

- This catalog provides a summary of the semiconductor devices available from SANYO's Semiconductor Division as of July, 1992.
- \* indicates new products and †, those which are under development.
- Products are classified by application, and listed by device number, package type and/or arranged in order of one of the main characteristics.
- All electrical characteristics are typical values unless stated otherwise. Please refer to the relevant data sheet for further information.



## Gate Arrays (monolithic ICs)

Device	Gates*	Input/output cells	Delay time† (ns)	Supply voltage range (V)	Features
LC9111A	1,190	70	1.7	3.0 to 5.5	Powerful CAD support system using an advanced engineering workstation for all design operations, from schematic capture through circuit verification Full support for standard logic—more than 100 logic cell and 200 macro equivalents for 74-series TTL and 4000/4500 series CMOS logic Over 30 input/output cell types, including Schmitt trigger inputs for oscillators, analog switches and others Megacells Pin-compatible with Sanyo standard cells LC92000B series for large input currents (I <sub>OL</sub> = 24 mA at V <sub>OL</sub> = 0.4 V max) Flexible customer-manufacturer interface. Orders are accepted at any stage from schematic through electronic data. Convenient design house and design center locations Support for Mentor/Dash interface
LC9116A	1,692	84	1.7	3.0 to 5.5	
LC9123A	2,394	96	1.7	3.0 to 5.5	
LC9130A	3,013	112	1.7	3.0 to 5.5	
LC9140A	4,082	128	1.7	3.0 to 5.5	
LC9153A	5,365	152	1.7	3.0 to 5.5	
LC9103B	340	32	1.7	3.0 to 5.5	
LC9105B	588	44	1.7	3.0 to 5.5	
LC9108B	858	52	1.7	3.0 to 5.5	
LC92032A	3,216	96	1.2	3.0 to 5.5	
LC92041A	4,185	108	1.2	3.0 to 5.5	
LC92060A	6,016	130	1.2	3.0 to 5.5	
LC92080A	8,028	152	1.2	3.0 to 5.5	
LC92100A	10,023	176	1.2	3.0 to 5.5	
LC92160A	16,366	218	1.2	3.0 to 5.5	
LC92200A	20,350	239	1.2	3.0 to 5.5	
LC92007B	708	62	1.2	3.0 to 5.5	
LC92011B	1,110	82	1.2	3.0 to 5.5	
LC92018B	1,881	108	1.2	3.0 to 5.5	
LC92030C	3,098	130	1.2	3.0 to 5.5	
LC92040C	4,080	152	1.2	3.0 to 5.5	
LC92050C	5,096	176	1.2	3.0 to 5.5	
LC93013A*	1,300	48	0.9	3.0 to 5.5	
LC93019A*	1,900	56	0.9	3.0 to 5.5	
LC93028A*	2,800	68	0.9	3.0 to 5.5	
LC93043A*	4,300	86	0.9	3.0 to 5.5	
LC93057A*	5,700	100	0.9	3.0 to 5.5	
LC93080A*	8,000	120	0.9	3.0 to 5.5	
LC93110A*	11,000	144	0.9	3.0 to 5.5	
LC93150A*	15,000	166	0.9	3.0 to 5.5	
LC93220A*	22,000	208	0.9	3.0 to 5.5	
LC93260A*	26,000	228	0.9	3.0 to 5.5	
LC93300A*	30,000	252	0.9	3.0 to 5.5	

\* 2-input NAND  
† 2-input NAND, fanout = 2, AI = 2 mm (typ)  
Note: Refer to the gate array catalog for package dimensions.

## Standard Cells (monolithic ICs)

Device	Gates*	Input/output pins (max)	Delay time† (ns)	Supply voltage range (V)	Features
LC9600 series	1,000 to 10,000	180	1.7	3.0 to 5.5	High integration and low power consumption. Design and development flow compatible with Sanyo gate array series. On-chip RAM, ROM, A/D and D/A converters, high-current drivers, megacells On-chip pull-ups/pull-downs, building-block architecture
LC97000 series	1,000 to 30,000	239	1.2	3.0 to 5.5	
LC98000 series*	1,000 to 45,000	252	0.9	3.0 to 5.5	

\* 2-input NAND  
† 2-input NAND, fanout = 2, AI = 2 mm (typ)  
Note: Refer to the gate array catalog for package dimensions.