



FIFO BUFFER MEMORY/IC MEMORY CARD

★ Under development

■ FIFO BUFFER MEMORIES

◆ Features

- It is applicable to communication and OA equipment, as a data buffer between systems operating at different speeds.

Capacity	Bit configuration (Words × bits)	Model No.	Access time MAX. (ns)	Cycle time MIN. (ns)	Operating frequency MAX. (MHz)	Supply current MAX.		Supply voltage (V)	Package
						Operating (mA)	Standby (mA)		
0.5k	× 8	LH5481D/U-25/35	—	—	25/35	45	—	4.5 to 5.5	28SK-DIP/28QFJ
	× 9	LH5491D/U-25/35	—	—	25/35	45	—	4.5 to 5.5	28SK-DIP/28QFJ
4.5k	× 9	LH5496D/U-20/35/50	20/35/50	30/45/65	—	100	5	4.5 to 5.5	28DIP/28SK-DIP/32QFJ
9k	× 9	LH540202D/U-15/20/25/35	15/20/25/35	25/30/35/45	—	100	5	4.5 to 5.5	28SK-DIP/32QFJ
	× 18	LH540215U-20/25/35	12/15/20	20/25/35	—	190	1	4.5 to 5.5	68QFJ
18k	× 9	LH540203D/U-15/20/25/35	15/20/25/35	25/30/35/45	—	100	5	4.5 to 5.5	28SK-DIP/32QFJ
	× 18	LH540225U-20/25/35	12/15/20	20/25/35	—	190	1	4.5 to 5.5	68QFJ
	256 × 36 × 2	LH543601P-20/25/30/35	12.8/16/20/25	20/25/30/35	—	280	0.1	4.5 to 5.5	132QFP
36k	× 9	LH540204D/U-20/25/35	20/25/35	30/35/45	—	110	8	4.5 to 5.5	28SK-DIP/32QFJ
	× 18	LH540235M/U*20/25/35	12/15/20	20/25/35	—	245	1	4.5 to 5.5	64TQFP ¹⁾ /68QFJ [★]
	× 36	LH543620P-20/25/30	14/16/18	20/25/30	—	380	1	4.5 to 5.5	132QFP
	512 × 36 × 2	LH543611MP-18/20/25/30/35	13/13.8/16/20/25	18/20/25/30/35	—	280	1	4.5 to 5.5	144TQFP ²⁾ /132QFJ
72k	× 9	LH540205D-20/25/35	20/25/35	30/35/45	—	110	8	4.5 to 5.5	28SK-DIP
	× 18	LH540245M/U*20/25/35	12/15/20	20/25/35	—	245	1	4.5 to 5.5	64TQFP ¹⁾ /68QFJ [★]
	1k × 36 × 2	LH543621MP-18/20/25/30/35	13/13.8/16/20/25	18/20/25/30/35	—	280	1	4.5 to 5.5	144TQFP ²⁾ /132QFJ

¹⁾ 1.4 mm thickness

²⁾ 1.6 mm thickness

QFJ=PLCC

■ IC MEMORY CARDS (ID2 series conforming to PCMCIA/JEIDA)

Type	Memory capacity (byte)	Bit configuration	Model No.	Access time (ns) MAX.	Supply voltage	Read current (mA) MAX.	Standby current (mA) MAX.				
Flash memory	2 M	x8/x16	ID244Dxx	200	Vcc = 5 V, Vpp = 5 V Vcc = 5 V, Vpp = 12 V	80	2				
	4 M		ID244Exx								
	8 M		ID244Gxx								
	10 M		ID244Hxx								
	16 M		ID244Kxx								
	1 M	x8/x16	★ID242Cxx	150 (at Vcc = 5 V)	Smart voltage Vcc=3.3 V, Vpp=3.3 V/ Vcc=3.3 V, Vpp=5 V/ Vcc=3.3 V, Vpp=12 V/ Vcc=5 V, Vpp=5 V/ Vcc=5 V, Vpp=12 V/	130	2				
	2 M		ID242Dxx								
	4 M		ID242Exx								
	8 M		ID242Gxx								
	10 M		★ID242Mxx								
	16 M		★ID242Kxx								
	20 M		★ID242Lxx								
	16 M		★ID241Kxx					150	Vcc = 4.75 to 5.25 V	130	2
	20 M		★ID241Lxx								
	32 M		★ID241Pxx								
40 M	★ID241Rxx										
48 M	★ID241Sxx										
Mask ROM	256 k	Fix to x8 or x16 as user option	ID222xx	130	Vcc = 4.5 to 5.5 V	60	0.05				
	512 k		ID223xx			65					
	1 M		ID224xx			70					
	2 M		ID226xx	150		75	0.05				
	4 M		ID227xx			75					
	8 M		ID229xx			90					
	16 M		ID22Dxx			100	0.08				
	32 M		ID22Fxx								
	64 M		ID22Hxx					200	0.2		

Memories