Features

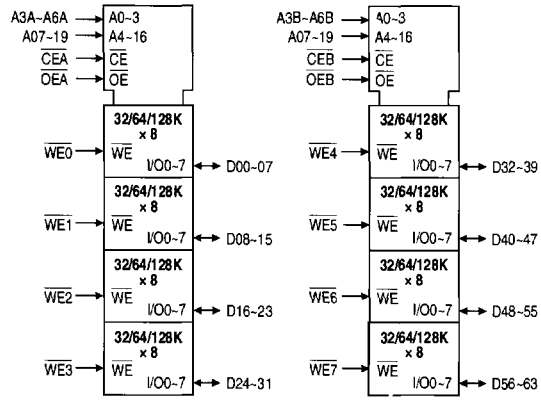
- **Pentium™-ready 64-bit data path**
- **High speed: t_{AA}= 10–20 ns**
- **Low Power**
  - 5.28W @ 66 MHz
  - 440 mW standby
- **Same pinout for 256/512/1024KB**
- **High-quality 4-layer PCB**

Pin Configuration

GND	81	1	GND	VCC5	123	43	[VCC3]
D63	82	2	D62	D09	124	44	D08
VCC5	83	3	[VCC3]	[P1]	125	45	[P0]
D61	84	4	D60	VCC5	126	46	[VCC3]
VCC5	85	5	[VCC3]	D07	127	47	D06
D59	86	6	D58	D05	128	48	D04
D57	87	7	D56	D03	129	49	D02
GND	88	8	GND	D01	130	50	D00
[P7]	89	9	[P6]	GND	131	51	GND
D55	90	10	D54	A3B	132	52	A3A
D53	91	11	D52	A4B	133	53	A4A
D51	92	12	D50	A5B	134	54	A5A
GND	93	13	GND	A6B	135	55	A6A
D49	94	14	D48	A07	136	56	A08
D47	95	15	D46	GND	137	57	GND
D45	96	16	D44	A09	138	58	A10
D43	97	17	D42	A11	139	59	A12
GND	98	18	GND	A13	140	60	A14
D41	99	19	D40	A15	141	61	A16
[P5]	100	20	[P4]	A17	142	62	A18
D39	101	21	D38	GND	143	63	GND
D37	102	22	D36	A19	144	64	PD0
D35	103	23	D34	PD1	145	65	PD2
GND	104	24	GND	[CLK0]	146	66	[CLK1]
D33	105	25	D32	[CLK2]	147	67	[CLK3]
D31	106	26	D30	GND	148	68	GND
D29	107	27	D28	WE7	149	69	WE6
D27	108	28	D26	WE5	150	70	WE4
D25	109	29	D24	WE3	151	71	WE2
GND	110	30	GND	WE1	152	72	WE0
[P3]	111	31	[P2]	GND	153	73	GND
D23	112	32	D22	[ADSCB]	154	74	[ADSCA]
D21	113	33	D20	CEB	155	75	CEA
VCC5	114	34	[VCC3]	[ADVB]	156	76	[ADVA]
D19	115	35	D18	OEB	157	77	OEA
GND	116	36	GND	VCC5	158	78	[VCC3]
D17	117	37	D16	[ADSPB]	159	79	[ADSPA]
VCC5	118	38	[VCC3]	GND	160	80	GND
D15	119	39	D14				
D13	120	40	D12				
GND	121	41	GND				
D11	122	42	D10				

Signals in brackets [ ] = No Connection
(provided for future compatibility)

Logic Block Diagram



	PD2	PD1	PD0
256 KB	NC	GND	NC
512 KB	NC	GND	GND
1 MB	NC	NC	GND

Overview

The 7M64PM256, 7M64P512, and 7M64P1024 are members of Alliance's fast SRAM cache module family for Pentium™ processors and other advanced applications. Speed grades down to 10 ns are ideal for today's system requirements.

This family provides an upgradable SRAM solution for personal computer and server cache, as well as high performance DSP and embedded systems applications.

These modules are available in a CELP2x80 package, and are pin-compatible with Alliance's 3.3V 64P3 family of modules.

Selection Guide

		7M64P256				7M64P512		7M64P1024		Unit
		-10	-12	-15	-20	-15	-20	-15	-20	
Cache Size		256K	256K	256K	256K	512K	512K	1M	1M	byte
Maximum address access time	t_{AA}	10	12	15	20	15	20	15	20	ns
Maximum operating current	I_{CC}	960	920	880	800	920	840	960	880	mA
Maximum CMOS standby current	I_{SB}	16	16	16	16	40	40	80	80	mA

Features

- **Pentium™-ready 64-bit data path**
- **High speed: t_{AA}= 10–20 ns**
- **Low Power**
  - 1.73W @ 66 MHz
  - 144 mW standby
- **Same pinout for 256/512/1024KB**
- **High-quality 4-layer PCB**

Pin Configuration

GND	81	1	GND
D63	82	2	D62
[VCC5]	83	3	VCC3
D61	84	4	D60
[VCC5]	85	5	VCC3
D59	86	6	D58
D57	87	7	D56
GND	88	8	GND
[P7]	89	9	[P6]
D55	90	10	D54
D53	91	11	D52
D51	92	12	D50
GND	93	13	GND
D49	94	14	D48
D47	95	15	D46
D45	96	16	D44
D43	97	17	D42
GND	98	18	GND
D41	99	19	D40
[P5]	100	20	[P4]
D39	101	21	D38
D37	102	22	D36
D35	103	23	D34
GND	104	24	GND
D33	105	25	D32
D31	106	26	D30
D29	107	27	D28
D27	108	28	D26
D25	109	29	D24
GND	110	30	GND
[P3]	111	31	[P2]
D23	112	32	D22
D21	113	33	D20
[VCC5]	114	34	VCC3
D19	115	35	D18
GND	116	36	GND
D17	117	37	D16
[VCC5]	118	38	VCC3
D15	119	39	D14
D13	120	40	D12
GND	121	41	GND
D11	122	42	D10

[VCC5]	123	43	VCC3
D09	124	44	D08
[P1]	125	45	[P0]
[VCC5]	126	46	VCC3
D07	127	47	D06
D05	128	48	D04
D03	129	49	D02
D01	130	50	D00
GND	131	51	GND
A3B	132	52	A3A
A4B	133	53	A4A
A5B	134	54	A5A
A6B	135	55	A6A
A07	136	56	A08
GND	137	57	GND
A09	138	58	A10
A11	139	59	A12
A13	140	60	A14
A15	141	61	A16
A17	142	62	A18
GND	143	63	GND
A19	144	64	PD0
PD1	145	65	PD2
[CLK0]	146	66	[CLK1]
[CLK2]	147	67	[CLK3]
GND	148	68	GND
WE7	149	69	WE6
WE5	150	70	WE4
WE3	151	71	WE2
WE1	152	72	WE0
GND	153	73	GND
[ADSCB]	154	74	[ADSCA]
CEB	155	75	CEA
[ADVB]	156	76	[ADVA]
OEB	157	77	OEA
[VCC5]	158	78	VCC3
[ADSPB]	159	79	[ADSPA]
GND	160	80	GND

Signals in brackets [ ] = No Connection
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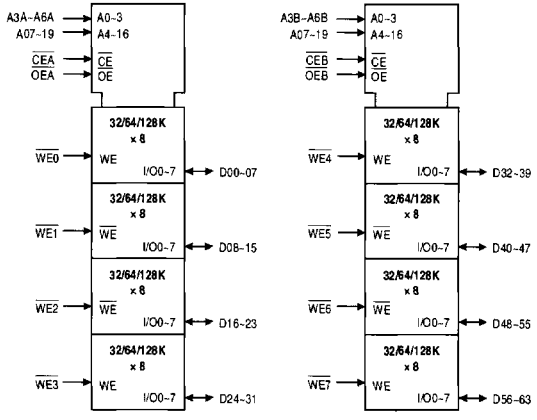
Logic Block Diagram



	PD2	PD1	PD0
256 KByte	NC	GND	NC
512 KByte	NC	GND	GND
1 MByte	NC	NC	GND

Overview

The 7M64P3256, 7M64P3512, and 7M64P31024 are three members of Alliance's fast SRAM cache module family for Pentium™ processors and other advanced low voltage applications. Speed grades down to 10 ns are ideal for today's system requirements.

This family provides an upgradable SRAM solution for personal computer and server cache, as well as high performance DSP and embedded systems applications.

These modules are available in a CELP2x80 package and are pin-compatible with Alliance's 5V 64P family of modules.

Selection Guide

		7M64P256				7M64P512		7M64P1024		Unit
		-10	-12	-15	-20	-15	-20	-15	-20	
Cache Size		256K	256K	256K	256K	512K	512K	1M	1M	byte
Maximum address access time	t_{AA}	10	12	15	20	15	20	15	20	ns
Maximum operating current	I_{CC}	480	440	400	360	520	480	560	520	mA
Maximum CMOS standby current	I_{SB}	8	8	8	8	20	20	40	40	mA