



### REVISION HISTORY

<u>Revision</u>	<u>Description</u>	<u>Issue Date</u>
Rev. 1.0	Initial Issue	Jul.25.2004
Rev. 1.1	Revised sym. b of 32 pin 450mil SOP package outline dimension in page 8	Jan.17.2007
Rev. 1.2	Added SL(C-grade) Spec.	Jun.14.2007
Rev. 1.3	Revised $I_{SB}/I_{DR(MAX.)}$ Added SL(E/I-grade) Spec. Deleted L Spec.	Aug.20.2008
Rev. 1.4	Revised $I_{SB1}/I_{DR(MAX.)}$ Added $I_{SB1}/I_{DR}$ values when $T_A = 25^\circ C$ and $T_A = 40^\circ C$ Revised <b>FEATURES &amp; ORDERING INFORMATION</b> <b>Lead free and green package available</b> to <b>Green package available</b> Added packing type in <b>ORDERING INFORMATION</b> Deleted $T_{SOLDER}$ in <b>ABSOLUTE MAXIMUM RATINGS</b>	Mar.30.2009
Rev. 1.5	Revised $V_{DR}$	Sep.11.2009
Rev. 1.6	Revised <b>PACKAGE OUTLINE DIMENSION</b> in page 10/11/12/13	May.7.2010
Rev. 1.7	Revised <b>ORDERING INFORMATION</b> in page 14	Aug.31.2010
Rev. 1.8	Revised $V_{IL(max)}$ from 0.6V to 0.8V	May. 8.2014
Rev. 1.9	Correct <b>ORDERING INFORMATION</b> Typo.	May.20.2016
Rev. 1.10	Deleted <b>WRITE CYCLE</b> Notes : 1. WE#, CE# must be high or CE2 must be low during all address transitions in page 7	Jun.28.2016
Rev. 1.11	Revised <b>ORDERING INFORMATION</b> in page 14 32 Pin(450mil) SOP Packing Type : Tube→Tray	Aug.24.2023

### FEATURES

- Fast access time : 35/55/70ns
- Low power consumption:  
Operating current : 24/17/15mA (TYP.)  
Standby current : 2 $\mu$ A@5V(TYP.) LL/SL version  
0.8 $\mu$ A@3V(TYP.) SL version
- Single 5V power supply
- All inputs and outputs TTL compatible
- Fully static operation
- Tri-state output
- Data retention voltage : 1.5V (MIN.)
- **Green package available**
- Package : 32-pin 450 mil SOP  
32-pin 600 mil PDIP  
32-pin 8mm x 20mm TSOP I  
32-pin 8mm x 13.4mm sTSOP  
36-ball 6mm x 8mm TFBGA

### GENERAL DESCRIPTION

The LY621024 is a 1,048,576-bit low power CMOS static random access memory organized as 131,072 words by 8 bits. It is fabricated using very high performance, high reliability CMOS technology. Its standby current is stable within the range of operating temperature.

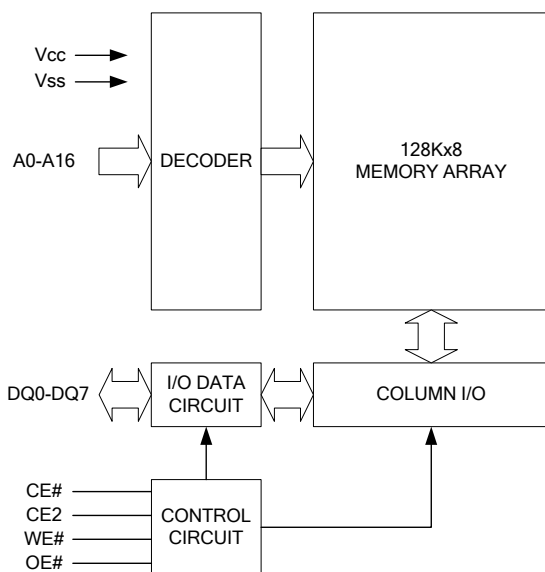
The LY621024 is well designed for very low power system applications, and particularly well suited for battery back-up nonvolatile memory application.

The LY621024 operates from a single power supply of 5V and all inputs and outputs are fully TTL compatible

### PRODUCT FAMILY

Product Family	Operating Temperature	Vcc Range	Speed	Power Dissipation		
				Standby(I <sub>SB1</sub> , TYP.)	Operating(I <sub>CC</sub> , TYP.)	
LY621024(LL)	0 ~ 70°C	4.5 ~ 5.5V	35/55/70ns	-	2 $\mu$ A@5V	24/17/15mA
LY621024(LLE)	-20 ~ 80°C	4.5 ~ 5.5V	35/55/70ns	-	2 $\mu$ A@5V	24/17/15mA
LY621024(LLI)	-40 ~ 85°C	4.5 ~ 5.5V	35/55/70ns	-	2 $\mu$ A@5V	24/17/15mA
LY621024(SL)	0 ~ 70°C	4.5 ~ 5.5V	35/55/70ns	0.8 $\mu$ A@3V	2 $\mu$ A@5V	24/17/15mA
LY621024(SLE)	-20 ~ 80°C	4.5 ~ 5.5V	35/55/70ns	0.8 $\mu$ A@3V	2 $\mu$ A@5V	24/17/15mA
LY621024(SLI)	-40 ~ 85°C	4.5 ~ 5.5V	35/55/70ns	0.8 $\mu$ A@3V	2 $\mu$ A@5V	24/17/15mA

### FUNCTIONAL BLOCK DIAGRAM



### PIN DESCRIPTION

SYMBOL	DESCRIPTION
A0 - A16	Address Inputs
DQ0 - DQ7	Data Inputs/Outputs
CE#, CE2	Chip Enable Inputs
WE#	Write Enable Input
OE#	Output Enable Input
Vcc	Power Supply
Vss	Ground
NC	No Connection

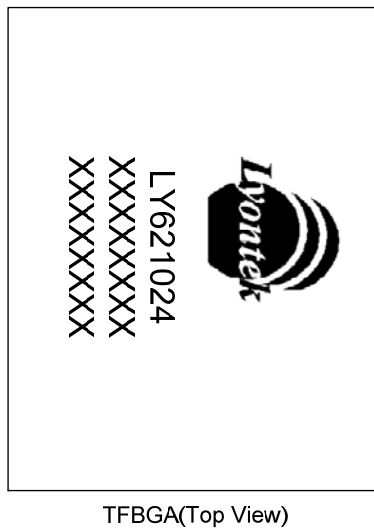
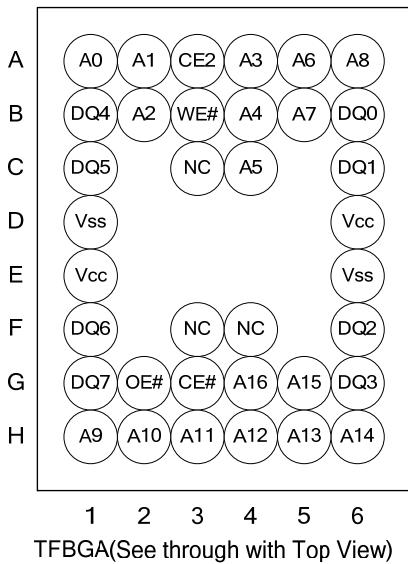
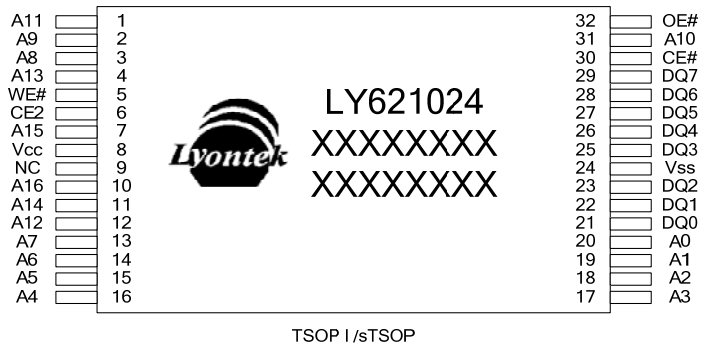
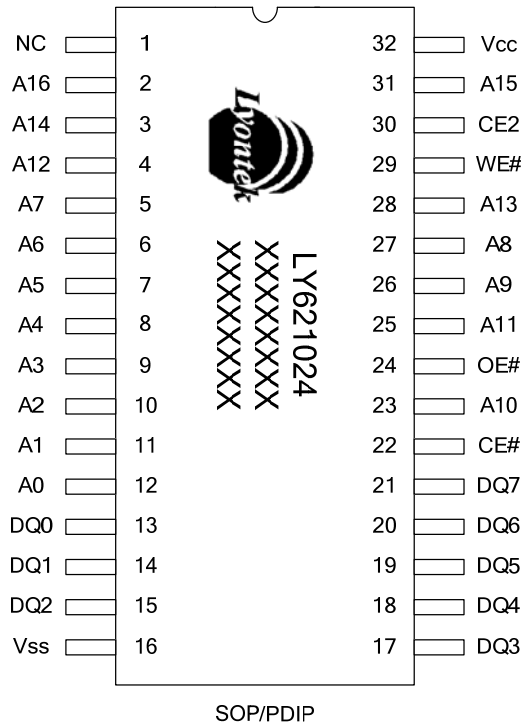
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### PIN CONFIGURATION





### ABSOLUTE MAXIMUM RATINGS\*

PARAMETER	SYMBOL	RATING	UNIT
Voltage on Vcc relative to Vss	V <sub>T1</sub>	-0.5 to 6.5	V
Voltage on any other pin relative to Vss	V <sub>T2</sub>	-0.5 to V <sub>cc</sub> +0.5	V
Operating Temperature	T <sub>A</sub>	0 to 70(C grade)	°C
		-20 to 80(E grade)	
		-40 to 85(I grade)	
Storage Temperature	T <sub>STG</sub>	-65 to 150	°C
Power Dissipation	P <sub>D</sub>	1	W
DC Output Current	I <sub>OUT</sub>	50	mA

\*Stresses greater than those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. This is a stress rating only and functional operation of the device or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to the absolute maximum rating conditions for extended period may affect device reliability.

### TRUTH TABLE

MODE	CE#	CE2	OE#	WE#	I/O OPERATION	SUPPLY CURRENT
Standby	H	X	X	X	High-Z	I <sub>SB1</sub>
	X	L	X	X	High-Z	I <sub>SB1</sub>
Output Disable	L	H	H	H	High-Z	I <sub>cc</sub> , I <sub>cc1</sub>
Read	L	H	L	H	D <sub>OUT</sub>	I <sub>cc</sub> , I <sub>cc1</sub>
Write	L	H	X	L	D <sub>IN</sub>	I <sub>cc</sub> , I <sub>cc1</sub>

Note: H = V<sub>IH</sub>, L = V<sub>IL</sub>, X = Don't care.



### DC ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.*4	MAX.	UNIT		
Supply Voltage	V <sub>CC</sub>		4.5	5.0	5.5	V		
Input High Voltage	V <sub>IH</sub> *1		2.4	-	V <sub>CC</sub> +0.3	V		
Input Low Voltage	V <sub>IL</sub> *2		- 0.2	-	0.8	V		
Input Leakage Current	I <sub>LI</sub>	V <sub>CC</sub> ≥ V <sub>IN</sub> ≥ V <sub>SS</sub>	- 1	-	1	μA		
Output Leakage Current	I <sub>LO</sub>	V <sub>CC</sub> ≥ V <sub>OUT</sub> ≥ V <sub>SS</sub> , Output Disabled	- 1	-	1	μA		
Output High Voltage	V <sub>OH</sub>	I <sub>OH</sub> = -1mA	2.4	-	-	V		
Output Low Voltage	V <sub>OL</sub>	I <sub>OL</sub> = 2mA	-	-	0.4	V		
Average Operating Power supply Current	I <sub>CC</sub>	Cycle time = Min. CE# = V <sub>IL</sub> and CE2 = V <sub>IH</sub> , I <sub>I/O</sub> = 0mA Other pins at V <sub>IL</sub> or V <sub>IH</sub>	- 35	-	24	80	mA	
			- 55	-	17	60	mA	
			- 70	-	15	50	mA	
	I <sub>CC1</sub>	Cycle time = 1μs CE# = 0.2V and CE2 ≥ V <sub>CC</sub> -0.2V, I <sub>I/O</sub> = 0mA Other pins at 0.2V or V <sub>CC</sub> - 0.2V	-	2	10	mA		
Standby Power Supply Current	I <sub>SB1</sub>	CE# ≥ V <sub>CC</sub> -0.2V or CE2 ≤ 0.2V Others at 0.2V or V <sub>CC</sub> - 0.2V	LL	-	2	15	μA	
			LLE/LLI	-	2	30	μA	
			SL*5	25°C	-	0.8	2	μA
			SLE*5	40°C	-	1	2	μA
			SLI*5		-	2	7	μA
			SLE/SLI	-	2	10	μA	

**Notes:**

- V<sub>IH</sub>(max) = V<sub>CC</sub> + 3.0V for pulse width less than 10ns.
- V<sub>IL</sub>(min) = V<sub>SS</sub> - 3.0V for pulse width less than 10ns.
- Over/Undershoot specifications are characterized, not 100% tested.
- Typical values are included for reference only and are not guaranteed or tested.  
Typical values are measured at V<sub>CC</sub> = V<sub>CC</sub>(TYP.) and T<sub>A</sub> = 25°C
- This parameter is measured at V<sub>CC</sub> = 3.0V



### CAPACITANCE (TA = 25°C, f = 1.0MHz)

PARAMETER	SYMBOL	MIN.	MAX	UNIT
Input Capacitance	C <sub>IN</sub>	-	6	pF
Input/Output Capacitance	C <sub>I/O</sub>	-	8	pF

Note : These parameters are guaranteed by device characterization, but not production tested.

### AC TEST CONDITIONS

Input Pulse Levels	0.2V to V <sub>CC</sub> - 0.2V
Input Rise and Fall Times	3ns
Input and Output Timing Reference Levels	1.5V
Output Load	C <sub>L</sub> = 50pF + 1TTL, I <sub>OH</sub> /I <sub>OL</sub> = -1mA/2mA

### AC ELECTRICAL CHARACTERISTICS

#### (1) READ CYCLE

PARAMETER	SYM.	LY621024-35		LY621024-55		LY621024-70		UNIT
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Read Cycle Time	t <sub>RC</sub>	35	-	55	-	70	-	ns
Address Access Time	t <sub>AA</sub>	-	35	-	55	-	70	ns
Chip Enable Access Time	t <sub>ACE</sub>	-	35	-	55	-	70	ns
Output Enable Access Time	t <sub>OE</sub>	-	25	-	30	-	35	ns
Chip Enable to Output in Low-Z	t <sub>CLZ</sub> *	10	-	10	-	10	-	ns
Output Enable to Output in Low-Z	t <sub>OLZ</sub> *	5	-	5	-	5	-	ns
Chip Disable to Output in High-Z	t <sub>CHZ</sub> *	-	15	-	20	-	25	ns
Output Disable to Output in High-Z	t <sub>OHZ</sub> *	-	15	-	20	-	25	ns
Output Hold from Address Change	t <sub>OH</sub>	10	-	10	-	10	-	ns

#### (2) WRITE CYCLE

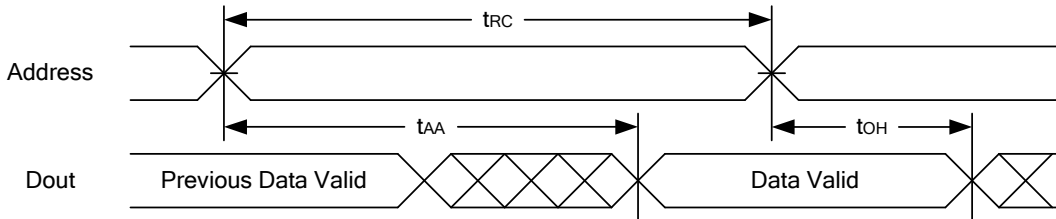
PARAMETER	SYM.	LY621024-35		LY621024-55		LY621024-70		UNIT
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Write Cycle Time	t <sub>WC</sub>	35	-	55	-	70	-	ns
Address Valid to End of Write	t <sub>AW</sub>	30	-	50	-	60	-	ns
Chip Enable to End of Write	t <sub>CW</sub>	30	-	50	-	60	-	ns
Address Set-up Time	t <sub>AS</sub>	0	-	0	-	0	-	ns
Write Pulse Width	t <sub>WP</sub>	25	-	45	-	55	-	ns
Write Recovery Time	t <sub>WR</sub>	0	-	0	-	0	-	ns
Data to Write Time Overlap	t <sub>DW</sub>	20	-	25	-	30	-	ns
Data Hold from End of Write Time	t <sub>DH</sub>	0	-	0	-	0	-	ns
Output Active from End of Write	t <sub>OW</sub> *	5	-	5	-	5	-	ns
Write to Output in High-Z	t <sub>WHZ</sub> *	-	15	-	20	-	25	ns

\*These parameters are guaranteed by device characterization, but not production tested.

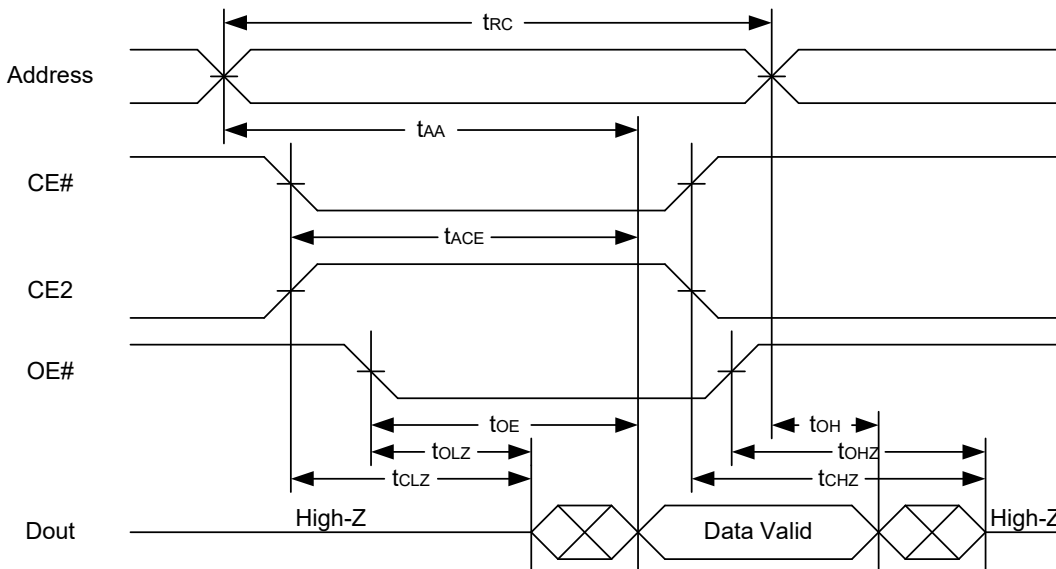


### TIMING WAVEFORMS

#### READ CYCLE 1 (Address Controlled) (1,2)



#### READ CYCLE 2 (CE# and CE2 and OE# Controlled) (1,3,4,5)

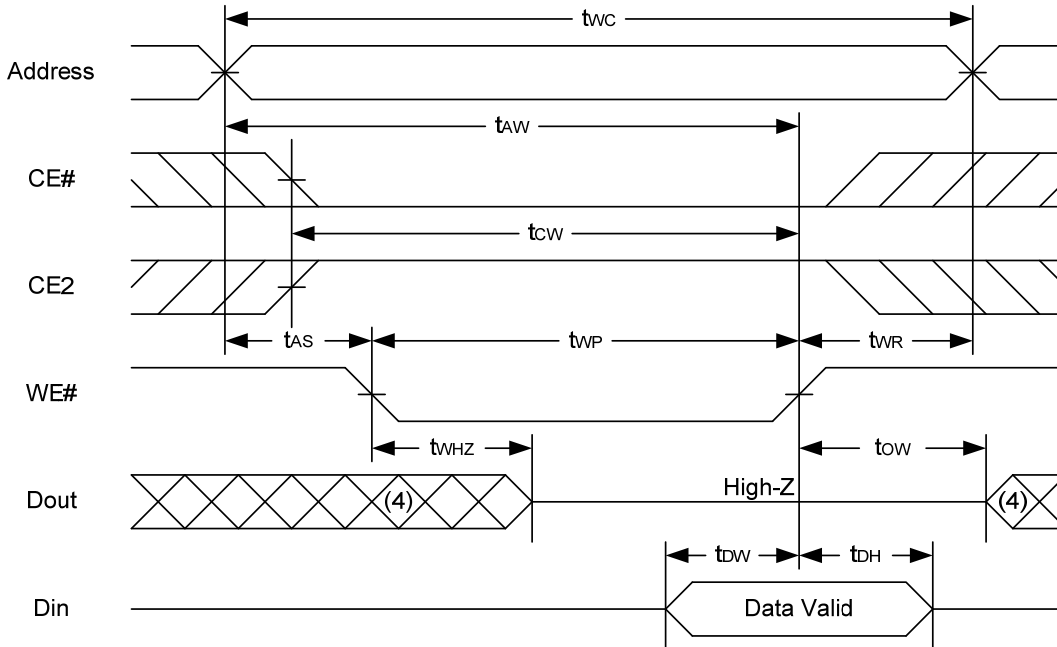


Notes :

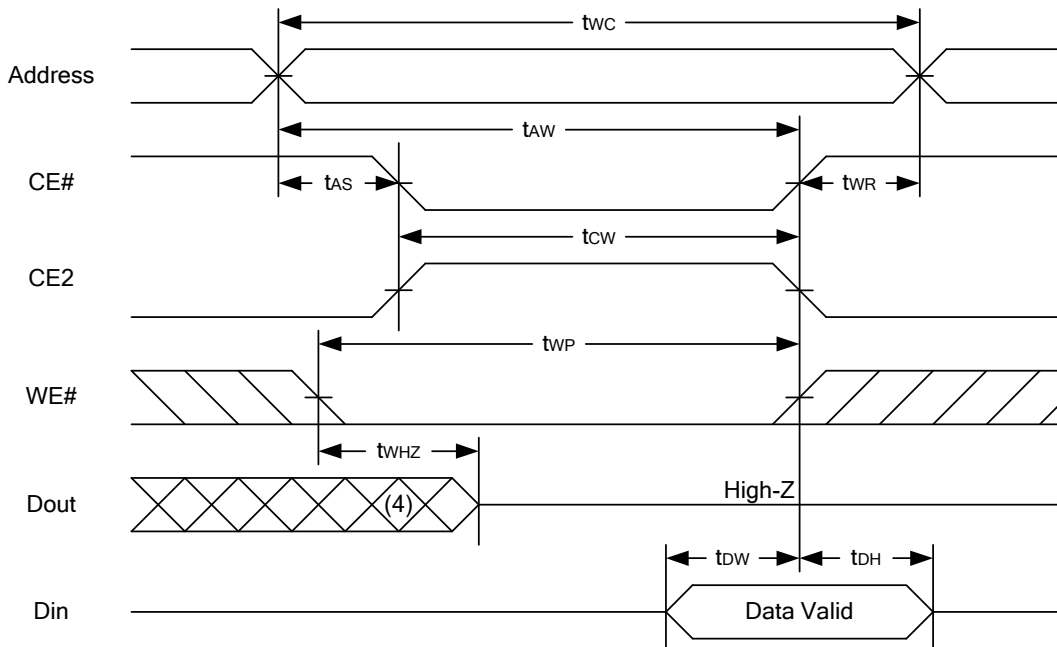
1. WE# is high for read cycle.
2. Device is continuously selected OE# = low, CE# = low, CE2 = high.
3. Address must be valid prior to or coincident with CE# = low, CE2 = high; otherwise  $t_{AA}$  is the limiting parameter.
4.  $t_{CLZ}$ ,  $t_{OLZ}$ ,  $t_{CHZ}$  and  $t_{OH}$  are specified with  $C_L = 5pF$ . Transition is measured  $\pm 500mV$  from steady state.
5. At any given temperature and voltage condition,  $t_{CHZ}$  is less than  $t_{CLZ}$ ,  $t_{OH}$  is less than  $t_{OLZ}$ .



#### WRITE CYCLE 1 (WE# Controlled) (1,2,4,5)



#### WRITE CYCLE 2 (CE# and CE2 Controlled) (1,4,5)



Notes :

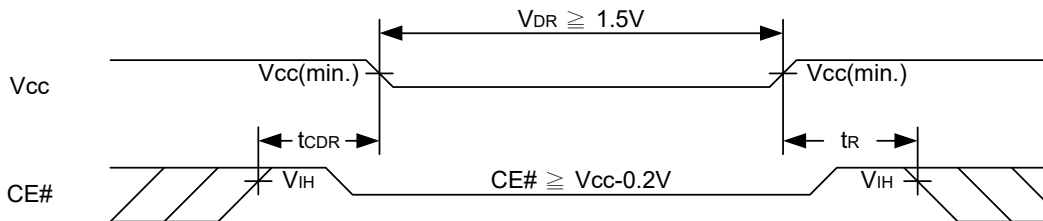
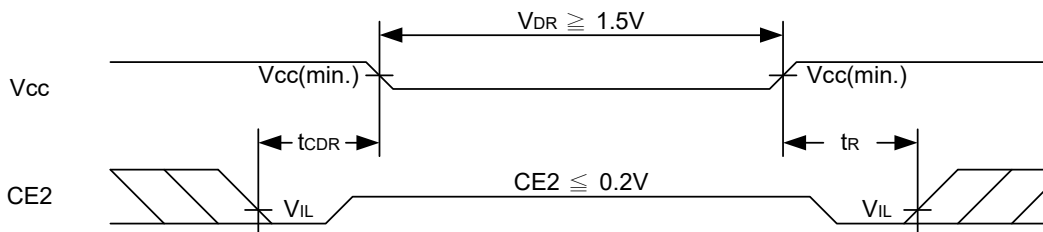
1. A write occurs during the overlap of a low CE#, high CE2, low WE#.
2. During a WE#-controlled write cycle with OE# low, twp must be greater than twhz + tdw to allow the drivers to turn off and data to be placed on the bus.
3. During this period, I/O pins are in the output state, and input signals must not be applied.
4. If the CE# low transition and CE2 high transition occurs simultaneously with or after WE# low transition, the outputs remain in a high impedance state.
5. tow and twhz are specified with CL = 5pF. Transition is measured ±500mV from steady state.



**DATA RETENTION CHARACTERISTICS**

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
V <sub>CC</sub> for Data Retention	V <sub>DR</sub>	CE# ≥ V <sub>CC</sub> - 0.2V or CE2 ≤ 0.2V	1.5	-	5.5	V	
Data Retention Current	I <sub>DR</sub>	V <sub>CC</sub> = 1.5V CE# ≥ V <sub>CC</sub> - 0.2V or CE2 ≤ 0.2V Other pins at 0.2V or V <sub>CC</sub> -0.2V	LL	-	0.5	12	μA
			LLE/LLI	-	0.5	30	μA
			SL 25°C	-	0.4	2	μA
			SLE 40°C	-	0.5	2	μA
			SLI	-	0.4	5	μA
			SLE/SLI	-	0.4	8	μA
Chip Disable to Data Retention Time	t <sub>CDR</sub>	See Data Retention Waveforms (below)	0	-	-	ns	
Recovery Time	t <sub>R</sub>		t <sub>RC</sub> *	-	-	ns	

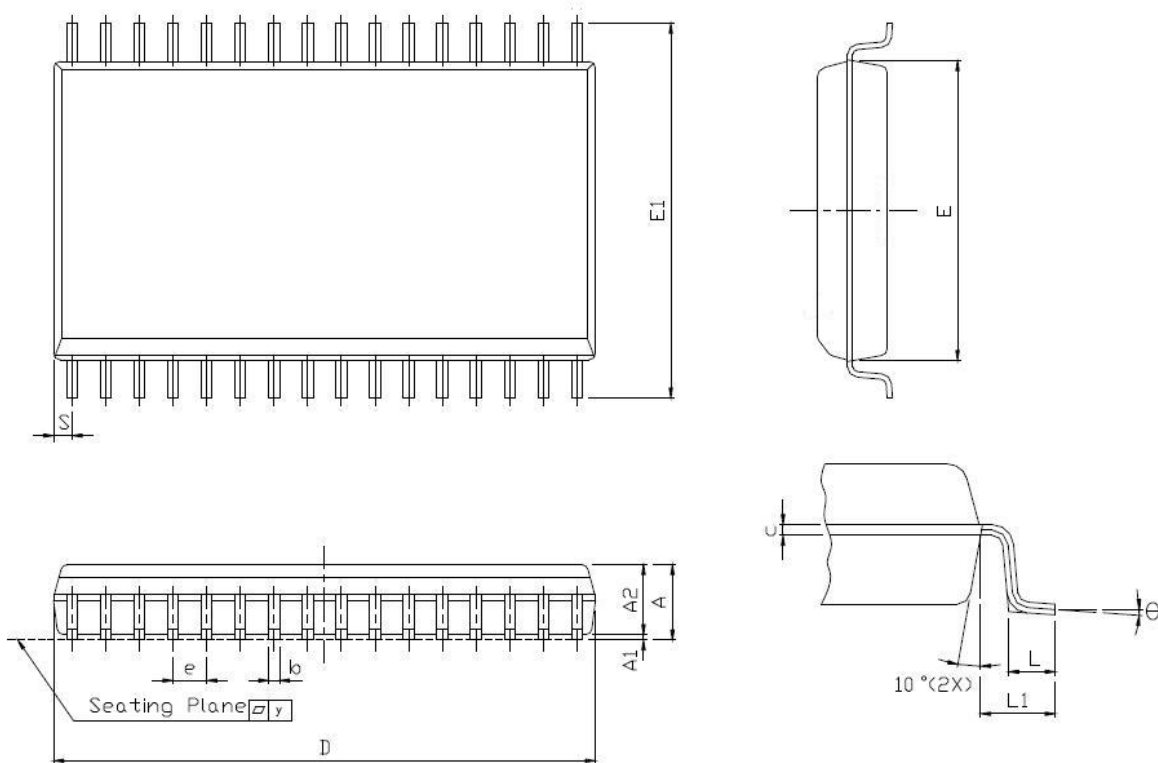
 t<sub>RC</sub>\* = Read Cycle Time

**DATA RETENTION WAVEFORM**
**Low V<sub>CC</sub> Data Retention Waveform (1) (CE# controlled)**

**Low V<sub>CC</sub> Data Retention Waveform (2) (CE2 controlled)**




**PACKAGE OUTLINE DIMENSION**

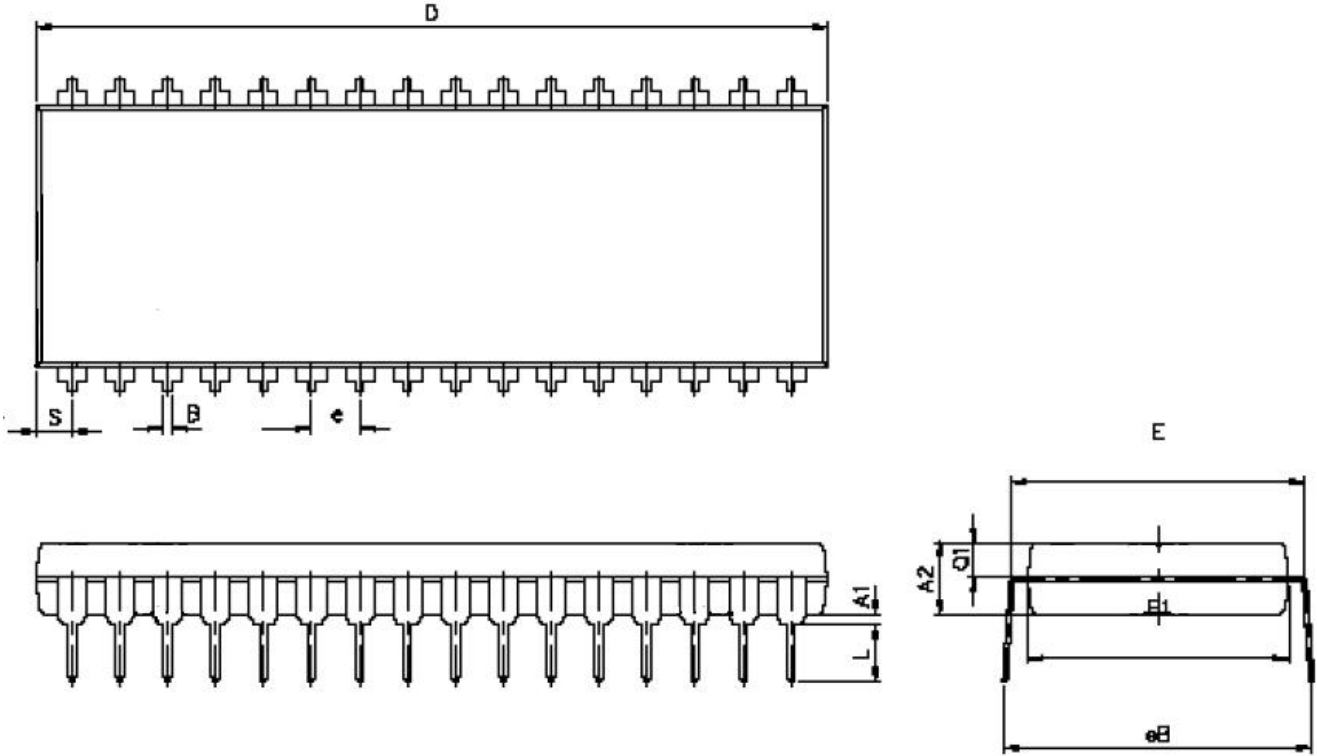
**32 pin 450 mil SOP Package Outline Dimension**



SYM.	UNIT	
	INCH.(BASE)	MM(REF)
A	0.118 (MAX)	2.997 (MAX)
A1	0.004(MIN)	0.102(MIN)
A2	0.111(MAX)	2.82(MAX)
b	0.016 +0.004 -0.002	0.406 +0.102 -0.051
c	0.008(TYP)	0.203(TYP)
D	0.817(MAX)	20.75(MAX)
E	0.445 ±0.005	11.303 ±0.127
E1	0.555 ±0.012	14.097 ±0.305
e	0.050(TYP)	1.270(TYP)
L	0.0347 ±0.008	0.881 ±0.203
L1	0.055 ±0.008	1.397 ±0.203
S	0.026(MAX)	0.660 (MAX)
y	0.004(MAX)	0.101(MAX)
$\theta$	0° -10°	0° -10°



### 32 pin 600 mil PDIP Package Outline Dimension

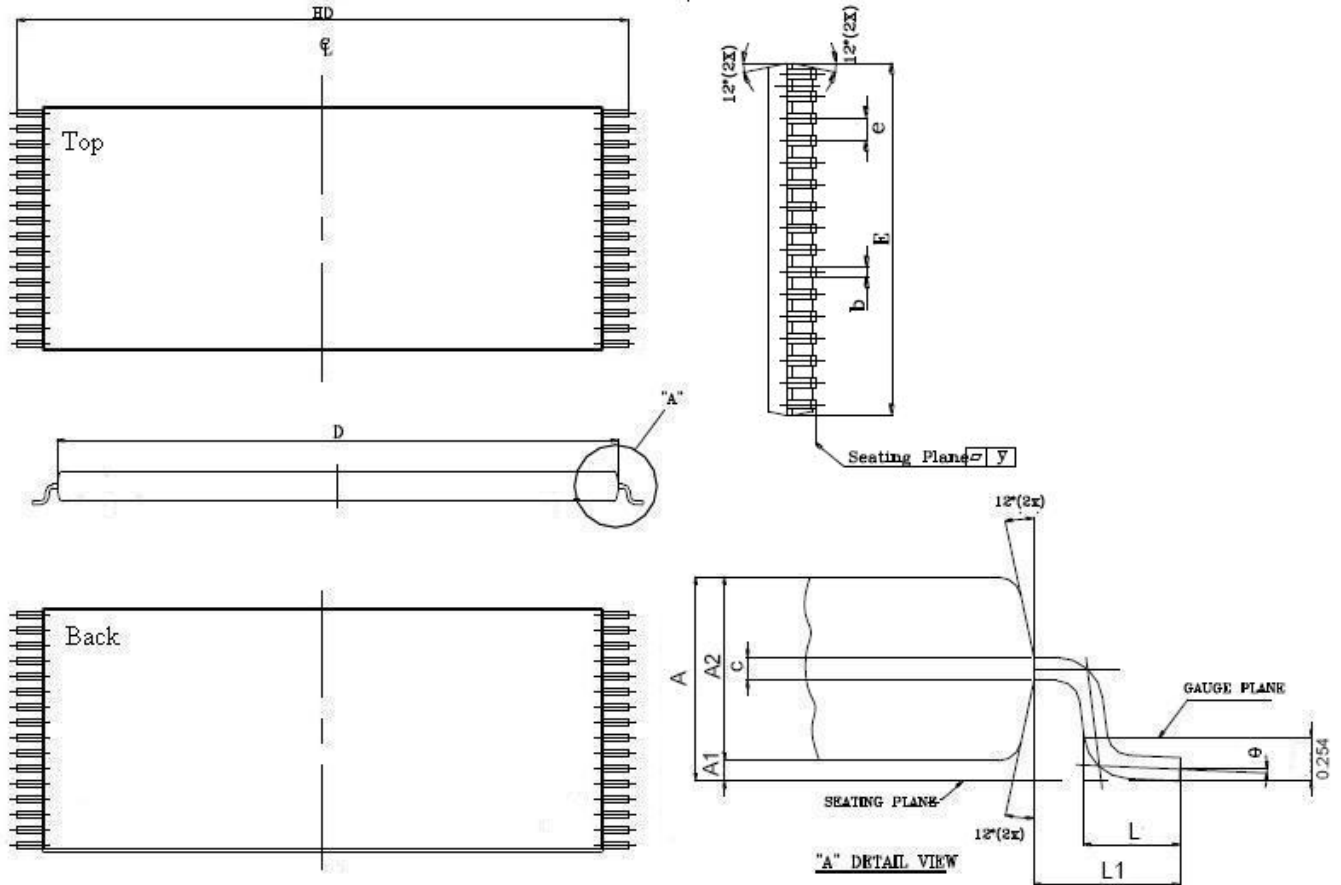


SYM.	UNIT	INCH(BASE)	MM(REF)
A1		0.015(MIN)	0.381(MIN)
A2		0.155±0.005	3.937±0.127
B		0.018±0.005	0.457±0.127
D		1.650±0.01	41.910±0.254
E		0.600±0.010	15.240±0.254
E1		0.545±0.005	13.843±0.127
e		0.100(TYP)	2.540(TYP)
eB		0.650±0.020	16.510±0.508.
L		0.158±0.043	4.013±1.092
S		0.075±0.010	1.905±0.254
Q1		0.070±0.005	1.778±0.127

Note : D/E1/S dimension do not include mold flash.



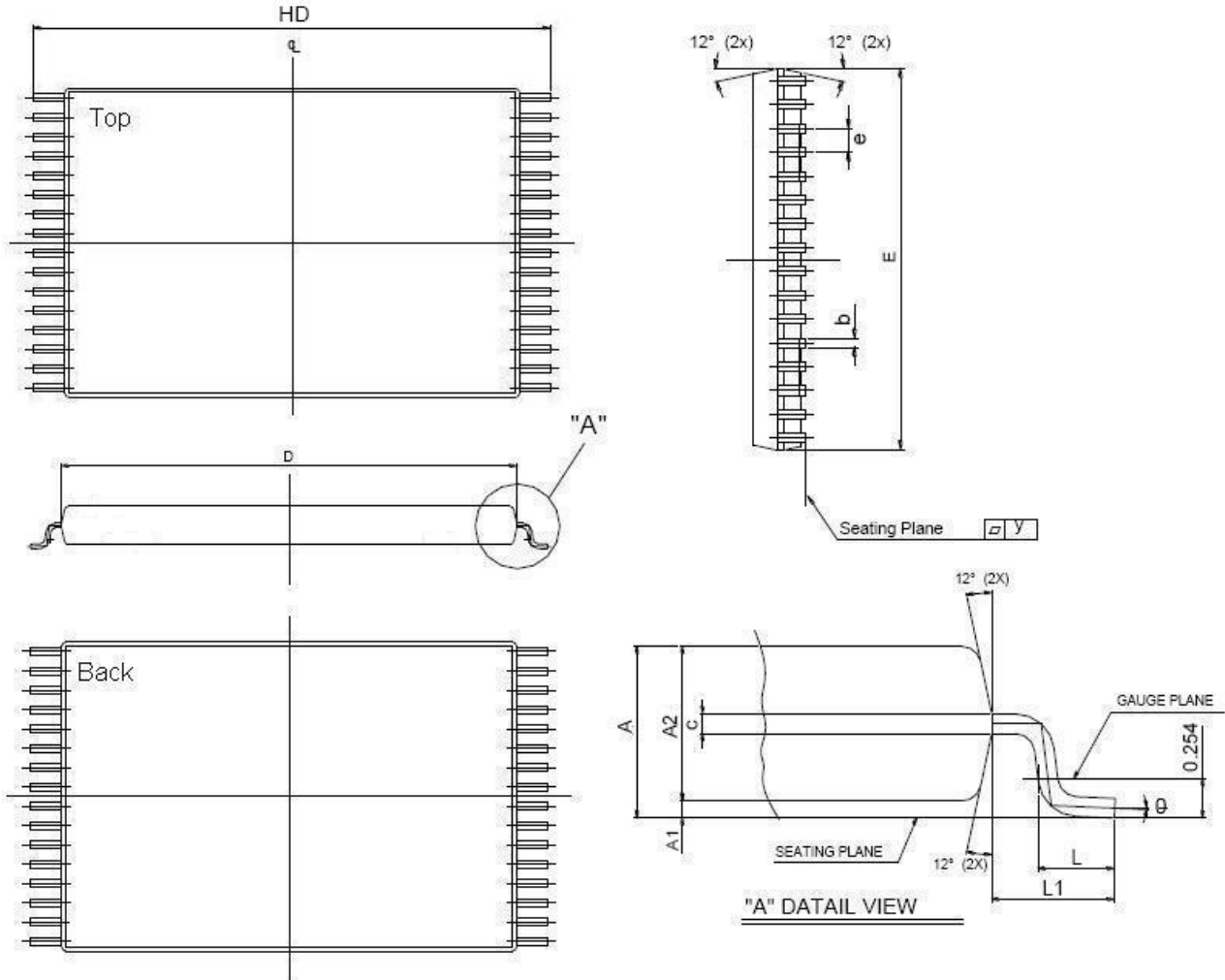
**32 pin 8mm x 20mm TSOP I Package Outline Dimension**



SYM.	UNIT	INCH(BASE)	MM(REF)
A		0.047 (MAX)	1.20 (MAX)
A1		0.004 $\pm$ 0.002	0.10 $\pm$ 0.05
A2		0.039 $\pm$ 0.002	1.00 $\pm$ 0.05
b		0.009 $\pm$ 0.002	0.22 $\pm$ 0.05
c		0.006 $\pm$ 0.002	0.155 $\pm$ 0.055
D		0.724 $\pm$ 0.008	18.40 $\pm$ 0.20
E		0.315 $\pm$ 0.008	8.00 $\pm$ 0.20
e		0.020 (TYP)	0.50 (TYP)
HD		0.787 $\pm$ 0.008	20.00 $\pm$ 0.20
L		0.024 $\pm$ 0.004	0.60 $\pm$ 0.10
L1		0.0315 $\pm$ 0.004	0.08 $\pm$ 0.10
y		0.003 (MAX)	0.08 (MAX)
$\Theta$		0°~5°	0°~5°

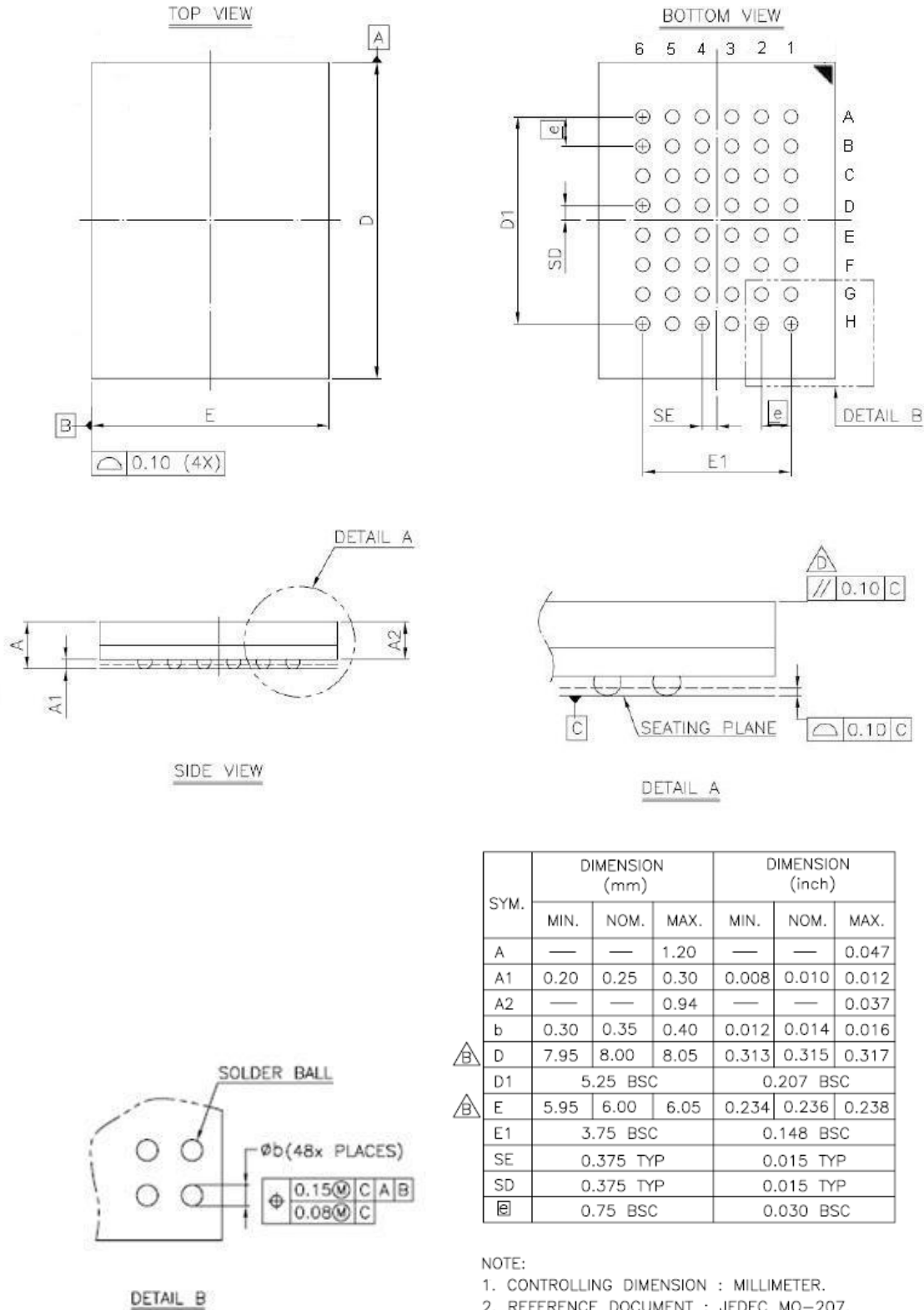


**32 pin 8mm x 13.4mm sTSOP Package Outline Dimension**



SYM.	UNIT	INCH(BASE)	MM(REF)
A		0.049 (MAX)	1.25 (MAX)
A1		0.004 ±0.002	0.10 ±0.05
A2		0.039 ±0.002	1.00 ±0.05
b		0.009 ±0.002	0.22 ±0.05
c		0.006 ±0.002	0.155 ±0.055
D		0.465 ±0.008	11.80 ±0.20
E		0.315 ±0.008	8.00 ±0.20
e		0.020 (TYP)	0.50 (TYP)
HD		0.528±0.008	13.40 ±0.20.
L		0.02 ±0.008	0.50 ±0.20
L1		0.031 ±0.005	0.8 ±0.125
y		0.003 (MAX)	0.076 (MAX)
∅		0°~5°	0°~5°

#### 36 ball 6mm × 8mm TFBGA Package Outline Dimension



NOTE:

1. CONTROLLING DIMENSION : MILLIMETER.
2. REFERENCE DOCUMENT : JEDEC MO-207.



### ORDERING INFORMATION

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32 Pin(450mil) SOP	35	Special Ultra Low Power	0°C~70°C	Tray	LY621024SL-35SL
				Tape Reel	LY621024SL-35SLT
			-20°C~80°C	Tray	LY621024SL-35SLE
				Tape Reel	LY621024SL-35SLET
			-40°C~85°C	Tray	LY621024SL-35SLI
				Tape Reel	LY621024SL-35SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024SL-35LL
				Tape Reel	LY621024SL-35LLT
			-20°C~80°C	Tray	LY621024SL-35LLE
				Tape Reel	LY621024SL-35LLET
			-40°C~85°C	Tray	LY621024SL-35LLI
				Tape Reel	LY621024SL-35LLIT
	55	Special Ultra Low Power	0°C~70°C	Tray	LY621024SL-55SL
				Tape Reel	LY621024SL-55SLT
			-20°C~80°C	Tray	LY621024SL-55SLE
				Tape Reel	LY621024SL-55SLET
			-40°C~85°C	Tray	LY621024SL-55SLI
				Tape Reel	LY621024SL-55SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024SL-55LL
				Tape Reel	LY621024SL-55LLT
			-20°C~80°C	Tray	LY621024SL-55LLE
				Tape Reel	LY621024SL-55LLET
			-40°C~85°C	Tray	LY621024SL-55LLI
				Tape Reel	LY621024SL-55LLIT
70	Special Ultra Low Power	0°C~70°C	Tray	LY621024SL-70SL	
			Tape Reel	LY621024SL-70SLT	
		-20°C~80°C	Tray	LY621024SL-70SLE	
			Tape Reel	LY621024SL-70SLET	
		-40°C~85°C	Tray	LY621024SL-70SLI	
			Tape Reel	LY621024SL-70SLIT	
	Ultra Low Power	0°C~70°C	Tray	LY621024SL-70LL	
			Tape Reel	LY621024SL-70LLT	
		-20°C~80°C	Tray	LY621024SL-70LLE	
			Tape Reel	LY621024SL-70LLET	
		-40°C~85°C	Tray	LY621024SL-70LLI	
			Tape Reel	LY621024SL-70LLIT	



### ORDERING INFORMATION

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32 Pin(600mil) PDIP	35	Special Ultra Low Power	0°C~70°C	Tube	LY621024PL-35SL
			-20°C~80°C	Tube	LY621024PL-35SLE
			-40°C~85°C	Tube	LY621024PL-35SLI
		Ultra Low Power	0°C~70°C	Tube	LY621024PL-35LL
			-20°C~80°C	Tube	LY621024PL-35LLE
			-40°C~85°C	Tube	LY621024PL-35LLI
	55	Special Ultra Low Power	0°C~70°C	Tube	LY621024PL-55SL
			-20°C~80°C	Tube	LY621024PL-55SLE
			-40°C~85°C	Tube	LY621024PL-55SLI
		Ultra Low Power	0°C~70°C	Tube	LY621024PL-55LL
			-20°C~80°C	Tube	LY621024PL-55LLE
			-40°C~85°C	Tube	LY621024PL-55LLI
	70	Special Ultra Low Power	0°C~70°C	Tube	LY621024PL-70SL
			-20°C~80°C	Tube	LY621024PL-70SLE
			-40°C~85°C	Tube	LY621024PL-70SLI
Ultra Low Power		0°C~70°C	Tube	LY621024PL-70LL	
		-20°C~80°C	Tube	LY621024PL-70LLE	
		-40°C~85°C	Tube	LY621024PL-70LLI	





### ORDERING INFORMATION

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32 Pin (8mmx20mm) TSOP I	35	Special Ultra Low Power	0°C~70°C	Tray	LY621024LL-35SL
				Tape Reel	LY621024LL-35SLT
			-20°C~80°C	Tray	LY621024LL-35SLE
				Tape Reel	LY621024LL-35SLET
			-40°C~85°C	Tray	LY621024LL-35SLI
				Tape Reel	LY621024LL-35SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024LL-35LL
				Tape Reel	LY621024LL-35LLT
			-20°C~80°C	Tray	LY621024LL-35LLE
				Tape Reel	LY621024LL-35LLET
			-40°C~85°C	Tray	LY621024LL-35LLI
				Tape Reel	LY621024LL-35LLIT
	55	Special Ultra Low Power	0°C~70°C	Tray	LY621024LL-55SL
				Tape Reel	LY621024LL-55SLT
			-20°C~80°C	Tray	LY621024LL-55SLE
				Tape Reel	LY621024LL-55SLET
			-40°C~85°C	Tray	LY621024LL-55SLI
				Tape Reel	LY621024LL-55SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024LL-55LL
				Tape Reel	LY621024LL-55LLT
			-20°C~80°C	Tray	LY621024LL-55LLE
				Tape Reel	LY621024LL-55LLET
			-40°C~85°C	Tray	LY621024LL-55LLI
				Tape Reel	LY621024LL-55LLIT
70	Special Ultra Low Power	0°C~70°C	Tray	LY621024LL-70SL	
			Tape Reel	LY621024LL-70SLT	
		-20°C~80°C	Tray	LY621024LL-70SLE	
			Tape Reel	LY621024LL-70SLET	
		-40°C~85°C	Tray	LY621024LL-70SLI	
			Tape Reel	LY621024LL-70SLIT	
	Ultra Low Power	0°C~70°C	Tray	LY621024LL-70LL	
			Tape Reel	LY621024LL-70LLT	
		-20°C~80°C	Tray	LY621024LL-70LLE	
			Tape Reel	LY621024LL-70LLET	
		-40°C~85°C	Tray	LY621024LL-70LLI	
			Tape Reel	LY621024LL-70LLIT	



### ORDERING INFORMATION

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32 Pin (8mmx13.4mm) sTSSOP	35	Special Ultra Low Power	0°C~70°C	Tray	LY621024RL-35SL
				Tape Reel	LY621024RL-35SLT
			-20°C~80°C	Tray	LY621024RL-35SLE
				Tape Reel	LY621024RL-35SLET
			-40°C~85°C	Tray	LY621024RL-35SLI
				Tape Reel	LY621024RL-35SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024RL-35LL
				Tape Reel	LY621024RL-35LLT
			-20°C~80°C	Tray	LY621024RL-35LLE
				Tape Reel	LY621024RL-35LLET
			-40°C~85°C	Tray	LY621024RL-35LLI
				Tape Reel	LY621024RL-35LLIT
	55	Special Ultra Low Power	0°C~70°C	Tray	LY621024RL-55SL
				Tape Reel	LY621024RL-55SLT
			-20°C~80°C	Tray	LY621024RL-55SLE
				Tape Reel	LY621024RL-55SLET
			-40°C~85°C	Tray	LY621024RL-55SLI
				Tape Reel	LY621024RL-55SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024RL-55LL
				Tape Reel	LY621024RL-55LLT
			-20°C~80°C	Tray	LY621024RL-55LLE
				Tape Reel	LY621024RL-55LLET
			-40°C~85°C	Tray	LY621024RL-55LLI
				Tape Reel	LY621024RL-55LLIT
70	Special Ultra Low Power	0°C~70°C	Tray	LY621024RL-70SL	
			Tape Reel	LY621024RL-70SLT	
		-20°C~80°C	Tray	LY621024RL-70SLE	
			Tape Reel	LY621024RL-70SLET	
		-40°C~85°C	Tray	LY621024RL-70SLI	
			Tape Reel	LY621024RL-70SLIT	
	Ultra Low Power	0°C~70°C	Tray	LY621024RL-70LL	
			Tape Reel	LY621024RL-70LLT	
		-20°C~80°C	Tray	LY621024RL-70LLE	
			Tape Reel	LY621024RL-70LLET	
		-40°C~85°C	Tray	LY621024RL-70LLI	
			Tape Reel	LY621024RL-70LLIT	



#### ORDERING INFORMATION

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
36 Ball (6mmx8mm) TFBGA	35	Special Ultra Low Power	0°C~70°C	Tray	LY621024GL-35SL
				Tape Reel	LY621024GL-35SLT
			-20°C~80°C	Tray	LY621024GL-35SLE
				Tape Reel	LY621024GL-35SLET
			-40°C~85°C	Tray	LY621024GL-35SLI
				Tape Reel	LY621024GL-35SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024GL-35LL
				Tape Reel	LY621024GL-35LLT
			-20°C~80°C	Tray	LY621024GL-35LLE
				Tape Reel	LY621024GL-35LLET
			-40°C~85°C	Tray	LY621024GL-35LLI
				Tape Reel	LY621024GL-35LLIT
	55	Special Ultra Low Power	0°C~70°C	Tray	LY621024GL-55SL
				Tape Reel	LY621024GL-55SLT
			-20°C~80°C	Tray	LY621024GL-55SLE
				Tape Reel	LY621024GL-55SLET
			-40°C~85°C	Tray	LY621024GL-55SLI
				Tape Reel	LY621024GL-55SLIT
		Ultra Low Power	0°C~70°C	Tray	LY621024GL-55LL
				Tape Reel	LY621024GL-55LLT
			-20°C~80°C	Tray	LY621024GL-55LLE
				Tape Reel	LY621024GL-55LLET
			-40°C~85°C	Tray	LY621024GL-55LLI
				Tape Reel	LY621024GL-55LLIT
70	Special Ultra Low Power	0°C~70°C	Tray	LY621024GL-70SL	
			Tape Reel	LY621024GL-70SLT	
		-20°C~80°C	Tray	LY621024GL-70SLE	
			Tape Reel	LY621024GL-70SLET	
		-40°C~85°C	Tray	LY621024GL-70SLI	
			Tape Reel	LY621024GL-70SLIT	
	Ultra Low Power	0°C~70°C	Tray	LY621024GL-70LL	
			Tape Reel	LY621024GL-70LLT	
		-20°C~80°C	Tray	LY621024GL-70LLE	
			Tape Reel	LY621024GL-70LLET	
		-40°C~85°C	Tray	LY621024GL-70LLI	
			Tape Reel	LY621024GL-70LLIT	



**Lyontek Inc.**

**LY621024**

Rev. 1.11

**128K X 8 BIT LOW POWER CMOS SRAM**

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