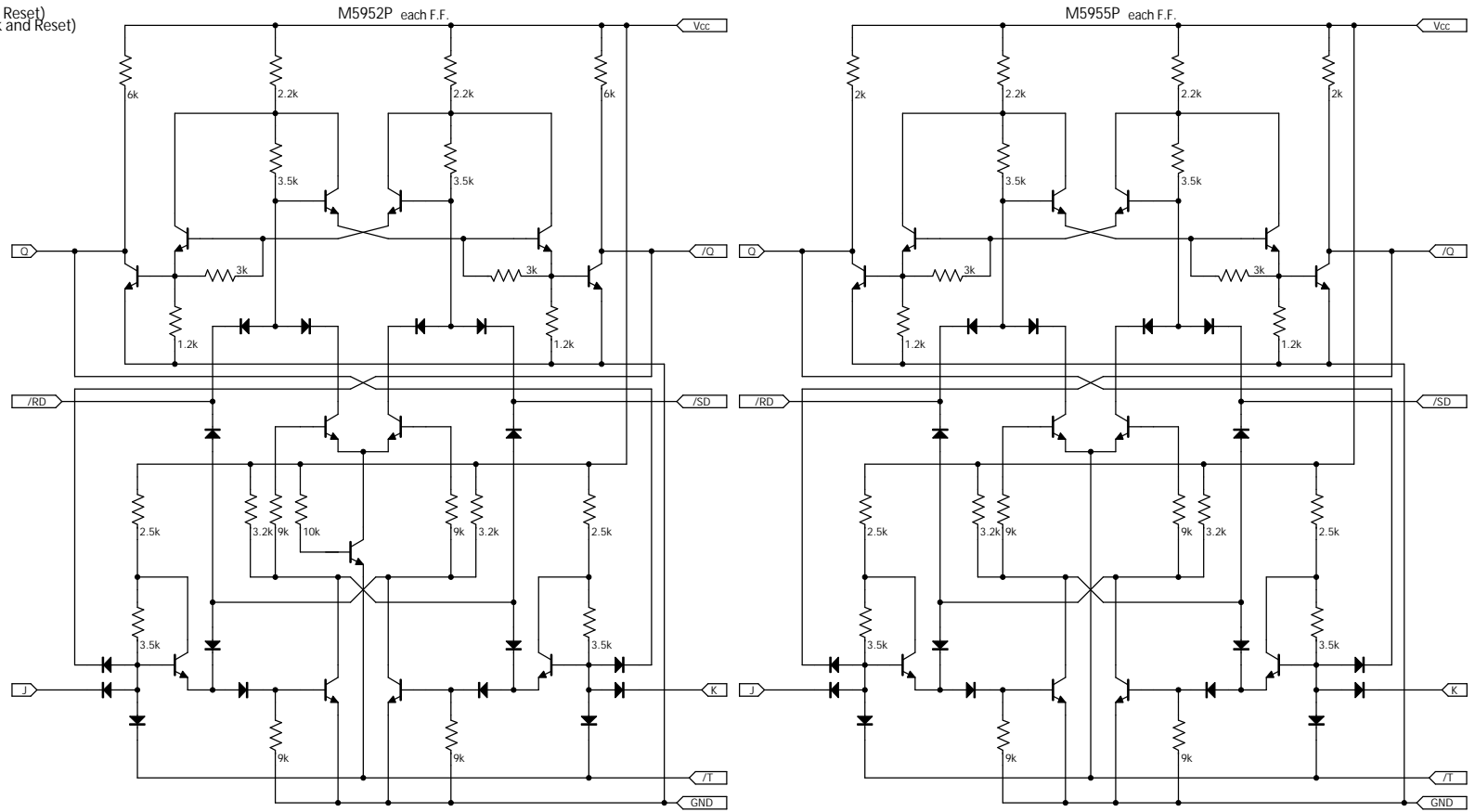
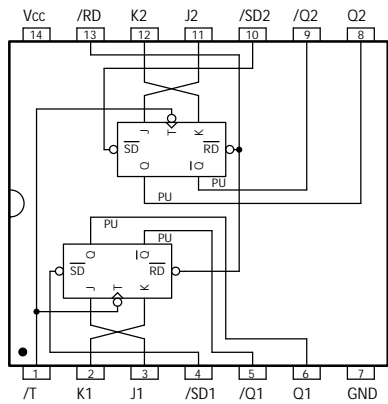
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M5946P Quadruple 2-Input NAND Gate
 M5949P Fast Quadruple 2-Input NAND Gate



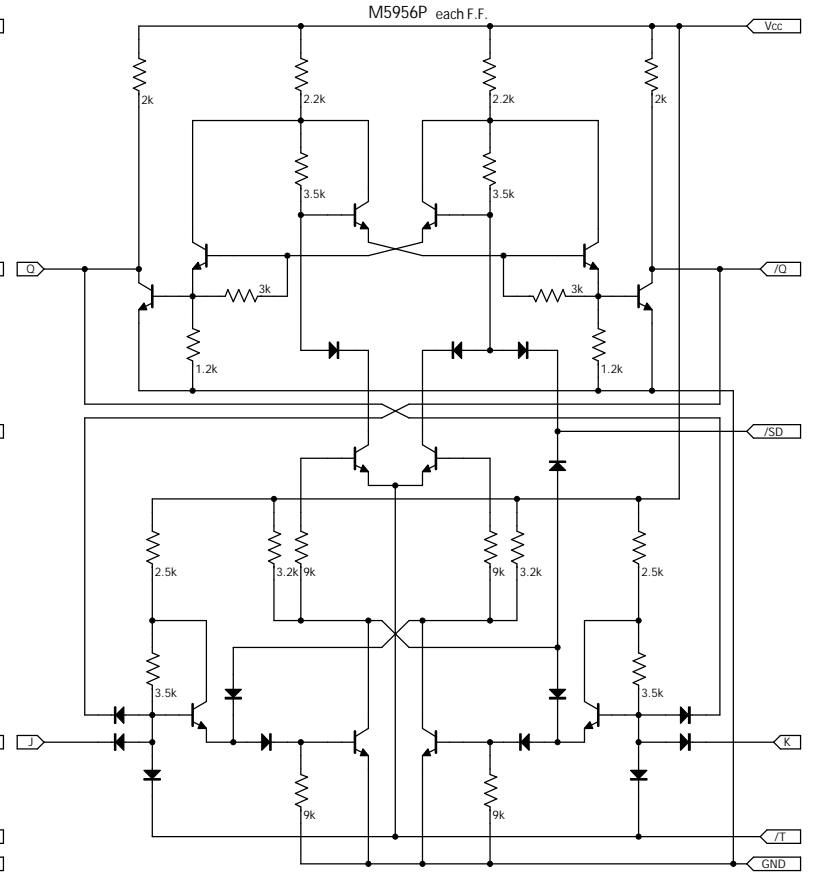
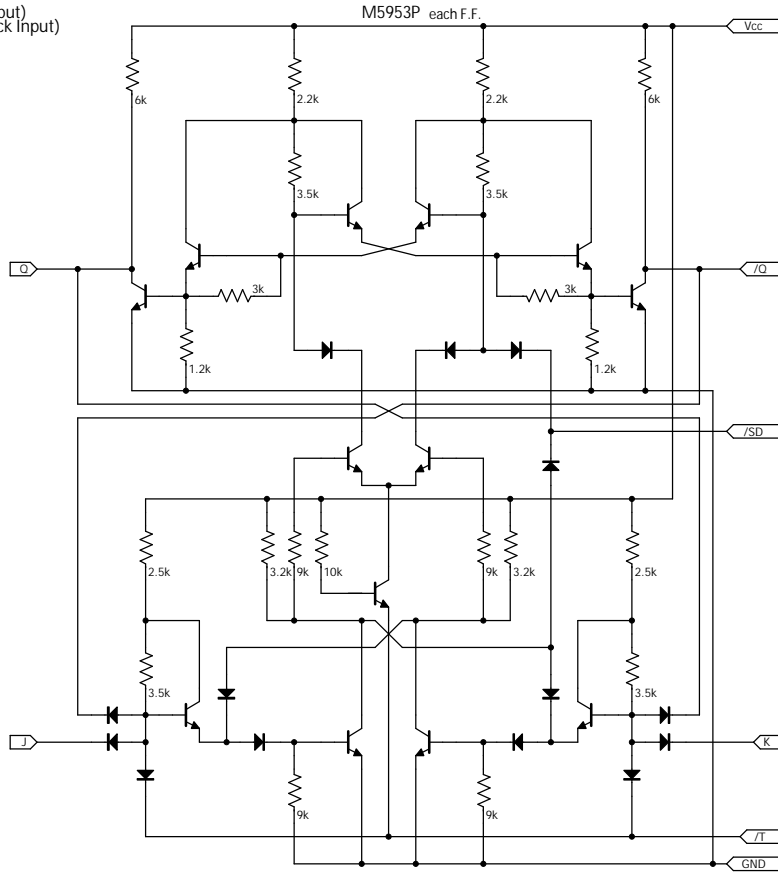
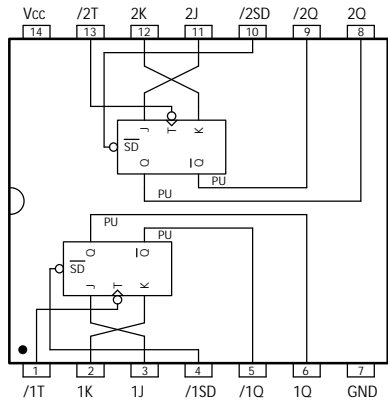
M5946P: Rc=6k ohm
 M5949P: Rc=2k ohm

M5952P Dual J-K Clocked Flip Flop (Common Clock and Reset)
 M5955P Fast Dual J-K Clocked Flip Flop (Common Clock and Reset)



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M5953P Dual J-K Clocked Flip Flop (Separate Clock Input)
 M5956P Fast Dual J-K Clocked Flip Flop (Separate Clock Input)



M5962P Triple 3-Input NAND Gate
 M5963P Fast Triple 3-Input NAND Gate

