



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 <u>FEATURES & ORDERING INFORMATION</u> Lead free and green package available to Green package available Added packing type in <u>ORDERING INFORMATION</u> Deleted T_{SOLDER} in <u>ABSOLUTE MAXIMUM RATINGS</u>	Mar.30.2009
Rev. 1.5	Revised V_{DR}	Sep.11.2009
Rev. 1.6	Revised <u>PACKAGE OUTLINE DIMENSION</u> in page 10/11/12/13	May.7.2010
Rev. 1.7	Revised <u>ORDERING INFORMATION</u> 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 <u>ORDERING INFORMATION</u> Typo.	May.20.2016
Rev. 1.10	Deleted <u>WRITE CYCLE</u> Notes : 1. WE#, CE# must be high or CE2 must be low during all address transitions in page 7	Jun.28.2016

FEATURES

- Fast access time : 35/55/70ns
- Low power consumption:
Operating current : 24/17/15mA (TYP.)
Standby current : 2 μ A@5V(TYP.) LL/SL version
0.8 μ 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 sTSP
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.

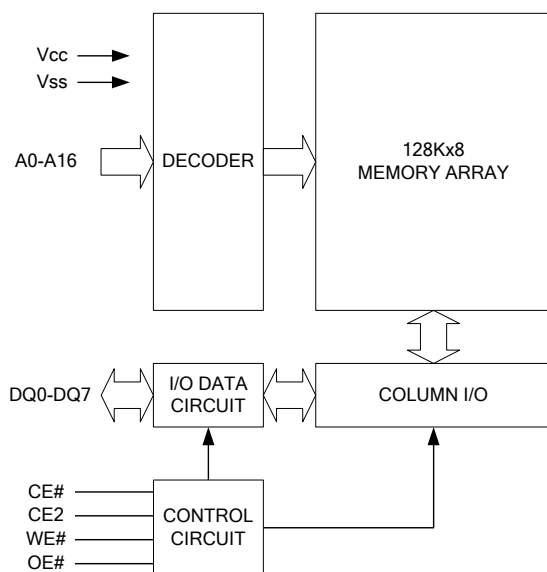
The LY621024 is well designed for very low power system applications, and particularly well suited for battery back-up nonvolatile memory application.

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 _{SB1} , TYP.)		Operating(I _{CC} , TYP.)
LY621024(LL)	0 ~ 70°C	4.5 ~ 5.5V	35/55/70ns	-	2 μ A@5V	24/17/15mA
LY621024(LLE)	-20 ~ 80°C	4.5 ~ 5.5V	35/55/70ns	-	2 μ A@5V	24/17/15mA
LY621024(LLI)	-40 ~ 85°C	4.5 ~ 5.5V	35/55/70ns	-	2 μ A@5V	24/17/15mA
LY621024(SL)	0 ~ 70°C	4.5 ~ 5.5V	35/55/70ns	0.8 μ A@3V	2 μ A@5V	24/17/15mA
LY621024(SLE)	-20 ~ 80°C	4.5 ~ 5.5V	35/55/70ns	0.8 μ A@3V	2 μ A@5V	24/17/15mA
LY621024(SLI)	-40 ~ 85°C	4.5 ~ 5.5V	35/55/70ns	0.8 μ A@3V	2 μ A@5V	24/17/15mA

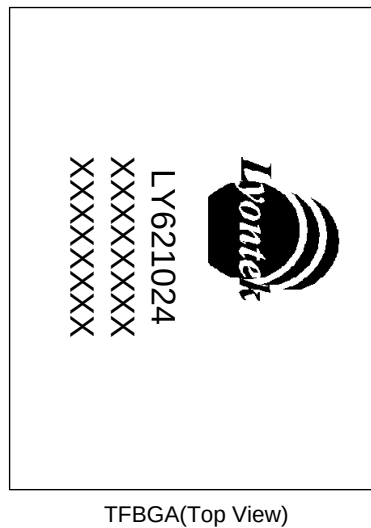
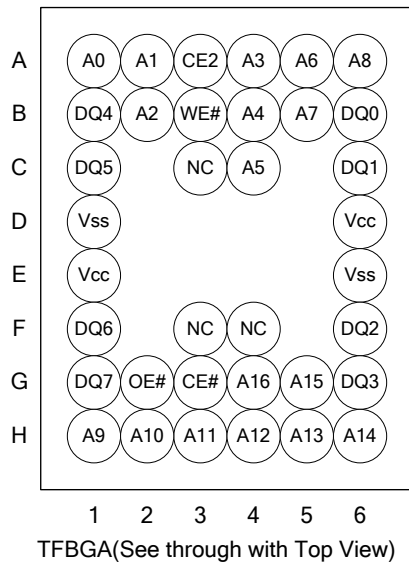
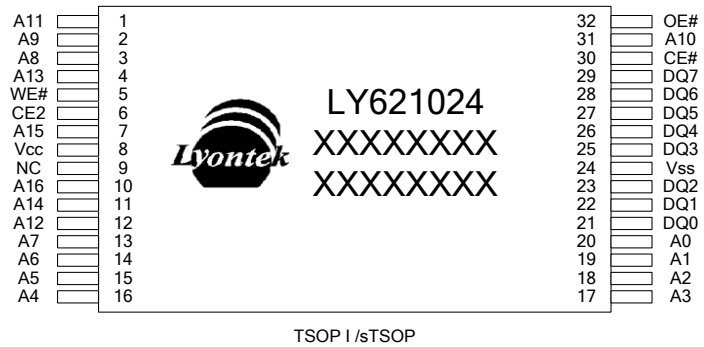
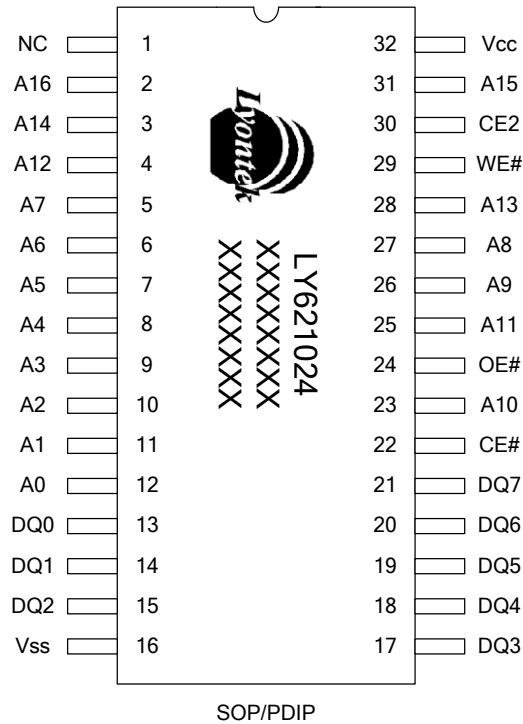
FUNCTIONAL BLOCK DIAGRAM



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

PIN CONFIGURATION





ABSOLUTE MAXIMUM RATINGS*

PARAMETER	SYMBOL	RATING	UNIT
Voltage on V _{CC} relative to V _{SS}	V _{T1}	-0.5 to 6.5	V
Voltage on any other pin relative to V _{SS}	V _{T2}	-0.5 to V _{CC} +0.5	V
Operating Temperature	T _A	0 to 70(C grade)	°C
		-20 to 80(E grade)	
		-40 to 85(I grade)	
Storage Temperature	T _{STG}	-65 to 150	°C
Power Dissipation	P _D	1	W
DC Output Current	I _{OUT}	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 _{SB1}
	X	L	X	X	High-Z	I _{SB1}
Output Disable	L	H	H	H	High-Z	I _{CC} , I _{CC1}
Read	L	H	L	H	D _{OUT}	I _{CC} , I _{CC1}
Write	L	H	X	L	D _{IN}	I _{CC} , I _{CC1}

Note: H = V_{IH}, L = V_{IL}, X = Don't care.



DC ELECTRICAL CHARACTERISTICS

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

Notes:

1. V_{IH}(max) = V_{CC} + 3.0V for pulse width less than 10ns.
2. V_{IL}(min) = V_{SS} - 3.0V for pulse width less than 10ns.
3. Over/Undershoot specifications are characterized, not 100% tested.
4. Typical values are included for reference only and are not guaranteed or tested.
Typical values are measured at V_{CC} = V_{CC}(TYP.) and T_A = 25°C
5. This parameter is measured at V_{CC} = 3.0V

CAPACITANCE ($T_A = 25^\circ\text{C}$, $f = 1.0\text{MHz}$)

PARAMETER	SYMBOL	MIN.	MAX	UNIT
Input Capacitance	C_{IN}	-	6	pF
Input/Output Capacitance	$C_{I/O}$	-	8	pF

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

AC TEST CONDITIONS

Input Pulse Levels	0.2V to $V_{CC} - 0.2V$
Input Rise and Fall Times	3ns
Input and Output Timing Reference Levels	1.5V
Output Load	$C_L = 50\text{pF} + 1\text{TTL}$, $I_{OH}/I_{OL} = -1\text{mA}/2\text{mA}$

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_{RC}	35	-	55	-	70	-	ns
Address Access Time	t_{AA}	-	35	-	55	-	70	ns
Chip Enable Access Time	t_{ACE}	-	35	-	55	-	70	ns
Output Enable Access Time	t_{OE}	-	25	-	30	-	35	ns
Chip Enable to Output in Low-Z	t_{CLZ}^*	10	-	10	-	10	-	ns
Output Enable to Output in Low-Z	t_{OLZ}^*	5	-	5	-	5	-	ns
Chip Disable to Output in High-Z	t_{CHZ}^*	-	15	-	20	-	25	ns
Output Disable to Output in High-Z	t_{OHZ}^*	-	15	-	20	-	25	ns
Output Hold from Address Change	t_{OH}	10	-	10	-	10	-	ns

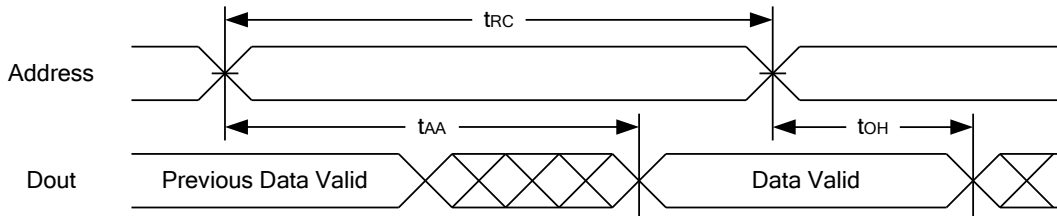
(2) WRITE CYCLE

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

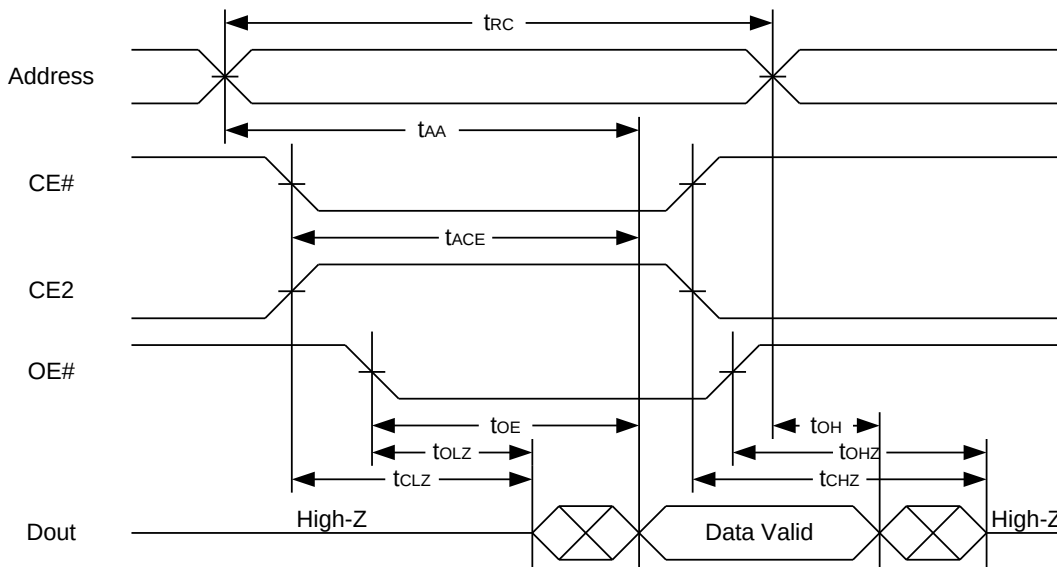
*These parameters are guaranteed by device characterization, but not production tested.

TIMING WAVEFORMS

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

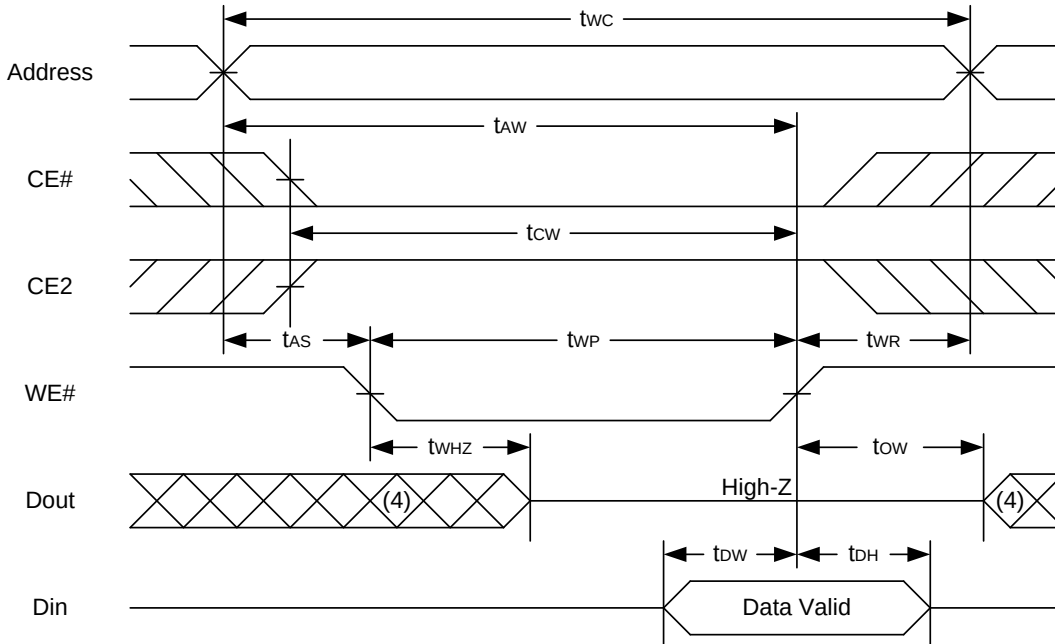
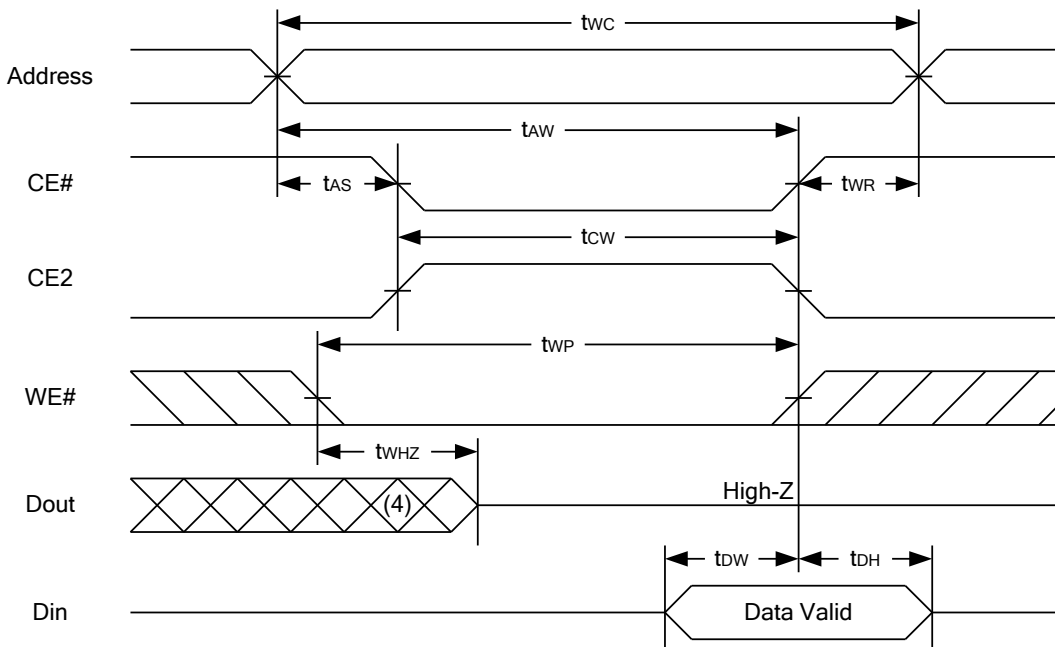


READ CYCLE 2 (CE# and CE2 and OE# Controlled) (1,3,4,5)



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_{OHZ} 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_{OHZ} 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, t_{WP} must be greater than $t_{WHZ} + t_{OW}$ 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. t_{OW} and t_{WHZ} are specified with $C_L = 5pF$. Transition is measured $\pm 500mV$ from steady state.

Lyontek Inc. reserves the rights to change the specifications and products without notice.

2F, No.17, Industry E. Rd. II, Science-Based Industrial Park, Hsinchu 300, Taiwan.

TEL: 886-3-6668838

FAX: 886-3-6668836

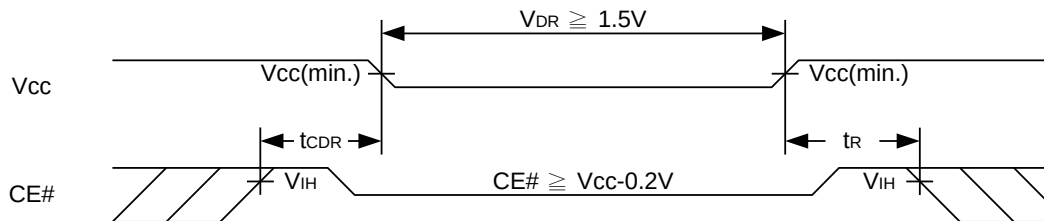
DATA RETENTION CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
V _{CC} for Data Retention	V _{DR}	CE# $\geq$ V _{CC} - 0.2V or CE2 $\leq$ 0.2V	1.5	-	5.5	V
Data Retention Current	I _{DR}	V _{CC} = 1.5V CE# $\geq$ V _{CC} - 0.2V or CE2 $\leq$ 0.2V Other pins at 0.2V or V _{CC} -0.2V	LL	-	0.5	12 μ A
			LLE/LLI	-	0.5	30 μ A
			SL 25°C	-	0.4	2 μ A
			SLE 40°C	-	0.5	2 μ A
			SLI	-	0.4	5 μ A
			SLE/SLI	-	0.4	8 μ A
Chip Disable to Data Retention Time	t _{CDR}	See Data Retention Waveforms (below)	0	-	-	ns
Recovery Time	t _R		t _{RC} *	-	-	ns

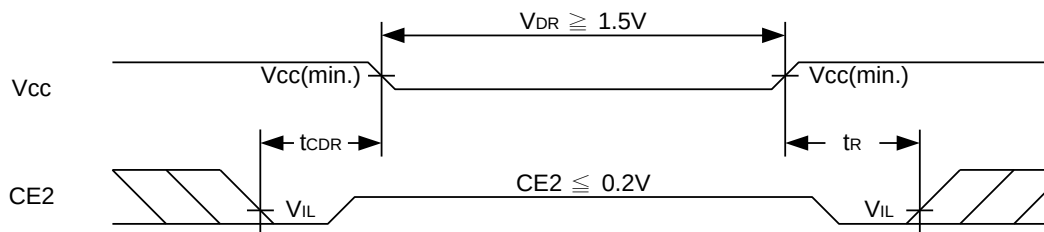
t_{RC}* = Read Cycle Time

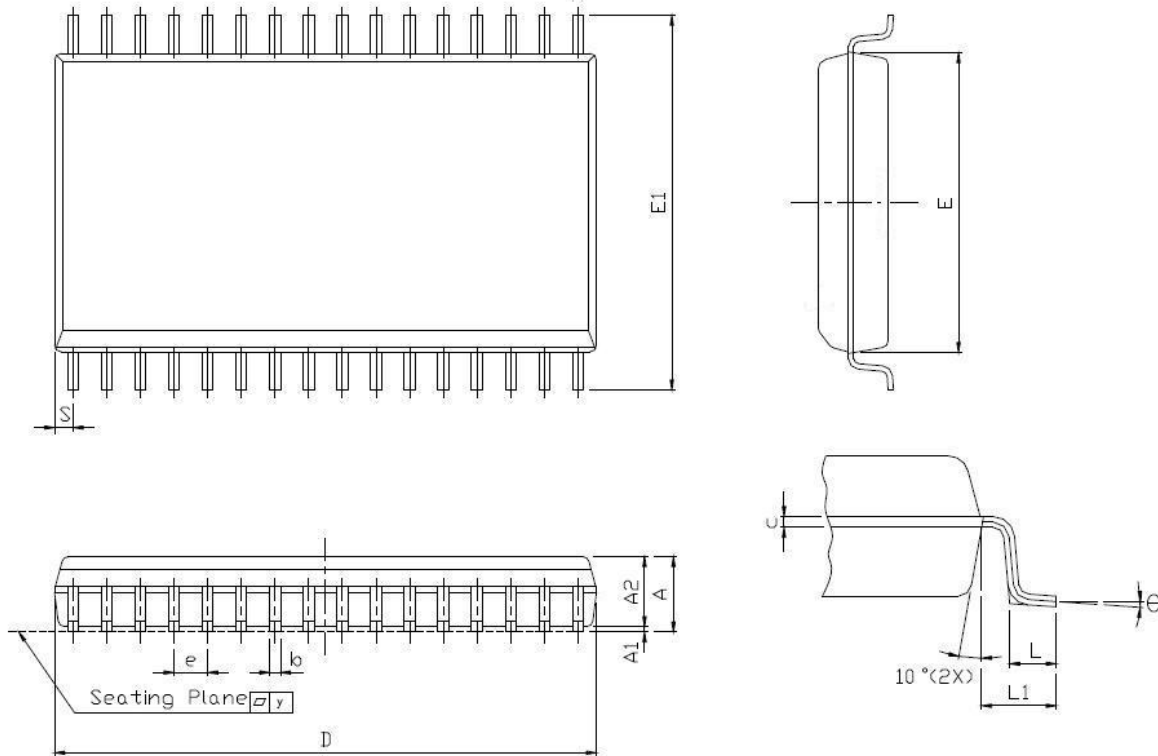
DATA RETENTION WAVEFORM

Low V_{CC} Data Retention Waveform (1) (CE# controlled)



Low V_{CC} Data Retention Waveform (2) (CE2 controlled)

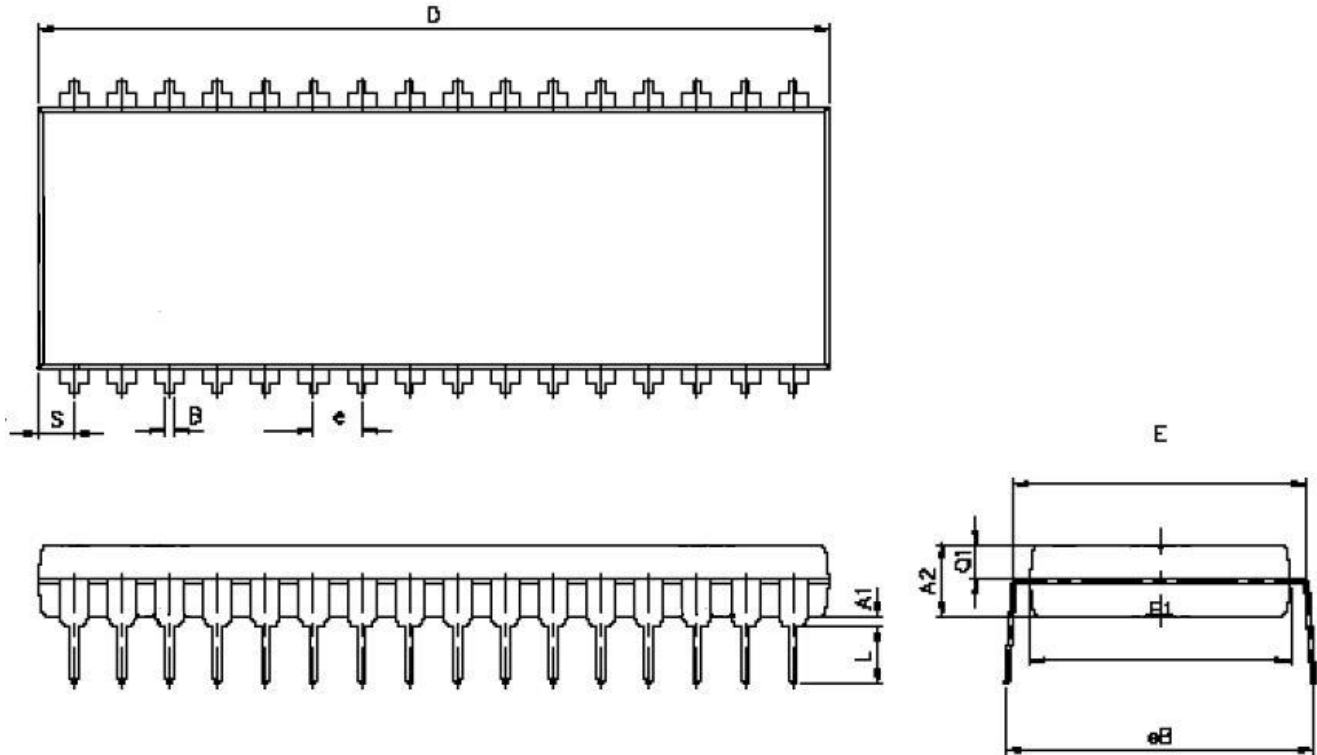


PACKAGE OUTLINE DIMENSION
32 pin 450 mil SOP Package Outline Dimension


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)
Θ		0° -10°	0° -10°



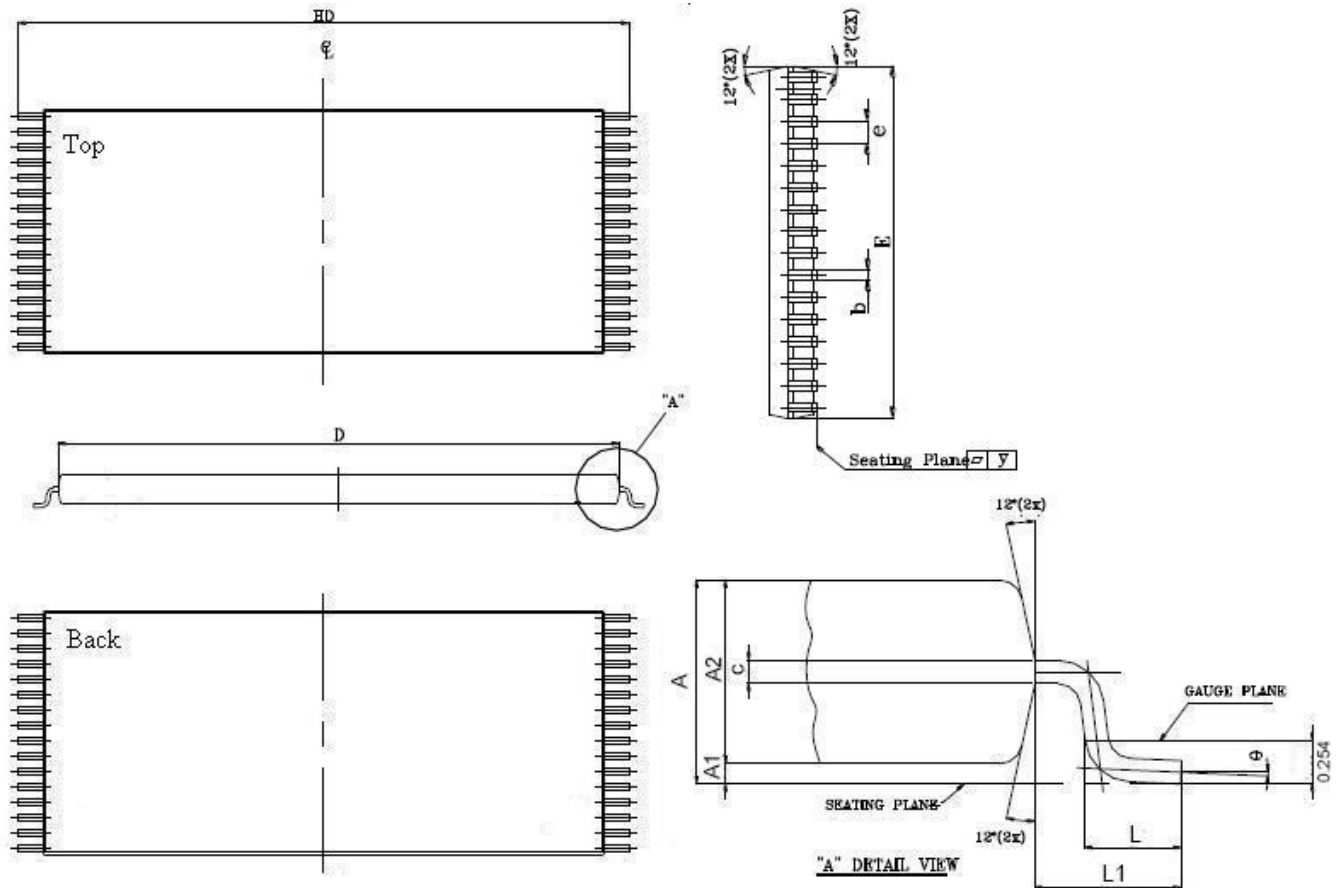
32 pin 600 mil PDIP Package Outline Dimension



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

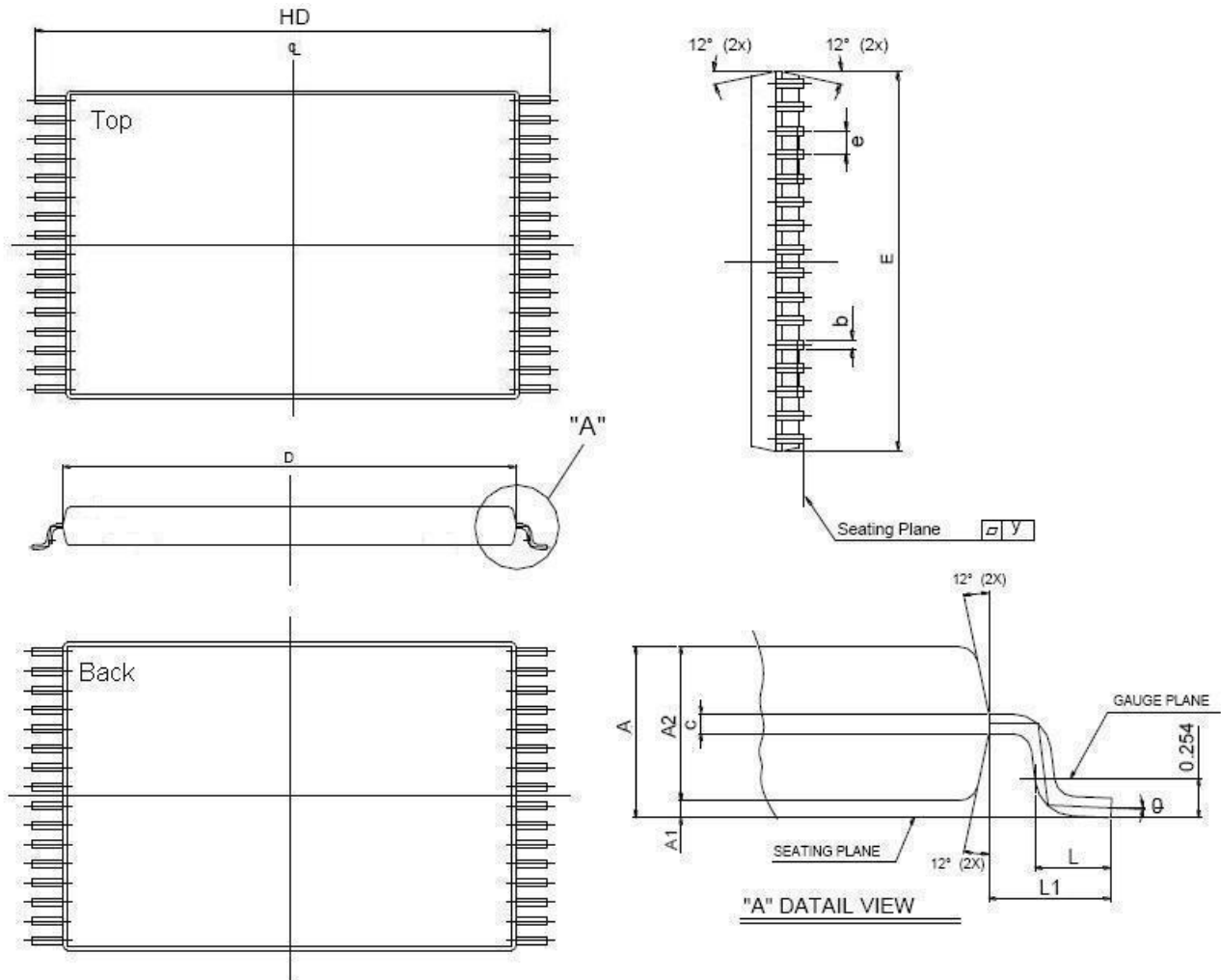
Note : D/E1/S dimension do not include mold flash.

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



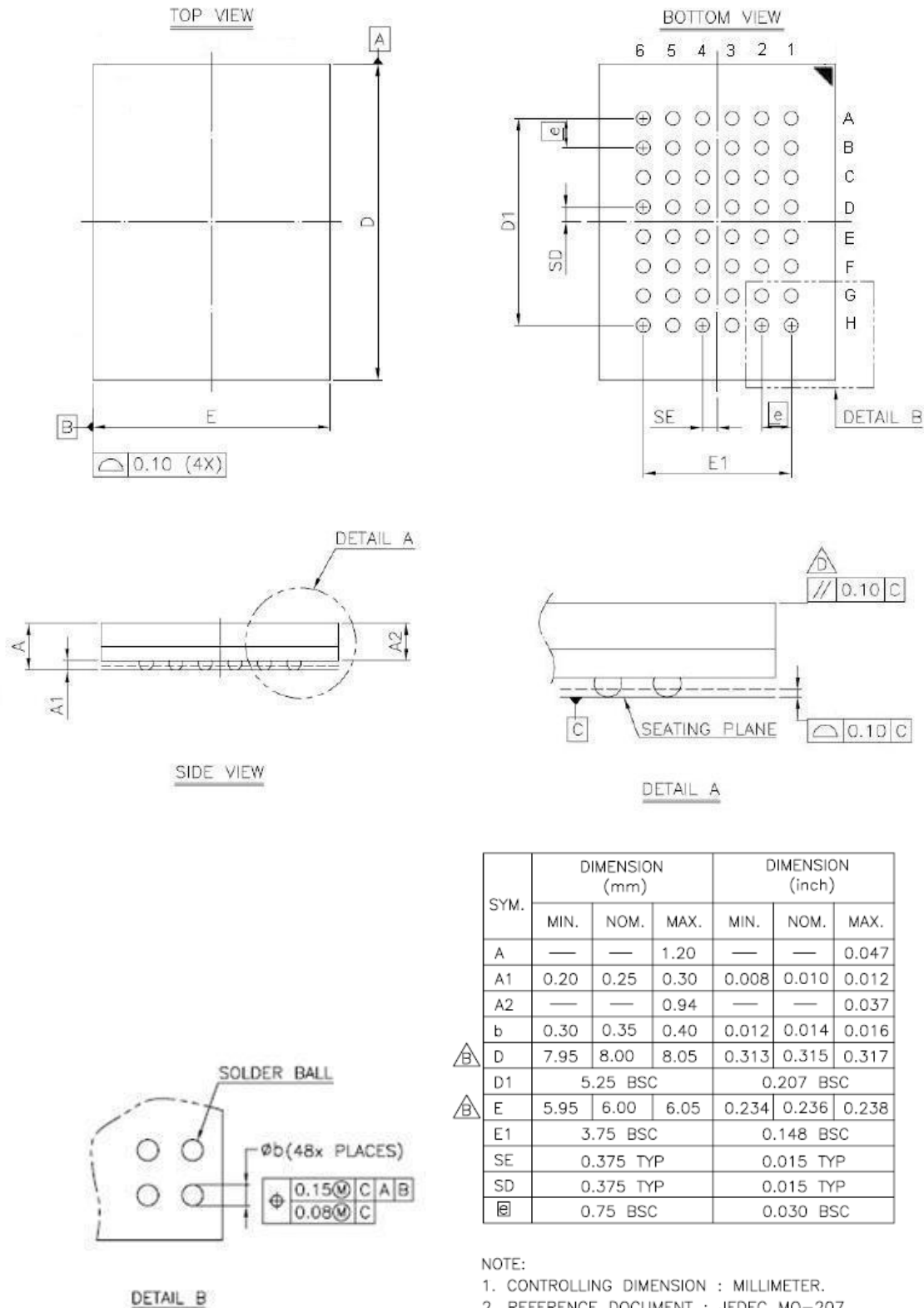
SYM.	UNIT	INCH(BASE)	MM(REF)
A		0.047 (MAX)	1.20 (MAX)
A1		0.004 ±0.002	0.10 ±0.05
A2		0.039 ±0.002	1.00 ±0.05
b		0.009 ±0.002	0.22 ±0.05
c		0.006 ±0.002	0.155 ±0.055
D		0.724 ±0.008	18.40 ±0.20
E		0.315 ±0.008	8.00 ±0.20
e		0.020 (TYP)	0.50 (TYP)
HD		0.787 ±0.008	20.00 ±0.20
L		0.024 ±0.004	0.60 ±0.10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

32 pin 8mm x 13.4mm sTSP 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)
Θ		0°~5°	0°~5°

36 ball 6mm × 8mm TFBGA Package Outline Dimension





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	Tube	LY621024SL-35SL
				Tape Reel	LY621024SL-35SLT
			-20°C~80°C	Tube	LY621024SL-35SLE
				Tape Reel	LY621024SL-35SLET
			-40°C~85°C	Tube	LY621024SL-35SLI
				Tape Reel	LY621024SL-35SLIT
		Ultra Low Power	0°C~70°C	Tube	LY621024SL-35LL
				Tape Reel	LY621024SL-35LLT
			-20°C~80°C	Tube	LY621024SL-35LLE
				Tape Reel	LY621024SL-35LLET
			-40°C~85°C	Tube	LY621024SL-35LLI
				Tape Reel	LY621024SL-35LLIT
	55	Special Ultra Low Power	0°C~70°C	Tube	LY621024SL-55SL
				Tape Reel	LY621024SL-55SLT
			-20°C~80°C	Tube	LY621024SL-55SLE
				Tape Reel	LY621024SL-55SLET
			-40°C~85°C	Tube	LY621024SL-55SLI
				Tape Reel	LY621024SL-55SLIT
		Ultra Low Power	0°C~70°C	Tube	LY621024SL-55LL
				Tape Reel	LY621024SL-55LLT
			-20°C~80°C	Tube	LY621024SL-55LLE
				Tape Reel	LY621024SL-55LLET
			-40°C~85°C	Tube	LY621024SL-55LLI
				Tape Reel	LY621024SL-55LLIT
	70	Special Ultra Low Power	0°C~70°C	Tube	LY621024SL-70SL
				Tape Reel	LY621024SL-70SLT
			-20°C~80°C	Tube	LY621024SL-70SLE
				Tape Reel	LY621024SL-70SLET
			-40°C~85°C	Tube	LY621024SL-70SLI
				Tape Reel	LY621024SL-70SLIT
		Ultra Low Power	0°C~70°C	Tube	LY621024SL-70LL
				Tape Reel	LY621024SL-70LLT
			-20°C~80°C	Tube	LY621024SL-70LLE
				Tape Reel	LY621024SL-70LLET
			-40°C~85°C	Tube	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) sTSOP	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. 1.10

128K X 8 BIT LOW POWER CMOS SRAM

THIS PAGE IS LEFT BLANK INTENTIONALLY.