

TTL/Bipolar PROM / RAM Reference Guide V2.f3

TS = Tri-State output

OC = Open Collector output

Hacked, copied, edited and extended by W.G. to give it a decent shape and handy booklet form

The main part is extracted from

http://www.arlo.net/vectorlist/archive/mbox/November_1997

and in detail: from the text part about the Bipolar PROMs List

See also old reference info at:

<http://matthieu.benoit.free.fr/cross/>

and the info at

<http://antiquetech.com/>

<http://www.xs4all.nl/~ganswijk/chipdir/n/>

32*8

	1	16	Vcc
O1	2	15	/CE
O3	3	14	A4
O4	4	13	A3
O5	5	12	A2
O6	6	11	A1
O7	7	10	A0
GND	8	9	O8

	NEC	Fujitsu
	---	-----
TS	uPB410	MB7051
OC	uPB400	MB7056

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	82S123 (50ns)	6331-1	18S030	7603-5	-	27S19	-	-
	82S123A(25ns)	63S081	-	-	-	27S19AC (27S09)	74S288	-
OC	82S23 (50ns)	6330-1	18SA030	7602-5	-	27S18	-	-
	82S23A(25ns)	63S080	-	-	-	27A18AC (27S08)	74S188	-

256*4

	1	16	Vcc
A6	2	15	A7
A5	3	14	/CE2
A4	4	13	/CE1
A3	5	12	O1
A0	6	11	O2
A1	7	10	O3
A2	8	9	O4
GND			

	NEC	Fujitsu	Fairchild
	---	-----	-----
TS	uPB423	MB7052	93427
OC	uPB403	MB7057	93417

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	82S129 (50ns)	6301-1	24S10	7611-5	29661	27S21	74S287	3621
	82S129A(27ns)	63S141	-	7611A	-	27S21A	-	-
	82S27							
OC	82S126 (50ns)	6300-1	24SA10	7610-5	29660	27S20	74S387	3601
	82S126A(30ns)	63S140	-	7610A	-	27S20A	-	-

(27S11 ??)

256*8

	1	20	Vcc
A0	1	20	Vcc
A1	2	19	A7
A2	3	18	A6
A3	4	17	A5
A4	5	16	/CE1
O1	6	15	/CE2
O2	7	14	O8
O3	8	13	O7
O4	9	12	O6
GND	10	11	O5

NEC

TS uPB421
OC

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
TS	82S135 (45ns)	6309-1	18S22	-	-	-	-	-
	82LS135(100ns)	-	28L22	-	-	-	74LS471	-
		63S281						
OC	-	63S280						

512*4

A6	1	16	Vcc
A5	2	15	A7
A4	3	14	A8
A3	4	13	/CE
A0	5	12	O1
A1	6	11	O2
A2	7	10	O3
GND	8	9	O4

	NEC	Fujitsu	Fairchild
	---	-----	-----
TS	uPB412	MB7053	93446
OC		MB7058	93436

Motorola

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
	-----	---	-----	-----	-----	---	-----	-----
TS	82S131 (50ns)	6306-1	- ??	7621-5	29611	27S13	74S571	3622
	82S131A(30ns)	63S241	74S370	7621A	-	27S13A	74S571A	3622A
OC	82S130 (50ns)	6305-1	- ??	7620-5	29610	27S12	74S570	3602
	82S130A(33ns)	63S240	74S270	7620A-5	-	27S12A	74S570A	3602A
			TI- OK??					

512*8

	1	20	Vcc
A0	1	20	Vcc
A1	2	19	A8
A2	3	18	A7
A3	4	17	A6
A4	5	16	A5
O1	6	15	/CE
O2	7	14	O8
O3	8	13	O7
O4	9	12	O6
GND	10	11	O5

NEC

 TS uPB424
 OC

	Signetics	MMI	TI	Motorola Harris	Raytheon	AMD	National	Intel
TS	82S147 (60ns)	6349-1	28S42	7649-5	29621	-	74S472	-
	82S147A (45ns)	6349-2	-	7649A-5	29621A	27S29	74S472A	-
	82S147AN/BN	63S481	18S42					
OC	82S146	6348 63S480	28SA42	-	-	27S28	74S473	-

512*8

	+-----+	
A7	1	24
A6	2	23
A5	3	22
A4	4	21
A3	5	20
A2	6	19
A1	7	18
A0	8	17
D0	9	16
D1	10	15
D2	11	14
GND	12	13

Vcc			
A8			
NC		NEC	Fairchild
/CE1		---	-----
/CE2	TS	uPB425	93448
CE3			
CE4	OC	uPB405	93438
D7			
D6			
D5			
D4			
D3			

	Signetics	MMI	TI	Motorola Harris	Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	82S141 (60ns)	6341-1 63S485	28S46	7641-5	29625	27S31	74S474	3624
OC	82S140 (60ns)	6340	28SA46	7640	-	27S30	74S475	3604

512*8 (latched)

	+-----+		
A3	1	24	Vcc
A4	2	23	A2
A5	3	22	A1
A6	4	21	A0
A7	5	20	/CE1
A8	6	19	CE2
O1	7	18	STROBE
O2	8	17	O8
O3	9	16	O7
O4	10	15	O6
FE2	11	14	O5
GND	12	13	FE1
	+-----+		

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS 82S115 (60ns)	-	-	-	7647	-	27S15	-	-

1024*4							
+-----+							
A6	1	18	Vcc	NEC	Fujitsu	Fairchild	
A5	2	17	A7	---	-----	-----	
A4	3	16	A8	TS	uPB426	MB7122	93453
A3	4	15	A9		uPB426-1		
A0	5	14	O1		uPB426-2		
A1	6	13	O2				
A2	7	12	O3	OC	uPB406	MB7059	
/CE1	8	11	O4		uPB406-1		
GND	9	10	/CE2		uPB406-2		
+-----+							

		Motorola							
		Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
		-----	---	--	-----	-----	---	-----	-----
TS	82S137 (60ns)	6353-1	24S41	7643-5	29641	27S33	74S573	3625	
	82S137A (45ns)	63S441	-	7643A	-	-	74S573A	-	
	82S137B (35ns)	63S441A	-	7643B	-	27S33A	74S573B	-	
OC	82S136 (60ns)	6352-1	24SA41	7642		27S32	74S572	3605	
		63S440							

1024*8

	+-----+					
A7	1	24	Vcc		NEC	Fujitsu Fairchild
A6	2	23	A8		---	-----
A5	3	22	A9	TS	uPB428	MB7162 93451
A4	4	21	/CE1			
A3	5	20	/CE2	OC	uPB408	MB ? 93450
A2	6	19	CE3			
A1	7	18	CE4			
A0	8	17	O8			
O1	9	16	O7			
O2	10	15	O6			
O3	11	14	O5			
GND	12	13	O4			
	+-----+					

Motorola

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
	-----	---	-----	-----	-----	---	-----	-----
TS	82S181 70ns	6381-1	28S86	7681-5	29631	27S181	-	3628A
	82S181A 55ns	6381-2	28S86-60	7681A	29631A	-	87S181	-
	82S181C 30ns	63S881	-	-	-	-	87S181A	-
			(24S86 ?)					
OC	82S180 70ns	6380-1	28SA86	7680		27S180	87s180	3608

1024*8

A7	1	24	Vcc
A6	2	23	A8
A5	3	22	A9
A4	4	21	NC
A3	5	20	/CE
A2	6	19	NC
A1	7	18	NC
A0	8	17	O8
O1	9	16	O7
O2	10	15	O6
O3	11	14	O5
GND	12	13	O4

special version

Prom 82S2708 is an EPROM replacement

-5, +12 and Vpp NO internal connection

(NEC uPB419 is a 2716 PROM replacement)

Signetics

TI

NEC

Harris

Fairchild

Motorola

Raytheon

82S2708

TBP28S2708

uPB417

7608-5

93461C

MCM82708C

29635

1024*8 (latched)

	+-----+		
A7	1	24	Vcc
A6	2	23	A8
A5	3	22	A9
A4	4	21	/CE1
A3	5	20	/CE2
A2	6	19	CE3
A1	7	18	STROBE
A0	8	17	O8
O1	9	16	O7
O2	10	15	O6
O3	11	14	O5
GND	12	13	O4
	+-----+		

Signetics

Harris

Fairchild

TS 82S183 (60ns)

7681R-5

93L451

=

2048*4

+-----+							
A6	1	18	Vcc	Nec	Fairchild	Fujitsu	
A5	2	17	A7	---	-----	-----	
A4	3	16	A8	TS	uPB427	93515	MB7128
A3	4	15	A9				
A0	5	14	O1	OC		93514	
A1	6	13	O2				
A2	7	12	O3				
A10	8	11	O4				
GND	9	10	/CE				
+-----+							

		Motorola							
		Signetics	MMI	TI	Harris	Raytheon	AMD	National	Intel
		-----	---	--	-----	-----	---	-----	-----
TS	82S185(100ns)	-	-	-	7685-5	29651	-	-	-
	82S185A(50ns)	63S841	24S81	7685A	29651A	27S185	87S185	-	
	82S185B(45ns)	-	24S81-55	-	-	-	87S185A	-	
OC	82S184(100ns)	63S840	24SA81	7684	-	27S184	87S184	-	

2048*8

	1	24	
A7	1	24	Vcc
A6	2	23	A8
A5	3	22	A9
A4	4	21	A10
A3	5	20	/CE1
A2	6	19	CE2
A1	7	18	CE3
A0	8	17	O8
O1	9	16	O7
O2	10	15	O6
O3	11	14	O5
GND	12	13	O4

	NEC	Fairchild	Hitachi
	---	-----	-----
TS	uPB429	93511P	HN25169
	uPB429-1		
	uPB429-2		
OC	uPB409		HN25168
	uPB409-1		
	uPB409-2		

	Signetics	MMI	TI	Motorola Harris	Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	82S191(80ns)	-	28S166	76161	29681	-	87S191	3636B
	82S191A(55ns)	63S1681	28S166-55	76161A	29681A	27S191	87S191A	-
	82S191C(35ns)	-	-	-	-	27S191A	-	-
OC	82S190(80ns)	63S1680	28SA166	76160	-	27S190	-	3606

4096*4

	+-----+		
A8	1	20	Vcc
A7	2	19	A9
A6	3	18	A10
A5	4	17	A11
A4	5	16	/CE1
A3	6	15	/CE2
A2	7	14	O1
A1	8	13	O2
A0	9	12	O3
GND	10	11	O4

	Signetics	MMI	TI	Motorola Harris	Raytheon	AMD	National	Fairchild
	-----	---	--	-----	-----	---	-----	-----
TS	82S195 (45ns)	63S1641	-	76165-5	-	27S41	87S195	93513
	82S195A(35ns)	63S1641A		-	-	27S41A	87S195A	-
	82S195B(25ns)	-	-	-	-	-	-	-
OC		63S1640						

8192*8

	+-----+		
A7	1	24	Vcc
A6	2	23	A8
A5	3	22	A9
A4	4	21	A10
A3	5	20	/CE1
A2	6	19	A11
A1	7	18	A12
A0	8	17	O8
O1	9	16	O7
O2	10	15	O6
O3	11	14	O5
GND	12	13	O4

	Signetics	MMI	TI	Harris	Raytheon	AMD	National	Fairchild
	-----	---	--	-----	-----	---	-----	-----
TS	82S641 (55ns)	-	-	76641-5	-	27S49	-	93Z565
	82S641A (45ns)	-	-	76641A-5	-	27S49A	-	93Z565A
	82S641B (35ns)	-	-	-	-	-	-	-

16*4 = 64 bit

THIS IS NOT A PROM

This is a RAM, it's here to be complete and not confused

```

+-----+
A0 | 1   16 | Vcc
/CE | 2   15 | A1
/WE | 3   14 | A2
I1  | 4   13 | A3
/D1 | 5   12 | I4
I2  | 6   11 | /D4
/D2 | 7   10 | I3
GND | 8    9 | /D3
+-----+

```

```

          NEC           Motorola
          ---           -----
          TS    uPB2089   -
          OC    uPB2289   4064

```

	Signetics	MMI	TI	Harris	Fairchild Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	74S89	6561 5561	74S189	-	93405	27S03	-	-
OC	82S25	6560 5560	74S289	-	93404	27S02	-	3101A

256*1 = 256 bit THIS IS NOT A PROM

This is a RAM, it's here to be complete and not confused

```

+-----+
A1 | 1  16 | Vcc
A0 | 2  15 | A2
/CE1 | 3  14 | A3
/CE2 | 4  13 | Din
/CE3 | 5  12 | /WE
/Dout | 6  11 | A7
A4 | 7  10 | A6
GND | 8   9 | A5
+-----+

```

NEC Motorola

TS uPB2202 4256

OC uPB2206 -

	Signetics	MMI	TI	Harris	Fairchild Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS	82S16 82S116 (82S06 TTL)	6531	74S200 74S201 TTL	-	93421	27S00	-	P3106
OC	82S17 82S117 (82S07 TTL)	-	74S301 TTL (74S206 TTL)	-	93411	27S01	-	P3107

1024*1 = 1024 bit THIS IS NOT A PROM

This is a RAM, it's here to be complete and not confused

```

+-----+
/CE | 1   16 | Vcc
A0  | 2   15 | Din
A1  | 3   14 | /WE
A2  | 4   13 | A9
A3  | 5   12 | A8
A4  | 6   11 | A7
Dout| 7   10 | A6
GND | 8    9 | A5
+-----+

```

NEC

TS -
OC -

	Signetics	MMI	TI	Harris	Motorola Fairchild Raytheon	AMD	National	Intel
	-----	---	--	-----	-----	---	-----	-----
TS 82S11		-	74S209	-	93425A	-	-	-
OC 82S10		-	74S309	-	93415A	-	-	3110??