

TTL IC SELECTION GUIDE

Gen No	Function	Bits	Blocks	Speciality
74LS00	NAND	2-input	Quad	
74LS02	NOR	2-input	Quad	
74LS04	INVERTER		Hex	
74LS08	AND	2-input	Quad	
74LS10	NAND	3-input	Triple	
74LS11	AND	3-input	Triple	
74LS14	INVERTER		Hex	Schmitt
74LS20	NAND	4-input	Dual	
74LS27	NOR	3-input	Triple	
74LS30	NAND	8-input		
74LS32	OR	2-input	Quad	
74LS47	DECODER	BCD	to SEGMENT	Active LO
74LS48	DECODER	BCD	to SEGMENT	Active HI
74LS73	JK F/F		Dual, Clr	MS
74LS74	D F/F		Dual, Pr, Clr	+Edg Trig
74LS75	D Latch	2-bit	Dual	+Level Act

74LS83	Full ADDER	4-bit		Fast Cy
74LS85	Magnitude Comparator	4-bit	<, = , >	
74LS86	XOR	2-input	Quad	
74LS90	COUNTER	Decade	Zero, Nine, Div-2, Div-5	–Edg Trig
74LS92	COUNTER	Mod-12	Zero , Div-2, Div-6	–Edg Trig
74LS93	COUNTER	4-bit	Zero , Div-2, Div-8	–Edg Trig
74LS95	SHIFT Register	4-bit		PIPO
74LS123	MONO SHOT		Dual	Re-Trig
74LS125	BUFFER		Quad	Tristate-H
74LS126	BUFFER		Quad	Tristate-L
74LS138	DECODER / DEMUX	3 to 8		Gated
74LS139	DECODER / DEMUX	2 to 4	Dual	Gated
74LS148	PRIORITY ENCODER	8 to 3		
74LS151	MUX	8 to 1	Complementary Outputs	
74LS153	MUX	4 to 1	Dual	Comm Adr
74LS154	DECODER / DEMUX	4 to 16		Gated
74LS155	DECODER / DEMUX	2 to 4	Dual, Gated	Comm Adr
74LS156	DECODER	2 to 4	Dual, Gated, O/C	Comm Adr
74LS157	MUX	2 to 1	Quad	Comm Adr

74LS158	MUX	2 to 1	Quad, Inv out	Comm Adr
74LS160	COUNTER (Synchro)	Decade	Clr-Asyn-L, Load-Syn-L	+Edg Trig
74LS161	COUNTER (Synchro)	4-bit	Clr-Asyn-L, Load-Syn-L	+Edg Trig
74LS162	COUNTER (Synchro)	Decade	Clr-Syn-L, Load-Syn-L	+Edg Trig
74LS163	COUNTER (Synchro)	4-bit	Clr-Syn-L, Load-Syn-L	+Edg Trig
74LS166	SHIFT Register	8-bit		PISO
74LS169	COUNTER (Synchro)	4-bit	U/D, Load-Syn-L, Mode-ctrl	+Edg Trig
74LS173	D Register	4-bit	Clr-H, Tristate (L)	+Edg Trig
74LS174	D Register	6-bit	Clr-L	+Edg Trig
74 181	ALU	4-bit	16 Function	
74LS191	COUNTER (Synchro)	4-bit	U/D, Load-Asyn-L, Mode-ctrl	+Edg Trig
74LS193	COUNTER (Synchro)	4-bit	U/D, Clr-Asyn-H, Load-Asyn-L	Dual Clock+
74LS194	SHIFT Register	4-bit	R/L, Clear-Asyn-L, Mode-ctrl	PIPO
74LS197	COUNTER	4-bit	Clr-L, Load-L	–Edg Trig
74LS240	INV BUFFER	4-bit	Dual	Tristate-L,H
74LS241	BUFFER	4-bit	Dual	Tristate-L,H
74LS244	BUFFER	4-bit	Dual	Tristate-L
74LS245	BUFFER	8-bit	Bidirectional	Tristate-H
74LS251	MUX	8 to 1	Complementary Outputs	Tristate-H
74LS257	MUX	2 to 1	Quad, Common ctrl	Tristate-H

74LS273	D Register	8-bit	+ Edge Trig, Clear-L	
74LS373	D Latch	8-bit	+ Level Active	Tristate-H
74LS374	D Register	8-bit	+ Edg Trig	Tristate-H
74LS377	D Register	8-bit	+ Edg Trig, Clock Enable	
74LS381	ALU	4-bit	8 Function	
74LS393	COUNTER	4-bit	Dual, Clr-H	–Edg Trig
74LS461	COUNTER	8-bit	Mode-ctrl(Clr,Load,Inr,Hi-z)	+Edg Trig
74LS465	BUFFER	8-bit	Dual ctrl (ORed)	Tristate-H
74LS469	U/D COUNTER	8-bit	Mode-ctrl(Clr, Load, Hi-z)	+Edg Trig
74LS670	Register FILE	4-by-4	In-Port, Out-port, –Level Act	Tristate-H
CSEALU	ALU	4-bit	Custom built for CPU design	Tristate-H
1488	Line Driver	Quad		
1489	Line Receiver	Quad		
MAX232	Driver/Receiver	Dual		

CMOS IC SELECTION GUIDE

Gen No	Function	Bits	Blocks	Speciality
4001	NOR	2	QUAD	
4002	NOR	4	DUAL	
4007	DUAL COMPLEMENTARY PAIR + 1 INVERTER			
4008	ADDER	4		
4009	INVERTER		HEX	
4011	NAND	2	QUAD	
4012	NAND	4	DUAL	
4013	D F/F		DUAL	+ Edge, Pr, Clr
4019	AND-OR	2-to-1	QUAD	INPUT CONTROLS
4021	SHIFTER	8		+ Edge, 8-IN, 3-OUT
4023	NAND	3	TRIPLE	
4025	NOR	3	TRIPLE	
4027	M/S J-K F/F		DUAL	+ Edge, Pr, Clr
4029	U/D COUNTER	BIN/DEC		+ Edge , Pr-Asynch
4030	EX-OR	2	QUAD	
4033	DECADE COUNTER + 7-SEGMENT DRIVER, Clr			

4040	COUNTER	12		- Edge, Clr
4042	D-Latch		QUAD	CLK-Polarity Control
4050	BUFFER		HEX	
4051	MUX/ DMUX	8		Analog, Inhibit
4067	MUX/ DMUX	16		Analog, Inhibit
4068	AND/ NAND	8		
4069	INVERTER		HEX	
4071	OR	2	QUAD	
4072	OR	4	DUAL	
4073	AND	3	TRIPLE	
4075	OR	3	TRIPLE	
4081	AND	2	QUAD	
4082	AND	4	DUAL	
4094	SHIFTER	8		+ Edge, Latch, Tristate O/P
40163	COUNTER	4		+ Edge , Clr-Synch, Pr-Synch
40193	U/D COUNTER	4		+ Edge, Dual CLK, Ld-Clr-Asyn
4502	INVERTER		HEX	Inhibit, Tristate O/P
4511	BCD-to-7 SEG DRIVER			Latched

4514	DECODER	4-to-16		I/P-Latched, O/P-Inhibit
4516	COUNTER	4		+ Edge, Clr-Asynch, Pr-Synch
4520	COUNTER	4	DUAL	+ Edge, Clr-Asynch
4539	MUX	4	DUAL	STROBED
4552	RAM	4X64		
4560	BCD ADDER	4		
4584	INVERTER		HEX	SCHMITT
4585	MAGNITUDE COMPARATOR	4		

RESISTOR VALUES AVAILABLE

10	15	22	33	47	56	68	82
100	150	220	330	470	560	680	820
1K	1K5	2K2	3K3	4K7	5K6	6K8	8K2
10K	15K	22K	33K	47K	56K	68K	82K
100K	150K	220K	330K	470K	560K	680K	820K

MEMORY SELECTION GUIDE		
2114	STATIC RAM	1 KILO NIBBLE
6116	STATIC RAM	2 KILO BYTE
2716	EPROM	2 KILO BYTE
2732	EPROM	4 KILO BYTE
6264	STATIC RAM	8 KILO BYTE
2764	EPROM	8 KILO BYTE
27128	EPROM	16 KILO BYTE