



REVISION HISTORY

<u>Revision</u>	<u>Description</u>	<u>Issue Date</u>
Rev. 1.0	Initial Issue	Jul.25.2004
Rev. 1.1	Adding PKG type : 32 P-DIP Revised Test Condition of I _{SB1} /I _{DR}	May.14.2007
Rev. 1.2	Deleted L Spec. Added SL Spec. Revised V _{TERM} to V _{T1} and V _{T2} Revised Test Condition of I _{CC}	Nov.8.2007
Rev. 1.3	Revised I _{SB} /I _{DR}	Mar.21.2008
Rev. 1.4	Adding PKG type : 44 TSOP-II	Jul.14.2008
Rev. 1.5	Added I _{SB1} /I _{DR} values when T _A = 25°C and T _A = 40°C Revised FEATURES & ORDERING INFORMATION Lead free and green package available to Green package available Added packing type in ORDERING INFORMATION Deleted T _{SOLDER} in ABSOLUTE MAXIMUN RATINGS	Mar.30.2009
Rev. 1.6	Added PKG type : 32 TSOP-II	Jun.22.2009
Rev. 1.7	Deleted PKG type : 32 TSOP-II	Jul.17.2009
Rev. 1.8	Revised PACKAGE OUTLINE DIMENSION in page 10/11/12/13	May.7.2010
Rev. 1.9	Revised ORDERING INFORMATION in page 15 Revised PACKAGE OUTLINE DIMENSION in page 9	Aug.30.2010
Rev. 1.10	Added PKG type : 32 TSOP-II	Nov.1.2010
Rev. 1.11	Revised ORDERING INFORMATION in page 16	Mar.9.2011
Rev. 1.12	Deleted PKG type : 44 TSOP-II	Feb.21.2012
Rev. 1.13	Revised TEST CONDITION of I _{CC} /I _{CC1} /I _{SB1} in DC ELECTRICAL CHARACTERISTICS (page4) and I _{DR} in DATA RETENTION CHARACTERISTICS (page8) PIN CONFIGURATION (Page2) ORDERING INFORMATION (Page15)	Jun.2.2015
Rev. 1.14	Deleted WRITE CYCLE Notes : 1. WE#,CE# must be high during all address transitions. in page 7	Jun.29.2016
Rev. 1.15	Revised ORDERING INFORMATION in page 16 Revised ORDERING INFORMATION in page 15 32 Pin(450mil) SOP PackingType : Tube→Tray	Aug.24.2023
Rev. 2.0	1.Deleted FEATURES Standby current : 1μA (TYP.) SL-version--Page 1 2.Deleted PRODUCT FAMILY Standby(ISB1,TYP.) : 1μA(SL)-- Page 1 3.Deleted DC ELECTRICAL CHARACTERISTICS : Standby Power Supply Current : ISB1--- Page4 4.Deleted DC ELECTRICAL CHARACTERISTICS : Notes: 5--- Page 4 5.Deleted DATA RETENTION CHARACTERISTICS : Data Retention Current: IDR --- Page 8 6.Revised ORDERING INFORMATION in Page 15~Page26	Jun.18.2024

FEATURES

- Fast access time : 45/55/70ns
- Low power consumption:
Operating current : 40/30/20mA (TYP.)
Standby current : 2 μ A (TYP.) LL-version
- Single 2.7V ~ 3.6V 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
32-pin 400 mil TSOP II
36-ball 6mm x 8mm TFBGA

GENERAL DESCRIPTION

The LY62L5128 is a 4,194,304-bit low power CMOS static random access memory organized as 524,288 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.

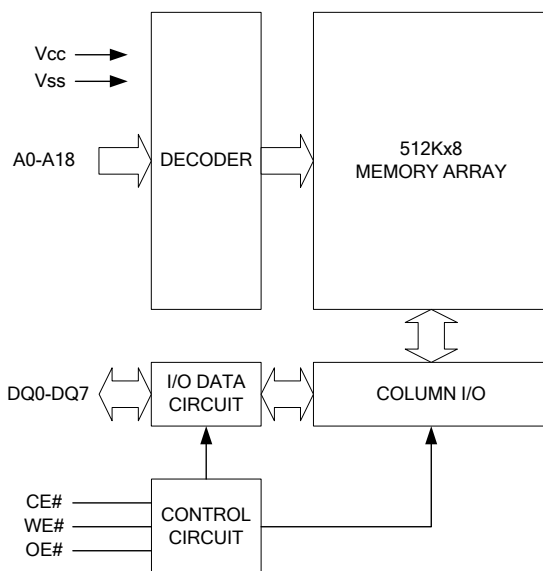
The LY62L5128 is well designed for very low power system applications, and particularly well suited for battery back-up nonvolatile memory application.

The LY62L5128 operates from a single power supply of 2.7V ~ 3.6V 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.)
LY62L5128	0 ~ 70°C	2.7 ~ 3.6V	45/55/70ns	2 μ A(LL)	40/30/20mA
LY62L5128(E)	-20 ~ 80°C	2.7 ~ 3.6V	45/55/70ns	2 μ A(LL)	40/30/20mA
LY62L5128(I)	-40 ~ 85°C	2.7 ~ 3.6V	45/55/70ns	2 μ A(LL)	40/30/20mA

FUNCTIONAL BLOCK DIAGRAM

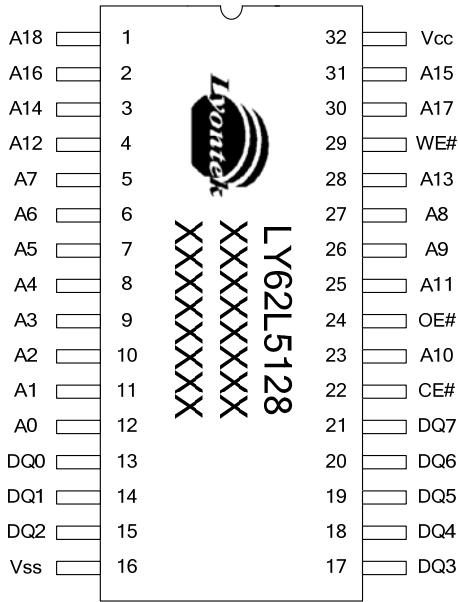


PIN DESCRIPTION

SYMBOL	DESCRIPTION
A0 - A18	Address Inputs
DQ0 - DQ7	Data Inputs/Outputs
CE#	Chip Enable Inputs
WE#	Write Enable Input
OE#	Output Enable Input
Vcc	Power Supply
Vss	Ground
NC	No Connection



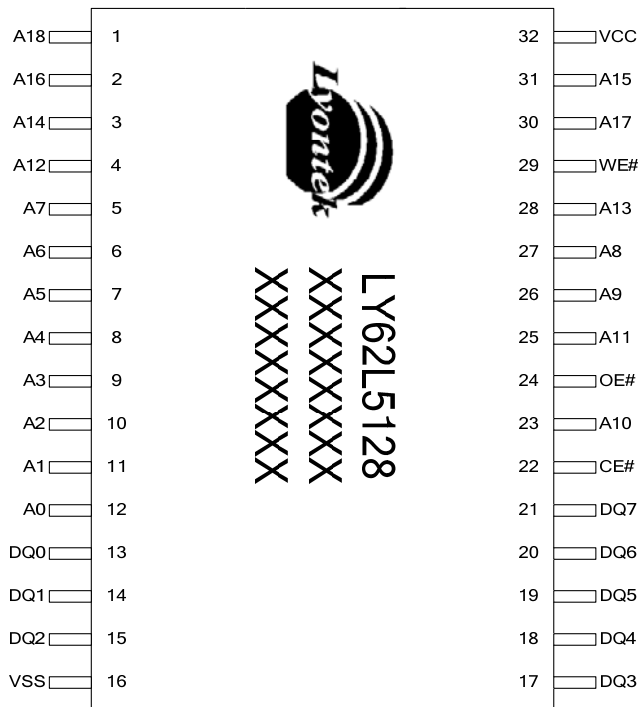
PIN CONFIGURATION



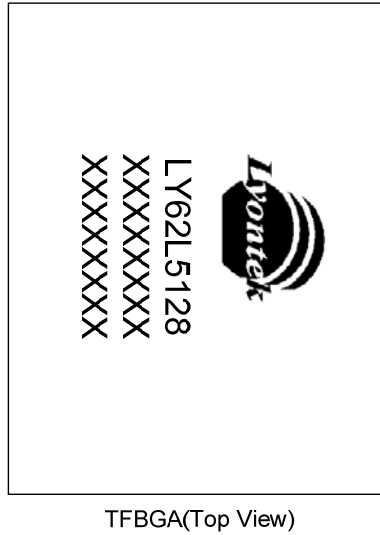
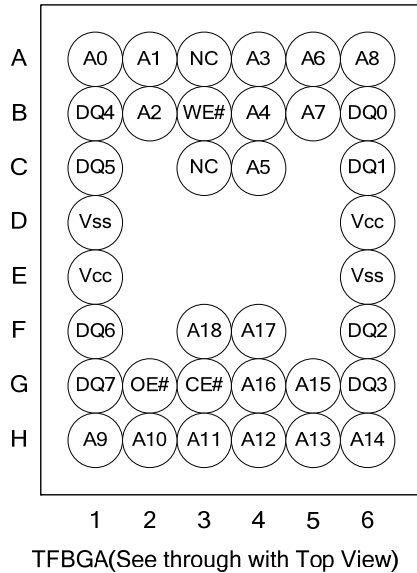
SOP/PDIP



TSOP I/sTSOP



TSOP II

PIN CONFIGURATION

ABSOLUTE MAXIMUM RATINGS*

PARAMETER	SYMBOL	RATING	UNIT
Voltage on V _{CC} relative to V _{SS}	V _{T1}	-0.5 to 4.6	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#	OE#	WE#	I/O OPERATION	SUPPLY CURRENT
Standby	H	X	X	High-Z	I _{SB} , I _{SB1}
Output Disable	L	H	H	High-Z	I _{CC} , I _{CC1}
Read	L	L	H	D _{OUT}	I _{CC} , I _{CC1}
Write	L	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}		2.7	3.0	3.6	V	
Input High Voltage	V _{IH} ^{*1}		2.2	-	V _{CC} +0.3	V	
Input Low Voltage	V _{IL} ^{*2}		- 0.2	-	0.6	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	2.2	2.7	-	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} , I _{I/O} = 0mA Other pins at V _{IL} or V _{IH}	- 45	-	40	50	mA
			- 55	-	30	40	mA
			- 70	-	20	30	mA
	I _{CC1}	Cycle time = 1μs CE# ≤ 0.2V, I _{I/O} = 0mA Other pins at 0.2V or V _{CC} -0.2V	-	4	5	mA	
Standby Power Supply Current	I _{SB}	CE# = V _{IH} , other pins at V _{IL} or V _{IH}	-	0.3	1.25	mA	
	I _{SB1}	CE# ≥ V _{CC} -0.2V Others at 0.2V or V _{CC} - 0.2V	LL	-	2	15	μA
			LLE/LLI	-	2	20	μA

Notes:

- V_{IH}(max) = V_{CC} + 3.0V for pulse width less than 10ns.
- V_{IL}(min) = V_{SS} - 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_{CC} = V_{CC}(TYP.) and T_A = 25°C

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	$C_L = 30\text{pF} + 1\text{TTL}$, $I_{OH}/I_{OL} = -1\text{mA}/2\text{mA}$

AC ELECTRICAL CHARACTERISTICS
(1) READ CYCLE

PARAMETER	SYM.	LY62L5128-45		LY62L5128-55		LY62L5128-70		UNIT
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Read Cycle Time	t_{RC}	45	-	55	-	70	-	ns
Address Access Time	t_{AA}	-	45	-	55	-	70	ns
Chip Enable Access Time	t_{ACE}	-	45	-	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

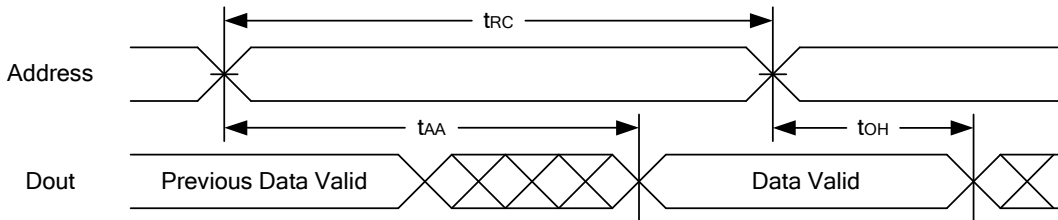
PARAMETER	SYM.	LY62L5128-45		LY62L5128-55		LY62L5128-70		UNIT
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Write Cycle Time	t_{WC}	45	-	55	-	70	-	ns
Address Valid to End of Write	t_{AW}	40	-	50	-	60	-	ns
Chip Enable to End of Write	t_{CW}	40	-	50	-	60	-	ns
Address Set-up Time	t_{AS}	0	-	0	-	0	-	ns
Write Pulse Width	t_{WP}	35	-	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.

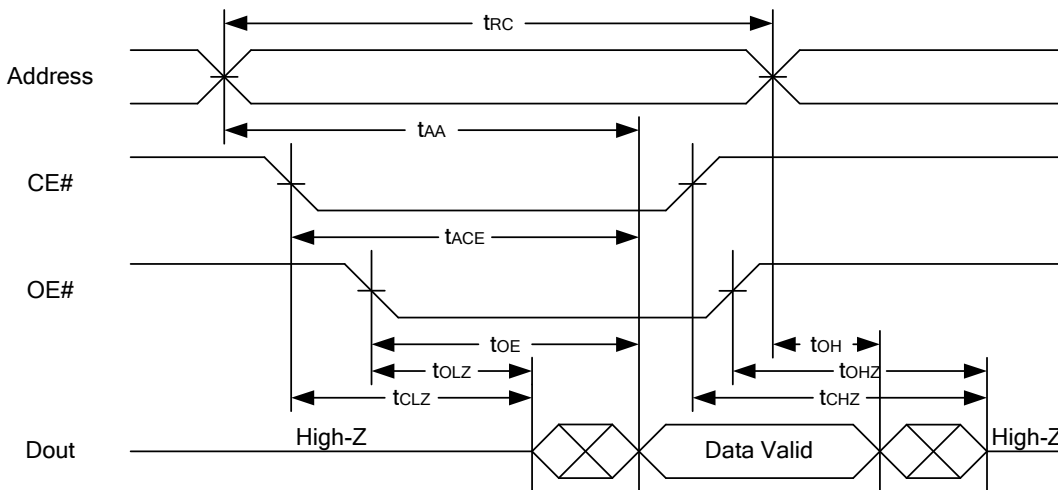


TIMING WAVEFORMS

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



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

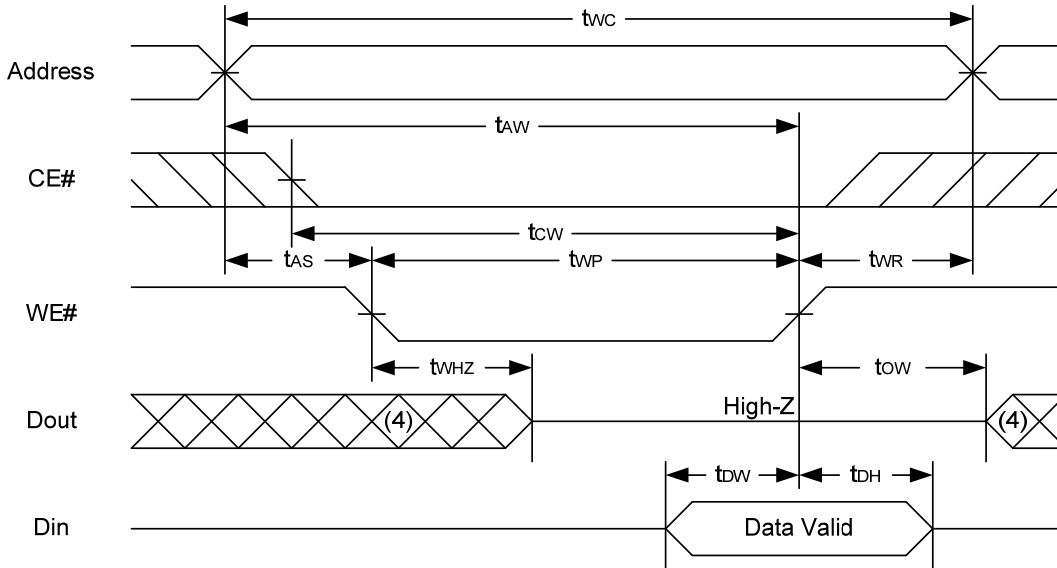


Notes :

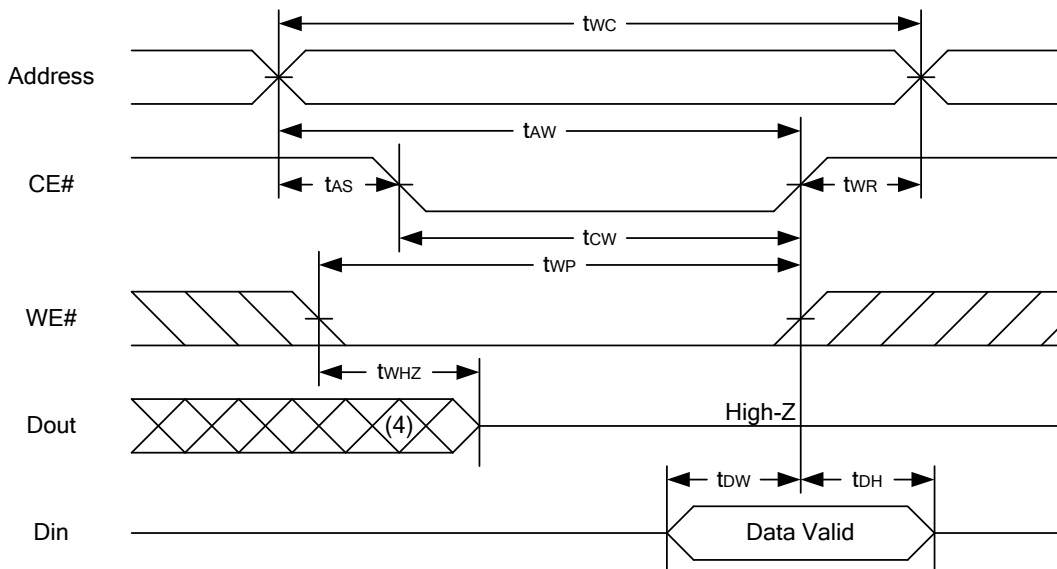
1. WE# is high for read cycle.
2. Device is continuously selected OE# = low, CE# = low.
3. Address must be valid prior to or coincident with CE# = low.; otherwise t_{AA} is the limiting parameter.
4. t_{CLZ} , t_{OLZ} , t_{CHZ} and t_{OHZ} are specified with $C_L = 5pF$. Transition is measured $\pm 500mV$ 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# Controlled) (1,4,5)



Notes :

1. A write occurs during the overlap of a low CE#, 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 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.

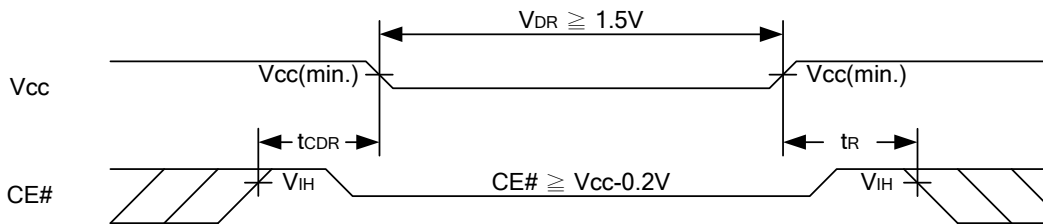


DATA RETENTION CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Vcc for Data Retention	V _{DR}	CE# ≥ V _{CC} - 0.2V or CE2 ≤ 0.2V	1.5	-	3.6	V	
Data Retention Current	I _{DR}	V _{CC} = 1.5V CE# ≥ V _{CC} - 0.2V or CE2 ≤ 0.2V Other pins at 0.2V or V _{CC} -0.2V	LL	-	1.0	12	μA
			LLE / LLI	-	1.0	16	μA
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

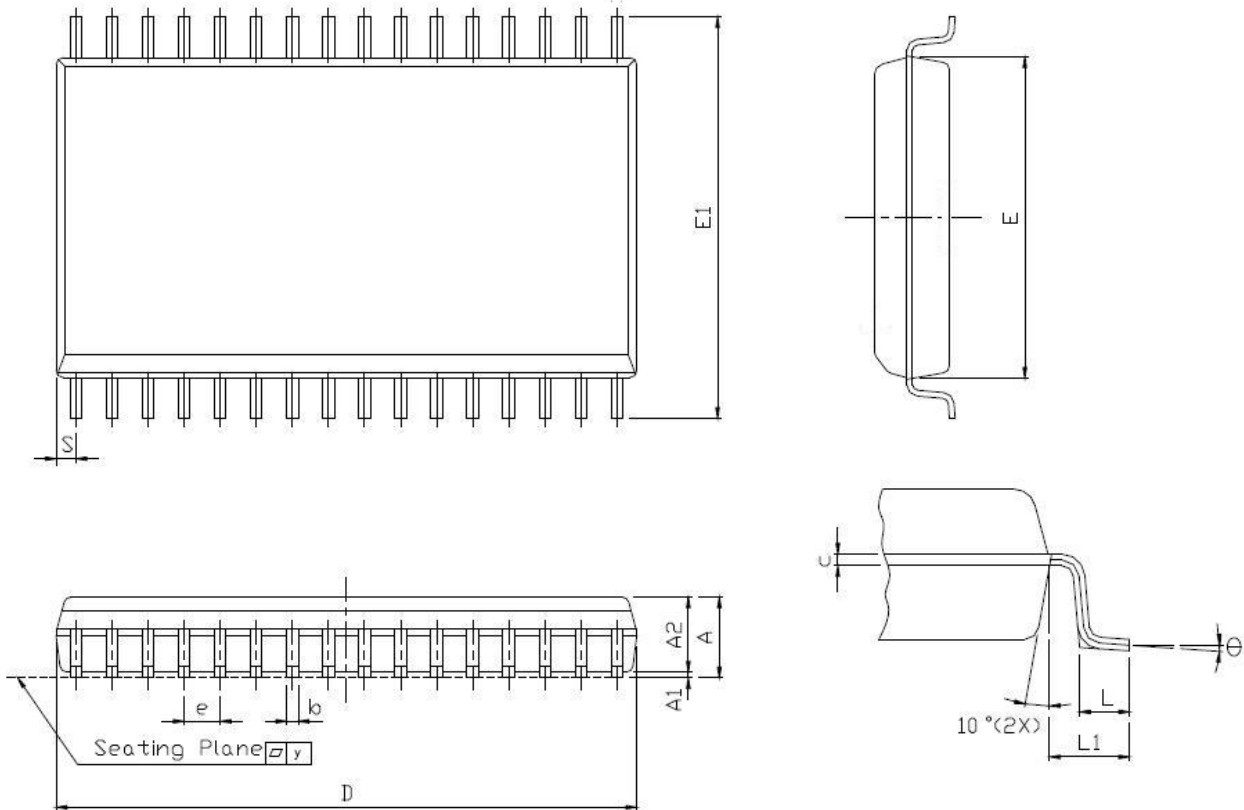
DATA RETENTION WAVEFORM





PACKAGE OUTLINE DIMENSION

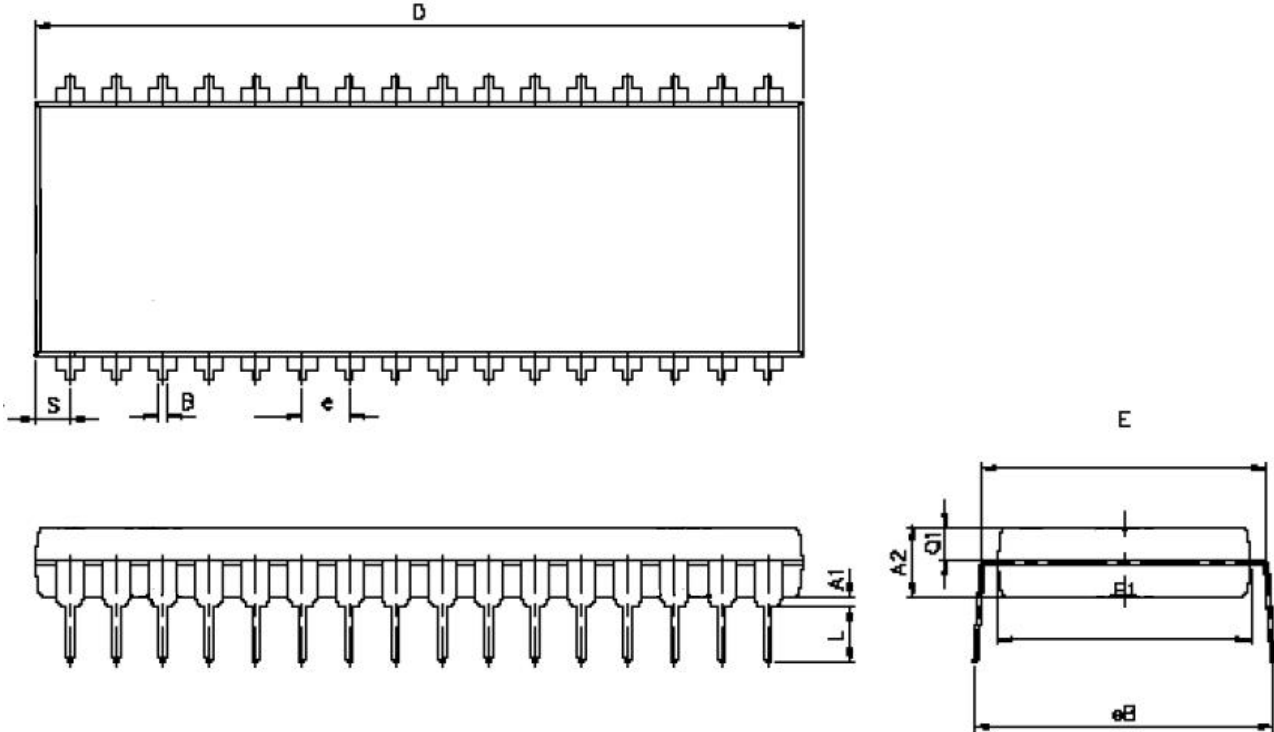
32 pin 450 mil SOP Package Outline Dimension



SYM.	UNIT	INCH.(BASE)	MM(REF)
A		0.120(MAX)	3.048(MAX)
A1		0.004(MIN)	0.102(MIN)
A2		0.116(MAX)	2.946(MAX)
b		0.016(TYP)	0.406(TYP)
c		0.008(TYP)	0.203(TYP)
D		0.817(MAX)	20.75(MAX)
E		0.445±0.006	11.303±0.152
E1		0.555±0.025	14.097±0.635
e		0.050(TYP)	1.270(TYP)
L		0.033±0.017	0.838±0.432
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

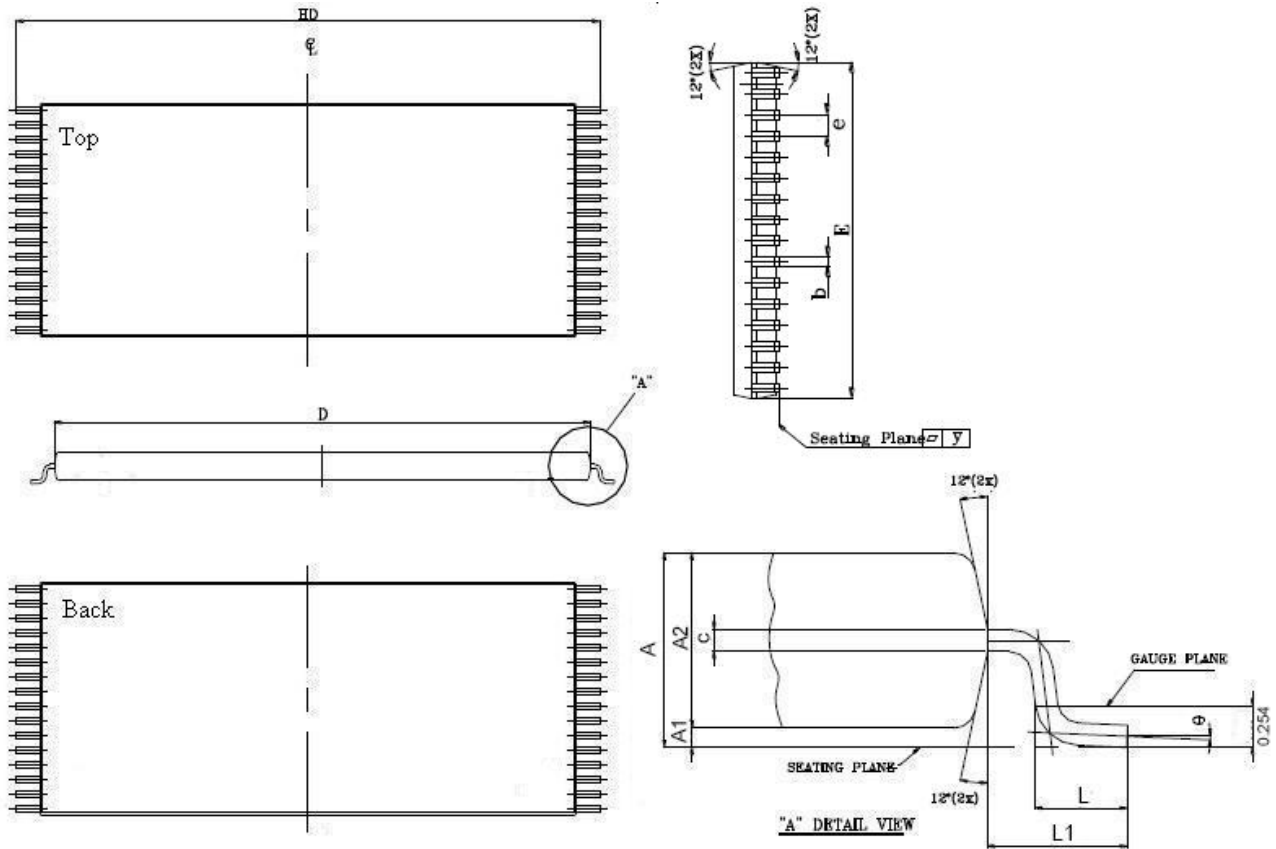


SYM.	UNIT	INCH(BASE)	MM(REF)
A1		0.015(MIN)	0.381(MIN)
A2		0.155±0.005	3.937±0.127
B		0.018±0.005	0.457±0.127
D		1.650±0.01	41.910±0.254
E		0.600±0.010	15.240±0.254
E1		0.545±0.005	13.843±0.127
e		0.100(TYP)	2.540(TYP)
eB		0.650±0.020	16.510±0.508.
L		0.158±0.043	4.013±1.092
S		0.075±0.010	1.905±0.254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

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



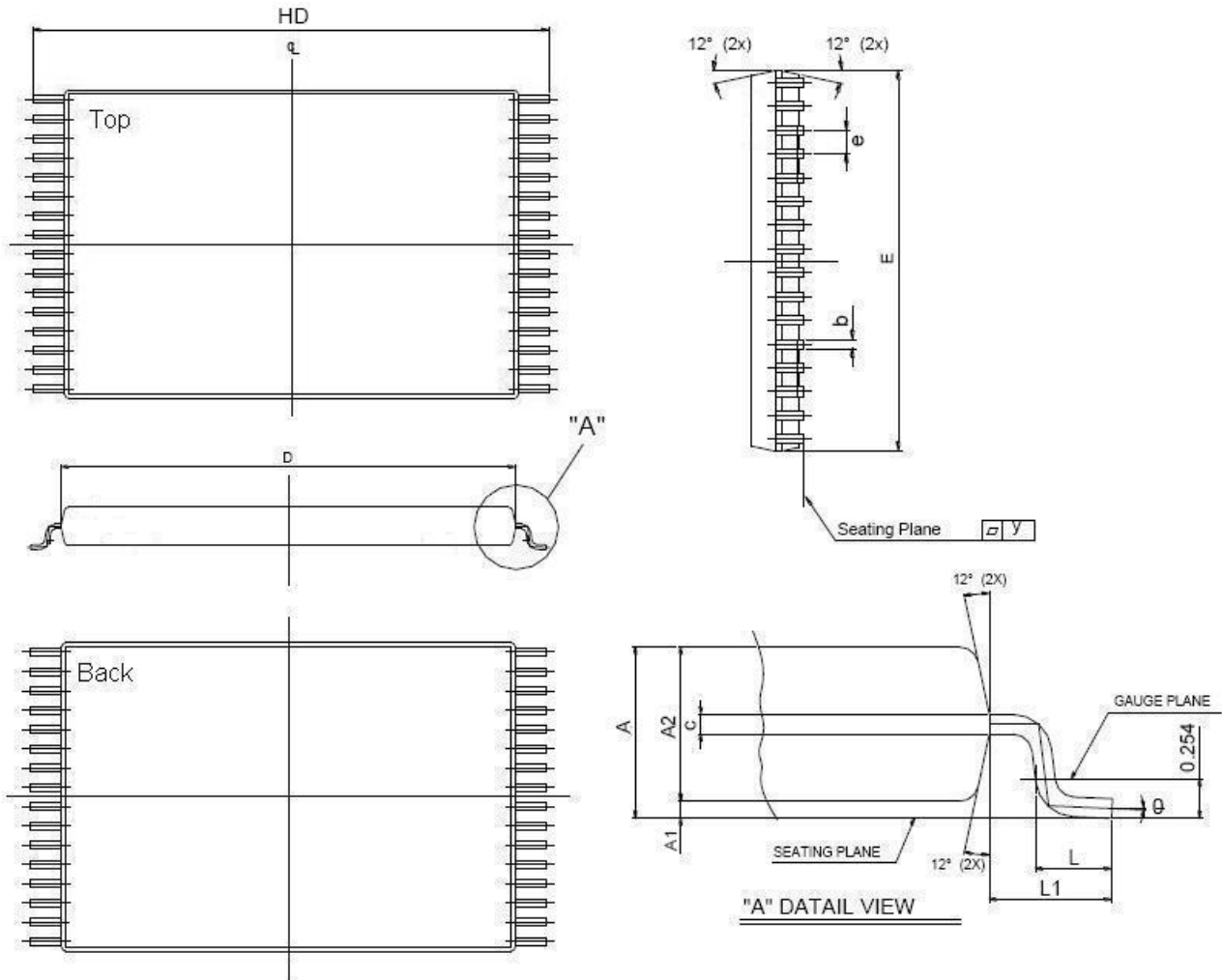
32 pin 8mm x 20mm TSOP I Package Outline Dimension



SYM.	UNIT	INCH(BASE)	MM(REF)
A		0.047 (MAX)	1.20 (MAX)
A1		0.004 \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)
θ		0°~5°	0°~5°



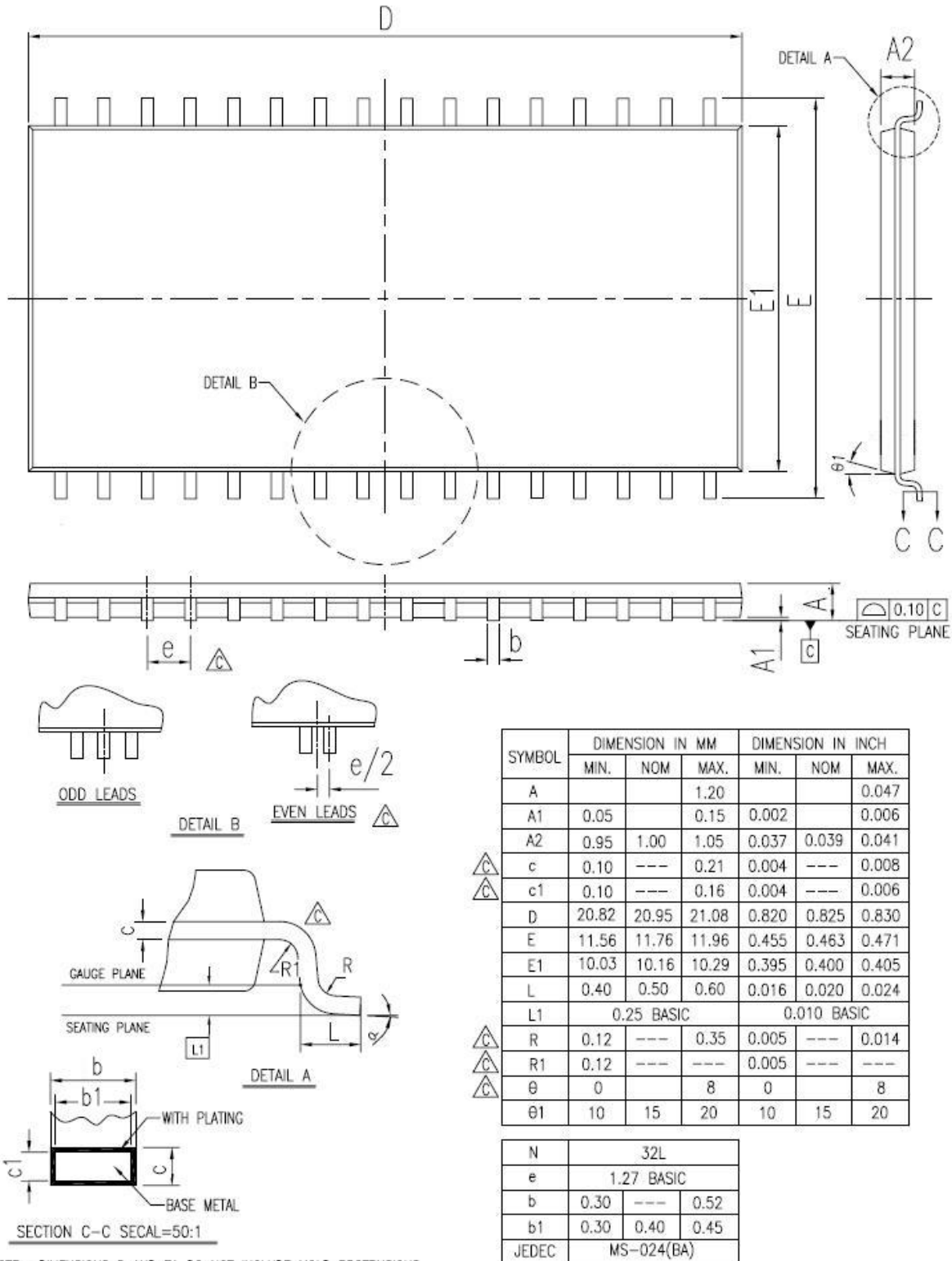
32 pin 8mm x 13.4mm sTSP Package Outline Dimension



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°

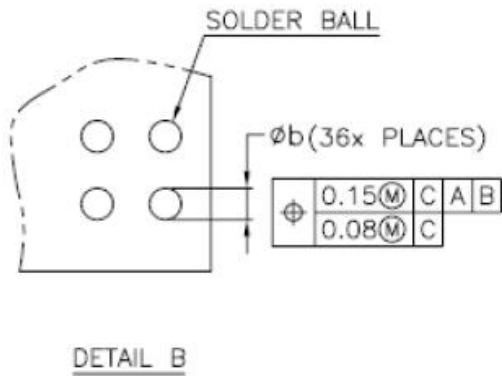
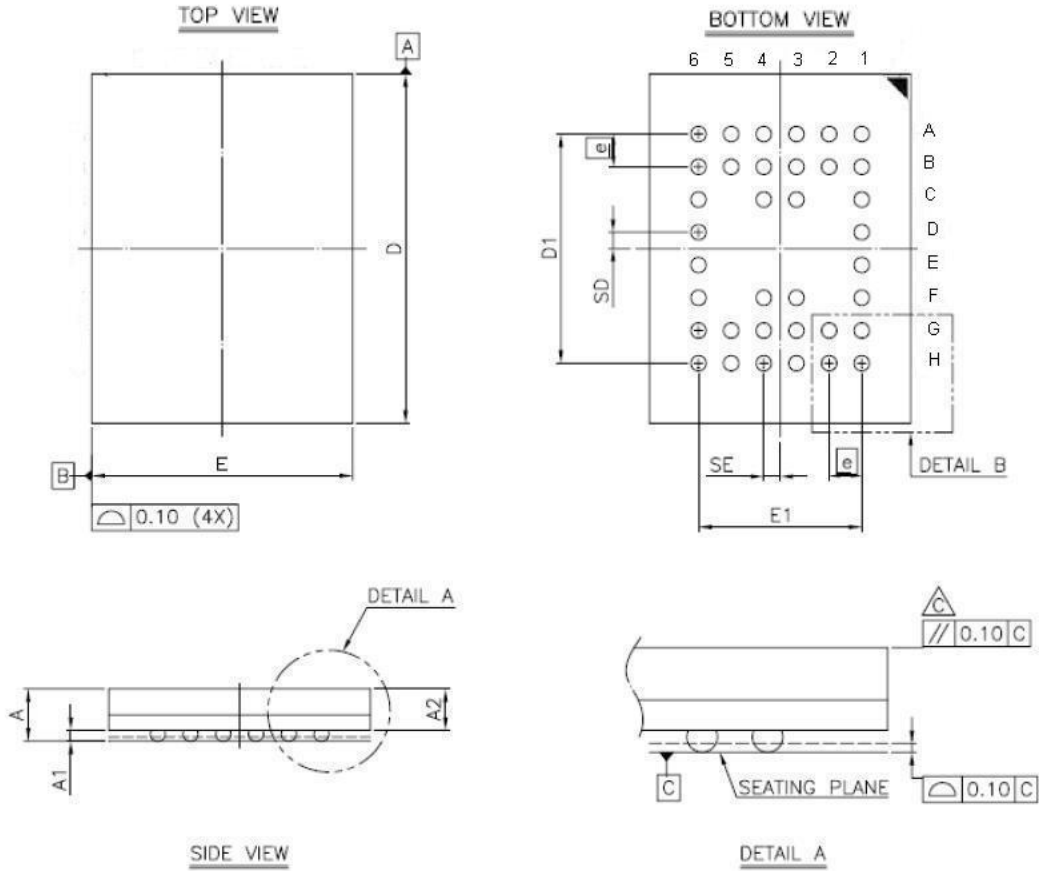


32-pin 400mil TSOP II Package Outline Dimension



NOTE : DIMENSIONS D AND E1 DO NOT INCLUDE MOLD PROTRUSIONS.
D AND E1 ARE MAXIMUM PLASTIC BODY SIZE DIMENSIONS INCLUDING MOLD MISMATCH.

36 ball 6mm × 8mm TFBGA Package Outline Dimension



SYM.	DIMENSION (mm)			DIMENSION (inch)		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	—	—	1.20	—	—	0.047
A1	0.20	0.25	0.30	0.008	0.010	0.012
A2	—	—	0.94	—	—	0.037
b	0.30	0.35	0.40	0.012	0.014	0.016
D	7.95	8.00	8.05	0.313	0.315	0.317
D1	5.25 BSC			0.207 BSC		
E	5.95	6.00	6.05	0.234	0.236	0.238
E1	3.75 BSC			0.148 BSC		
SE	0.375 TYP			0.015 TYP		
SD	0.375 TYP			0.015 TYP		
e	0.75 BSC			0.030 BSC		

NOTE:

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



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32Pin(450mil) SOP	45	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128SL-45LL
				Tape Reel	LY62L5128SL-45LLT
			-20°C~80°C	Tray	LY62L5128SL-45LLE
				Tape Reel	LY62L5128SL-45LLET
			-40°C~85°C	Tray	LY62L5128SL-45LLI
				Tape Reel	LY62L5128SL-45LLIT
	55	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128SL-55LL
				Tape Reel	LY62L5128SL-55LLT
			-20°C~80°C	Tray	LY62L5128SL-55LLE
				Tape Reel	LY62L5128SL-55LLET
			-40°C~85°C	Tray	LY62L5128SL-55LLI
				Tape Reel	LY62L5128SL-55LLIT
70	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128SL-70LL	
			Tape Reel	LY62L5128SL-70LLT	
		-20°C~80°C	Tray	LY62L5128SL-70LLE	
			Tape Reel	LY62L5128SL-70LLET	
		-40°C~85°C	Tray	LY62L5128SL-70LLI	
			Tape Reel	LY62L5128SL-70LLIT	



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32Pin(600mil) PDIP	45	Ultra Low Power (LL)	0°C~70°C	Tube	LY62L5128PL-45LL
			-20°C~80°C	Tube	LY62L5128PL-45LLE
			-40°C~85°C	Tube	LY62L5128PL-45LLI
	55	Ultra Low Power (LL)	0°C~70°C	Tube	LY62L5128PL-55LL
			-20°C~80°C	Tube	LY62L5128PL-55LLE
			-40°C~85°C	Tube	LY62L5128PL-55LLI
	70	Ultra Low Power (LL)	0°C~70°C	Tube	LY62L5128PL-70LL
			-20°C~80°C	Tube	LY62L5128PL-70LLE
			-40°C~85°C	Tube	LY62L5128PL-70LLI



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32Pin (8mmx20mm) TSOP I	45	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128LL-45LL
				Tape Reel	LY62L5128LL-45LLT
			-20°C~80°C	Tray	LY62L5128LL-45LLE
				Tape Reel	LY62L5128LL-45LLET
			-40°C~85°C	Tray	LY62L5128LL-45LLI
				Tape Reel	LY62L5128LL-45LLIT
	55	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128LL-55LL
				Tape Reel	LY62L5128LL-55LLT
			-20°C~80°C	Tray	LY62L5128LL-55LLE
				Tape Reel	LY62L5128LL-55LLET
			-40°C~85°C	Tray	LY62L5128LL-55LLI
				Tape Reel	LY62L5128LL-55LLIT
70	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128LL-70LL	
			Tape Reel	LY62L5128LL-70LLT	
		-20°C~80°C	Tray	LY62L5128LL-70LLE	
			Tape Reel	LY62L5128LL-70LLET	
		-40°C~85°C	Tray	LY62L5128LL-70LLI	
			Tape Reel	LY62L5128LL-70LLIT	



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32Pin (8mmx13.4mm) sTSOP	45	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128RL-45LL
				Tape Reel	LY62L5128RL-45LLT
			-20°C~80°C	Tray	LY62L5128RL-45LLE
				Tape Reel	LY62L5128RL-45LLET
			-40°C~85°C	Tray	LY62L5128RL-45LLI
				Tape Reel	LY62L5128RL-45LLIT
	55	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128RL-55LL
				Tape Reel	LY62L5128RL-55LLT
			-20°C~80°C	Tray	LY62L5128RL-55LLE
				Tape Reel	LY62L5128RL-55LLET
			-40°C~85°C	Tray	LY62L5128RL-55LLI
				Tape Reel	LY62L5128RL-55LLIT
70	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128RL-70LL	
			Tape Reel	LY62L5128RL-70LLT	
		-20°C~80°C	Tray	LY62L5128RL-70LLE	
			Tape Reel	LY62L5128RL-70LLET	
		-40°C~85°C	Tray	LY62L5128RL-70LLI	
			Tape Reel	LY62L5128RL-70LLIT	



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
32Pin(400mil) TSOP II	45	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128WL-45LL
				Tape Reel	LY62L5128WL-45LLT
			-20°C~80°C	Tray	LY62L5128WL-45LLE
				Tape Reel	LY62L5128WL-45LLET
			-40°C~85°C	Tray	LY62L5128WL-45LLI
				Tape Reel	LY62L5128WL-45LLIT
	55	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128WL-55LL
				Tape Reel	LY62L5128WL-55LLT
			-20°C~80°C	Tray	LY62L5128WL-55LLE
				Tape Reel	LY62L5128WL-55LLET
			-40°C~85°C	Tray	LY62L5128WL-55LLI
				Tape Reel	LY62L5128WL-55LLIT
70	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128WL-70LL	
			Tape Reel	LY62L5128WL-70LLT	
		-20°C~80°C	Tray	LY62L5128WL-70LLE	
			Tape Reel	LY62L5128WL-70LLET	
		-40°C~85°C	Tray	LY62L5128WL-70LLI	
			Tape Reel	LY62L5128WL-70LLIT	



ORDERING INFORMATION

[Production Status: M/P]

Package Type	Access Time (Speed)(ns)	Power Type	Temperature Range(°C)	Packing Type	Lyontek Item No.
36Ball (6mmx8mm) TFBGA	45	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128GL-45LL
				Tape Reel	LY62L5128GL-45LLT
			-20°C~80°C	Tray	LY62L5128GL-45LLE
				Tape Reel	LY62L5128GL-45LLET
			-40°C~85°C	Tray	LY62L5128GL-45LLI
				Tape Reel	LY62L5128GL-45LLIT
	55	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128GL-55LL
				Tape Reel	LY62L5128GL-55LLT
			-20°C~80°C	Tray	LY62L5128GL-55LLE
				Tape Reel	LY62L5128GL-55LLET
			-40°C~85°C	Tray	LY62L5128GL-55LLI
				Tape Reel	LY62L5128GL-55LLIT
70	Ultra Low Power (LL)	0°C~70°C	Tray	LY62L5128GL-70LL	
			Tape Reel	LY62L5128GL-70LLT	
		-20°C~80°C	Tray	LY62L5128GL-70LLE	
			Tape Reel	LY62L5128GL-70LLET	
		-40°C~85°C	Tray	LY62L5128GL-70LLI	
			Tape Reel	LY62L5128GL-70LLIT	



ORDERING INFORMATION

[Production Status: **EOL**]

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
32Pin(450mil) SOP	45	0°C~70°C	Tray	LY62L5128SL-45SL	LY62L5128BSL-45SL
			Tape Reel	LY62L5128SL-45SLT	LY62L5128BSL-45SLT
		-20°C~80°C	Tray	LY62L5128SL-45SLE	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-45SLET	LY62L5128BSL-45SLIT
		-40°C~85°C	Tray	LY62L5128SL-45SLI	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-45SLIT	LY62L5128BSL-45SLIT
	55	0°C~70°C	Tray	LY62L5128SL-55SL	LY62L5128BSL-45SL
			Tape Reel	LY62L5128SL-55SLT	LY62L5128BSL-45SLT
		-20°C~80°C	Tray	LY62L5128SL-55SLE	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-55SLET	LY62L5128BSL-45SLIT
		-40°C~85°C	Tray	LY62L5128SL-55SLI	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-55SLIT	LY62L5128BSL-45SLIT
	70	0°C~70°C	Tray	LY62L5128SL-70SL	LY62L5128BSL-45SL
			Tape Reel	LY62L5128SL-70SLT	LY62L5128BSL-45SLT
		-20°C~80°C	Tray	LY62L5128SL-70SLE	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-70SLET	LY62L5128BSL-45SLIT
		-40°C~85°C	Tray	LY62L5128SL-70SLI	LY62L5128BSL-45SLI
			Tape Reel	LY62L5128SL-70SLIT	LY62L5128BSL-45SLIT



ORDERING INFORMATION

[Production Status: **EOL**]

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
32Pin(600mil) PDIP	45	0°C~70°C	Tube	LY62L5128PL-45SL	LY62L5128PL-45LL
		-20°C~80°C	Tube	LY62L5128PL-45SLE	LY62L5128PL-45LLE
		-40°C~85°C	Tube	LY62L5128PL-45SLI	LY62L5128PL-45LLI
	55	0°C~70°C	Tube	LY62L5128PL-55SL	LY62L5128PL-55LL
		-20°C~80°C	Tube	LY62L5128PL-55SLE	LY62L5128PL-55LLE
		-40°C~85°C	Tube	LY62L5128PL-55SLI	LY62L5128PL-55LLI
	70	0°C~70°C	Tube	LY62L5128PL-70SL	LY62L5128PL-70LL
		-20°C~80°C	Tube	LY62L5128PL-70SLE	LY62L5128PL-70LLE
		-40°C~85°C	Tube	LY62L5128PL-70SLI	LY62L5128PL-70LLI



ORDERING INFORMATION

[Production Status: **EOL**]

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
32Pin (8mmx20mm) TSOP I	45	0°C~70°C	Tray	LY62L5128LL-45SL	LY62L5128BLL-45SL
			Tape Reel	LY62L5128LL-45SLT	LY62L5128BLL-45SLT
		-20°C~80°C	Tray	LY62L5128LL-45SLE	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-45SLET	LY62L5128BLL-45SLIT
		-40°C~85°C	Tray	LY62L5128LL-45SLI	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-45SLIT	LY62L5128BLL-45SLIT
	55	0°C~70°C	Tray	LY62L5128LL-55SL	LY62L5128BLL-45SL
			Tape Reel	LY62L5128LL-55SLT	LY62L5128BLL-45SLT
		-20°C~80°C	Tray	LY62L5128LL-55SLE	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-55SLET	LY62L5128BLL-45SLIT
		-40°C~85°C	Tray	LY62L5128LL-55SLI	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-55SLIT	LY62L5128BLL-45SLIT
	70	0°C~70°C	Tray	LY62L5128LL-70SL	LY62L5128BLL-45SL
			Tape Reel	LY62L5128LL-70SLT	LY62L5128BLL-45SLT
		-20°C~80°C	Tray	LY62L5128LL-70SLE	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-70SLET	LY62L5128BLL-45SLIT
		-40°C~85°C	Tray	LY62L5128LL-70SLI	LY62L5128BLL-45SLI
			Tape Reel	LY62L5128LL-70SLIT	LY62L5128BLL-45SLIT

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

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ORDERING INFORMATION

[Production Status: **EOL**]

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
32Pin (8mmx13.4mm) sTSOP	45	0°C~70°C	Tray	LY62L5128RL-45SL	LY62L5128BRL-45SL
			Tape Reel	LY62L5128RL-45SLT	LY62L5128BRL-45SLT
		-20°C~80°C	Tray	LY62L5128RL-45SLE	LY62L5128BRL-45SLI
			Tape Reel	LY62L5128RL-45SLET	LY62L5128BRL-45SLIT
		-40°C~85°C	Tray	LY62L5128RL-45SLI	LY62L5128BRL-45SLI
			Tape Reel	LY62L5128RL-45SLIT	LY62L5128BRL-45SLIT
	55	0°C~70°C	Tray	LY62L5128RL-55SL	LY62L5128BRL-45SL
			Tape Reel	LY62L5128RL-55SLT	LY62L5128BRL-45SLT
		-20°C~80°C	Tray	LY62L5128RL-55SLE	LY62L5128BRL-45SLI
			Tape Reel	LY62L5128RL-55SLET	LY62L5128BRL-45SLIT
		-40°C~85°C	Tray	LY62L5128RL-55SLI	LY62L5128BRL-45SLI
			Tape Reel	LY62L5128RL-55SLIT	LY62L5128BRL-45SLIT
	70	0°C~70°C	Tray	LY62L5128RL-70SL	LY62L5128BRL-45SL
			Tape Reel	LY62L5128RL-70SLT	LY62L5128BRL-45SLT
		-20°C~80°C	Tray	LY62L5128RL-70SLE	LY62L5128BRL-45SLI
			Tape Reel	LY62L5128RL-70SLET	LY62L5128BRL-45SLIT
-40°C~85°C		Tray	LY62L5128RL-70SLI	LY62L5128BRL-45SLI	
		Tape Reel	LY62L5128RL-70SLIT	LY62L5128BRL-45SLIT	

**ORDERING INFORMATION****[Production Status: EOL]**

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
32Pin(400mil) TSOP II	45	0°C~70°C	Tray	LY62L5128WL-45SL	LY62L5128BWL-45SL
			Tape Reel	LY62L5128WL-45SLT	LY62L5128BWL-45SLT
		-20°C~80°C	Tray	LY62L5128WL-45SLE	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-45SLET	LY62L5128BWL-45SLIT
		-40°C~85°C	Tray	LY62L5128WL-45SLI	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-45SLIT	LY62L5128BWL-45SLIT
	55	0°C~70°C	Tray	LY62L5128WL-55SL	LY62L5128BWL-45SL
			Tape Reel	LY62L5128WL-55SLT	LY62L5128BWL-45SLT
		-20°C~80°C	Tray	LY62L5128WL-55SLE	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-55SLET	LY62L5128BWL-45SLIT
		-40°C~85°C	Tray	LY62L5128WL-55SLI	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-55SLIT	LY62L5128BWL-45SLIT
	70	0°C~70°C	Tray	LY62L5128WL-70SL	LY62L5128BWL-45SL
			Tape Reel	LY62L5128WL-70SLT	LY62L5128BWL-45SLT
		-20°C~80°C	Tray	LY62L5128WL-70SLE	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-70SLET	LY62L5128BWL-45SLIT
		-40°C~85°C	Tray	LY62L5128WL-70SLI	LY62L5128BWL-45SLI
			Tape Reel	LY62L5128WL-70SLIT	LY62L5128BWL-45SLIT

**ORDERING INFORMATION****[Production Status: EOL]**

Power Type : Special Ultra Low Power

Package Type	Access Time (Speed)(ns)	Temperature Range(°C)	Packing Type	EOL Item No.	Substitute Product
36Ball (6mmx8mm) TFBGA	45	0°C~70°C	Tray	LY62L5128GL-45SL	LY62L5128BGL-45SL
			Tape Reel	LY62L5128GL-45SLT	LY62L5128BGL-45SLT
		-20°C~80°C	Tray	LY62L5128GL-45SLE	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-45SLET	LY62L5128BGL-45SLIT
		-40°C~85°C	Tray	LY62L5128GL-45SLI	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-45SLIT	LY62L5128BGL-45SLIT
	55	0°C~70°C	Tray	LY62L5128GL-55SL	LY62L5128BGL-45SL
			Tape Reel	LY62L5128GL-55SLT	LY62L5128BGL-45SLT
		-20°C~80°C	Tray	LY62L5128GL-55SLE	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-55SLET	LY62L5128BGL-45SLIT
		-40°C~85°C	Tray	LY62L5128GL-55SLI	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-55SLIT	LY62L5128BGL-45SLIT
	70	0°C~70°C	Tray	LY62L5128GL-70SL	LY62L5128BGL-45SL
			Tape Reel	LY62L5128GL-70SLT	LY62L5128BGL-45SLT
		-20°C~80°C	Tray	LY62L5128GL-70SLE	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-70SLET	LY62L5128BGL-45SLIT
		-40°C~85°C	Tray	LY62L5128GL-70SLI	LY62L5128BGL-45SLI
			Tape Reel	LY62L5128GL-70SLIT	LY62L5128BGL-45SLIT



Lyontek Inc.

LY62L5128

Rev.2.0

512K X 8 BIT LOW POWER CMOS SRAM

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