



來揚科技股份有限公司
Lyontek Inc.



Asynchronous **SRAM** Professional

Long-Term and Stable Supplier
Your Reliable Green Partner

→ Selection Guide

visit us at www.lyontek.com.tw

Lyontek Inc.

Lyontek Inc. is a fabless IC design company established in 2003 and located in Hsin-Chu Taiwan . We are dedicated in Asynchronous SRAM product design, developing and manufacturing for the following target markets:

- (a) Industrial Electronics
- (b) POS
- (c) Consumer electronics
- (d) Communication
- (e) Automotive electronics
- (f) Medical electronics.

We are also developing audio amplifier products focused on our target market.

Policy

- Long term supply of SRAM products : 64K to 32M SRAM.
- Various power supply voltages:1.8V,3V,5V and wide range as 2.7~5.5V.
- Diversified package types : SOP,TSOP I,TSOP II,BGA,PDIP,SOJ etc.
- Support small quantity order.
- All team members of Lyontek are well-experienced in providing sufficient technical support and service to our customers.
- We take great effort to build and sustain long-term relationships with foundry fabs,assembly and testing subcontractors to ensure Lyontek's commitment of continuous supply.

Accomplishment

- Over 100Mpcs SRAM delivered
- Certificates : SONY Green Partner, ISO9001&14001, QC080000, China RoHS



Low Power SRAM

3V Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY6264	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
256K	32Kx8	LY62256	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
		LY62256B	45	28 SOP / 28 PDIP-600mil / 28 sTSOP
1M	128Kx8	LY62L1024	35/45/55/70	32 SOP / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY62L6416	45/55/70	44 TSOP II / 48 BGA
		LY62L6416B	45/55	44 TSOP II / 48 BGA
2M	256Kx8	LY62L2568	45/55/70	32 SOP / 32 TSOP I / 32 sTSOP / 36 BGA
		LY62L2568B	45/55	32 SOP / 32 PDIP / 32 TSOP I / 32 TSOP II / 32 sTSOP / 36 BGA
	128Kx16	LY62L12816	45/55/70	44 TSOP II / 48 BGA
		LY62L12816B	45/55	44 TSOP II / 48 BGA
		LY62L12916	45/55/70	48 TSOP I / 44 TSOP II / 48 BGA
4M	512Kx8	LY62L5128	45/55/70	32 SOP / 32 PDIP / 32 TSOP I / 32 TSOP II / 32 sTSOP / 36 BGA
		LY62L5128B	45/55	32 SOP / 32 PDIP / 32 TSOP I / 32 TSOP II / 32 sTSOP / 36 BGA
	256Kx16	LY62L25616	45/55/70	44 TSOP II / 48 BGA
		LY62L25616B	45/55	44 TSOP II / 48 BGA
		LY62L25716	45/55/70	48 TSOP I / 44 TSOP II / 48 BGA
		LY62L25716B	45/55	48 TSOP I / 48 BGA
8M	1Mx8	LY62L10248	55/70	44 TSOP II / 48 BGA
		LY62L10248B	45/55	44 TSOP II / 48 BGA
	512Kx16	LY62L51216	55/70	44 TSOP II / 48 BGA
		LY62L51216B	45/55	44 TSOP II
		LY62L51316	55/70	48 TSOP I / 48 BGA
		LY62L51316B	45/55	48 TSOP I / 48 BGA
16M	2Mx8	LY62L20488	55/70	44 TSOP II
		LY62L20488B	45/55	44 TSOP II / 48 BGA
	1Mx16	LY62L102516	55/70	48 TSOP I
		LY62L102516B	55/70(SL) 45/55	48 BGA 48 TSOP I / 48 BGA
	1Mx16/ 2Mx8	LY62L102616	55/70	48 TSOP I
		LY62L102616B	45/55	48 TSOP I
32M	2Mx16	LY62L204916B	55	48 BGA
	4Mx8/ 2Mx16	LY62L205016B	55	48 TSOP I
64M	4Mx16	LY62L409716A	55	48 BGA
	8Mx8/4Mx16	LY62L409816A	55	48 TSOP I
128M	8Mx16	LY62L819216A	55	48 BGA

Low Power SRAM

5V Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY6264	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
256K	32Kx8	LY62256	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
		LY62256B	45	28 SOP / 28 PDIP-600mil / 28 sTSOP
1M	128Kx8	LY621024	35/55/70	32 SOP / 32 PDIP-600mil / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY626416	45/55/70	44 TSOP II
2M	256Kx8	LY622568	45/55/70	32 SOP / 32 TSOP I / 32 sTSOP
	128Kx16	LY6212816	45/55/70	44 TSOP II
4M	512Kx8	LY625128	45/55/70	32 SOP / 32 PDIP-600mil / 32 TSOP I / 32 sTSOP
	256Kx16	LY6225616	45/55/70	44 TSOP II / 48 BGA
8M	1Mx8	LY6210248	55/70	44 TSOP II
	512Kx16	LY6251216	55/70	44 TSOP II
16M	2Mx8	LY6220488	55/70	44 TSOP II
	1Mx16	LY62102516	55/70	48 TSOP I
	1Mx16/ 2Mx8	LY62102616	55/70	48 TSOP I

2.7-5.5V Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY6264	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
256K	32Kx8	LY62256	35/55/70	28 SOP / 28 PDIP-300mil / 28 PDIP-600mil / 28 sTSOP
		LY62256B	45	28 SOP / 28 PDIP-600mil / 28 sTSOP
1M	128Kx8	LY62W1024	35/55/70	32 SOP / 32 PDIP-600mil / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY62W6416	45/55/70	44 TSOP II / 48 BGA
		LY62W6416B	45/55/70	44 TSOP II / 48 BGA
2M	256Kx8	LY62W2568	55/70	32 SOP / 32 TSOP I / 32 sTSOP
		LY62W2568B	45/55/70	32 SOP / 32 PDIP-600mil / 32 TSOP I / 32 sTSOP / 36 BGA
	128Kx16	LY62W12816	45/55/70	44 TSOP II / 48 BGA
		LY62W12816B	45/55	44 TSOP II / 48 BGA
4M	512Kx8	LY62W5128	55/70	32 SOP / 32 PDIP / 32 TSOP I / 32 TSOP II / 32 sTSOP / 36 BGA
		LY62W5128B	45/55	32 SOP / 32 PDIP / 32 TSOP I / 32 sTSOP / 36 BGA
	256Kx16	LY62W25616	55/70	44 TSOP II / 48 BGA
		LY62W25616B	45/55/70	44 TSOP II / 48 BGA
8M	1Mx8	LY62W10248	55/70	44 TSOP II / 48 BGA
		LY62W10248B	45/55	44 TSOP II / 48 BGA
	512Kx16	LY62W51216	55/70	44 TSOP II / 48 BGA
		LY62W51216B	45/55	44 TSOP II / 48 BGA
		LY62W51316	55/70	48 TSOP I / 48 BGA
		LY62W51316B	45/55	48 TSOP I / 48 BGA
16M	2Mx8	LY62W20488	55/70	44 TSOP II
		LY62W20488B	45/55	44 TSOP II
	1Mx16	LY62W102516	55/70	48 TSOP I
		LY62W102516B	45/55	48 TSOP I
		LY62W102616B	45/55	48 TSOP I

Low Power SRAM

1.8V Ultra Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
1M	128Kx8	LY62S1024	70	32 SOP / 32 TSOP I / 32 sTSOP / 36 BGA

Low Power SRAM with ECC

Low Power SRAM with ECC

Density	Organization	Part No.	Speed(ns)	Package
1M	128Kx8	LY69L1024A	45/55	32 SOP / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY69L6416A	45/55	44 TSOP II / 48 BGA
4M	256Kx16	LY69L25616A	45/55	44 TSOP II / 48 BGA
16M	1Mx16 / 2Mx8	LY69L102616A	55	48 TSOP I
32M	2Mx16 / 4Mx8	LY69L205016A	55	48 TSOP I

Serial PSRAM , Serial SRAM

PSRAM with SQPI Interface Selection Guide

Density	Organization	Part No.	Max. Bandwidth(Mbps.)	Package
64M	8Mx8	LY68L6400	133	8-pin 150 mil SOP / 8-pin 2mmx3mm DFN
		LY68S6400	144	8-pin 150 mil SOP / 8-pin 2mmx3mm DFN
128M	8Mx8	LY68L1282	133	16-pin 150 mil SOP
		LY68S1282	144	16-pin 150 mil SOP

2.5-5.5V Serial SRAM with SPI/SQPI Interface Selection Guide

Density	Organization	Part No.	Max. Bandwidth(Mbps.)	Package	Status
64K	8K x 8	LY68W64	20	8-pin 150 mil SOP / 8-pin MSOP	Sample
256K	32Kx8	LY68W256	20	8-pin 150 mil SOP / 8-pin MSOP	Sample
	32Kx8	LY68W257	20	8-pin 150 mil SOP / 8-pin MSOP	Developing
512K	64Kx8	LY68W512	20	8-pin 150 mil SOP / 8-pin MSOP	Sample
1M	128Kx8	LY68W1024	20	8-pin 150 mil SOP / 8-pin MSOP	Sample
	128Kx8	LY68W1025	20	8-pin 150 mil SOP / 8-pin MSOP	Developing
2M	256Kx8	LY68W2568	20	8-pin 150 mil SOP / 8-pin MSOP	Developing
4M	512Kx8	LY68W5128	20	8-pin 150 mil SOP	Developing

High Speed SRAM

5V High Speed SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY6164	12/15	28 SOJ / 28 PDIP-300mil / 28 sTSOP
256K	32Kx8	LY61256	12/15	28 SOJ / 28 PDIP-300mil / 28 sTSOP
1M	128Kx8	LY611024	12/15	32 SOJ / 32 TSOP I / 32 sTSOP
	64Kx16	LY616416	15/20	44 TSOP II
2M	256Kx8	LY612568	15/20/25	44 TSOP II
	128Kx16	LY6112816	20	44 TSOP II
4M	512Kx8	LY615128	10/12/20	44 TSOP II
	256Kx16	LY6125616	10/12/15/20	44 TSOP II

3.3V High Speed SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
256K	32Kx8	LY61L256	12/15	28 SOJ / 28 sTSOP
1M	128Kx8	LY61L1288	10/12	32 TSOP II / 32 sTSOP
		LY61L1024	10/12/18	32 SOJ / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY61L6416	10/12/15	44 TSOP II / 48 BGA
		LY61L6416B	25	44 TSOP II
2M	256Kx8	LY61L2568A	8/10	44 TSOP II
	128Kx16	LY61L12816A	8/10	44 TSOP II / 48 BGA
4M	512Kx8	LY61L5128	20	44 TSOP II
		LY61L5128A	8/10	44 TSOP II / 36 BGA
	256Kx16	LY61L25616	20	44 TSOP II
		LY61L25616A	8/10	44 TSOP II / 48 BGA
8M	1Mx8	LY61L10248A	8/10	44 TSOP II / 48 BGA
		LY61L10268A	8/10	48 BGA
	512Kx16	LY61L51216A	8/10	44 TSOP II / 48 BGA
	256Kx32	LY61L25732A	10	90 BGA
16M	2Mx8	LY61L20508A	10	44 TSOP II / 48 BGA
		LY61L20498A	10	54 TSOP II / 48 BGA
	1Mx16	LY61L102416A	10/12	48 TSOP I / 48 BGA
		LY61L102516A	10	54 TSOP II / 48 BGA
	512Kx32	LY61L51332A	10	90 BGA

Ultra Low Power High Speed SRAM

5V Ultra Low Power High Speed SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
256K	32Kx8	LY61256	12LL/15LL	28 SOJ / 28 PDIP-300mil / 28 sTSOP
1M	128Kx8	LY611024	12LL/15LL	32 SOJ / 32 TSOP I / 32 sTSOP
	64Kx16	LY616416	15LL/20LL	44 TSOP II
2M	256Kx8	LY6112816	20LL	44 TSOP II
4M	512Kx8	LY6125616	15LL/20LL	44 TSOP II

3.3V Ultra Low Power High Speed SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
256K	32Kx8	LY61L256	12LL/15LL	28 SOJ / 28 sTSOP
1M	128Kx8	LY61L1024	18LL	32 SOJ / 32 TSOP I / 32 sTSOP / 36 BGA
	64Kx16	LY61L6416B	25LL	44 TSOP II
4M	512Kx8	LY61L5128	20LL	44 TSOP II
	256Kx16	LY61L25616	20LL	44 TSOP II

High Speed Low Power SRAM

5V High Speed Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY6564	20	28 sTSOP
256K	32Kx8	LY65256	20	28 sTSOP
1M	128Kx8	LY651024	20	32 TSOP I / 32 sTSOP

3.0V~5.5V High Speed Low Power SRAM Selection Guide

Density	Organization	Part No.	Speed(ns)	Package
64K	8Kx8	LY65W64	25	28 sTSOP
256K	32Kx8	LY65W256	25	28 sTSOP
1M	128Kx8	LY65W1024	25	32 TSOP I / 32 sTSOP

Inverting DC/DC Converter

Inverting DC/DC Converter

Part Number	Input Vdd/Vcc.	Output Voltage	I _{sb}	I _q	Control Mode	Freq.(KHz)	Package	Note
LY1152	2.4V~7.0V	-1.22 ~ -40V	0.1uA	90uA	PFM	60~160KHz	SOP8	-

NVSRAM with SPI & SQPI

NVSRAM with SPI & SQPI Interface Selection Guide

Density	Organization	Part No.	Interface	Max. Bandwidth(Mbps.)	Package
256K	32Kx8	LY6NL256A	SPI	133	8pin DNF
1M	128Kx8	LY6NL1024A	SPI	133	8pin DNF
1M	128Kx8	LY6NL1025A	QSPI	108	16-pin SOP
1M	128Kx8	LY6NL1026A	QSPI	108	16-pin SOP
4M	512Kx8	LY6NL4096A	SPI	80	8pin DNF

Audio Amplifier

Low Power Class AB Selection Guide

Part Number	Stereo/ Mono	Output Power (W)With Load	Vdd / Vcc	Earphone Function	Input	Output	Package	Note(* 1)
LY8891UL	Mono	2.0W/4Ω	2.5V~5.5V	None	Single-End/ Differential	BTL	8 MSOP(118mil)	-

Low Power Class D Selection Guide

Part Number	Stereo/ Mono	Output Power (W)With Load	Vdd / Vcc	Earphone Function	Input	Output	Package	Note(* 1)
LY8005UL	Mono	3.3W/4Ω	2.5V~5.5V	None	Differential	BTL	8 MSOP (118mil)	-
LY8006UL	Mono	3.3W/4Ω	2.5V~5.5V	None	Single-End	BTL	8 MSOP (118mil)	-
LY8009VL	Mono	5.5W/2Ω 3.6W/4Ω	2.5V~5.5V	None	Single-End	BTL	8 ESOP (150mil) (with thermal pad)	-
LY8009UL	Mono	1.7W/8Ω(x2) or 3.6W/4Ω	2.5V~5.5V	None	Single-End	BTL	8 MSOP(118mil)	
LY8010BL	Mono	3.3W/4Ω	2.5V~5.5V	None	Differential	BTL	8 DFN(3x3mm)	

High Power Class D Selection Guide

Part Number	Stereo/ Mono	Output Power (W)With Load	Vdd / Vcc	Earphone Function	Input	Output	Package	Note
LY8326A	Stereo/ Mono	4.5Wx4/4Ω/12V 8Wx2/4Ω/8.4V 16Wx2/4Ω/12V 40Wx2/4Ω/19V*1 47Wx1/4Ω/19V*1	6.3V~24V	None	Differential/ Single-End	4xSE/ 2xBTL/ 2.1 CH./ PBTL	28 TSSOP (with thermal pad)	1. Mute function 2. L/C filter-free operation. 3. Digital gain selectable
LY8361F	Multi Channel	(without heat-sink) 10Wx4/4Ω/19V 16Wx2/4Ω/12V 6Wx2+21W/4Ω/14V (with heat-sink) 10Wx4/4Ω/19V 27Wx2/4Ω/16V 8Wx2+27W/4Ω/16V	8V~19V	None	Single-End	4xSE/ 2xBTL/ 2.1 CH./ PBTL	48 LQFP	1. Mute function 2. Include 2 OP Amp.for High /Low Pass Filter 3. DC Volume Control
LY8366F	Multi Channel	(without heat-sink) 7Wx4/4Ω/14.4V 10Wx4/4Ω/24V 24Wx2/4Ω/14.4V (with heat-sink) 16Wx4/4Ω/22V 30Wx2/4Ω/16V	12V~26V	Yes	Single-End	4xSE/ 2xBTL/ 2.1 CH./ PBTL	48 LQFP	1. Mute function 2. Include 2 OP Amp.for High /Low Pass Filter 3. DC Volume Control

Note: (*1). with heat-sink.

Packing Quantity

Tray and Tube Unit Quantity

Package	Description		
28 SOJ	25 ea / Tube	2,500 ea / 100 Tube / Box	10,000 ea / 4 Box / CTN
32 SOJ	22 ea / Tube	2,200 ea / 100 Tube / Box	8,800 ea / 4 Box / CTN
28 SOP	25 ea / Tube	2,500 ea / 100 Tube / Box	10,000 ea / 4 Box / CTN
28 PDIP	15 ea / Tube	600 ea / 40 Tube / Box	2,400 ea / 4 Box / CTN
32 PDIP	13 ea / Tube	520 ea / 40 Tube / Box	2,080 ea / 4 Box / CTN
32 SOP	72 ea / Tray	720 ea / 10 Tray / Box	4,320 ea / 6 Box / CTN
28/32 sTSOP	234 ea / Tray	2,340 ea / 10 Tray / Box	14,040 ea / 6 Box / CTN
28/32 TSOP I	156 ea / Tray	1,560 ea / 10 Tray / Box	9,360 ea / 6 Box / CTN
28 TSSOP	50 ea / Tube	5,000 ea / 100 Tube / Box	20,000 ea / 4 Box / CTN
48 TSOP I	96 ea / Tray	960 ea / 10 Tray / Box	3,840 ea / 6 Box / CTN
32 TSOP II	117 ea / Tray	1,170 ea / 10 Tray / Box	7,020 ea / 6 Box / CTN
44 TSOP II	135 ea / Tray	1,350 ea / 10 Tray / Box	8,100 ea / 6 Box / CTN
54 TSOP II	108 ea / Tray	1,080 ea / 10 Tray / Box	6,480 ea / 6 Box / CTN
36B/48B TFBGA(6x8mm)	480 ea / Tray	4,800 ea / 10 Tray / Box	28,800 ea / 6 Box / CTN
48B TFBGA(8x10mm)	220 ea / Tray	2,200 ea / 10 Tray / Box	13,200 ea / 6 Box / CTN
90B TFBGA(8x13mm)	240 ea / Tray	2,400 ea / 10 Tray / Box	14,400 ea / 6 Box / CTN
128 LQFP	90 ea / Tray	900 ea / 10 Tray / Box	5,400 ea / 6 Box / CTN
48 LQFP(7x7mm)	250 ea / Tray	2,500 ea / 10 Tray / Box	15,000 ea / 6 Box / CTN

Tape and Reel Unit Quantity

Package	Description		
28/32 SOP	1,000 ea / Reel	1 Reel / Box	5,000 ea / 5 Box / CTN
28/32 SOJ	1,000 ea / Reel	1 Reel / Box	5,000 ea / 5 Box / CTN
28/32 sTSOP	1,500 ea / Reel	1 Reel / Box	7,500 ea / 5 Box / CTN
28/32/48 TSOP I	1,500 ea / Reel	1 Reel / Box	7,500 ea / 5 Box / CTN
32/44/54 TSOP II	1,000 ea / Reel	1 Reel / Box	5,000 ea / 5 Box / CTN
36B/48B/90B TFBGA	2,000 ea / Reel	1 Reel / Box	10,000 ea / 5 Box / CTN
8/10 MSOP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
8/10 EMSOP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
8/10/16 SOP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
8/10/16 ESOP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
16/28 TSSOP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
8/10 DFN	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
16 QFN	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
9B/18B WCSP	3,000 ea / Reel	1 Reel / Box	15,000 ea / 5 Box / CTN
48 LQFP	1,000 ea / Reel	1 Reel / Box	5,000 ea / 5 Box / CTN

Headquarters

300 新竹科學園區工業東二路17號2樓
2F, No. 17, Industry E. Rd. II, Science-Based
Industrial Park, Hsinchu 300, Taiwan, R.O.C.
Tel: 886-3-6668838
Fax: 886-3-6668836
Memory product: memory@lyontek.com.tw
Audio product: audio@lyontek.com.tw

Japan Office

東京都渋谷区代々木 2-23-1 NSM 1129 〒151-0053
2-23-1 NSM1129 Yoyogi, Shibuya-ku, Tokyo, 151-0053 Japan.
Tel: Sano: 81-50-3556-2378
Kiki: 81-50-3572-8838
E-mail: sano@lyontek.com.tw
kiki@lyontek.com.tw

