ads PROMBLASTER 27128 Modification

**** ATTENTION ads PROMBLASTER OWNERS ****

The following modification to a revision 2 PROMBLASTER when used
with version 3.1X PROMWRITER software for CP/M will allow the
programming of Intel 27128 EPROMS. This capability is obtained at the
expense of programming three-supply parts. Performing this
modification on a PROMBLASTER voids any warranty implied or explicit.
This same modification will allow the programming of Intel 27256's
with a new version of the PROMWRITER when programming information and
samples become available.

The modification is necessary to allow correct control of pin 26
on the programming socket U8. Until the advent of the 27128 pin 26
has either been +5v Vcc for all parts or +12v Vpp for three supply 2K
parts. The 27128 requires pin 26 to be A13 and as such it must be
controllable as +5v and 0v. Since no spare I/O lines are available on
the PROMBLASTER some feature must be sacrificed to provide this
control. The three-supply programming capability was chosen as the
least-used, most easily sacrificed feature.

The least significant mode bit, I/O address + 2 bit 3 will be
disconnected from the three-supply control circuitry on the board and
connected to the pin 26 level shifter. Since other EPROMS use pin 26
as Vcc an active high current pull-up to +5v is required. The level
shifter is altered to provide +5v instead of +12v. The passive supply
of +5v to pin 26 is removed and a pull-down resistor is used to
provide the 0v level when the level shifter is inactive. This allows
I/O address + 2 bit 3 to provide Vcc or A13 to the programming socket
U8 pin 26. The WRITE FUNCTIONS for I/O address +02 & +03 as shown on
page 7 of the PROMBLASTER User's Manual will now behave as follows:

I/O addr +02 & +03 WRITE FUNCTIONS

I/O addr	B7	B6	B5	B4	B3	B2	B1	B0	P23	P22	P21	P1
+02	!data! !out ! 1 !dsbl!	!P27 ! 0v	! P2 ! 0v	!P26 ! 0v	!P21 ! 0v	!+5v !	!+5v !	!+5v !	!+5v !			M O D
	!addr!+5v !out !P23 !enbl! 0v	!+5v !P22 ! 0v	!+5v !P20 ! 0v	!+25v! !P23 ! B6	!+25v! !P22 ! B5	!+25v! !P20 ! B4	! 1 !----- ! 0	!	!	!	!+25v! !----- !+5v !	E
+03												3
+02	!data! !out ! 0 !dsbl!	!P27 ! 0v	! P2 ! 0v	!P26 ! 0v	!P21 ! 0v	!+5v !	!+5v !	!+5v !	!+5v !			M O D
+03	!addr!+5v !out !P23 !enbl! 0v	!+5v !P22 ! 0v	!+5v !P20 ! 0v	!+21v! !P23 ! B6	!+21v! !P22 ! B5	!+21v! !P20 ! B4	! 1 !----- ! 0	!	!	!	!+21v! !----- !+5v !	E 1

**** PROMBLASTER 27128 MODIFICATIONS ****

(1) REMOVE DIODE CR5.

(2) ON THE SOLDER SIDE OF THE PROMBLASTER, CUT THE TRACE FROM U6-9 AT THE PIN.

(3) ON THE SOLDER SIDE OF THE PROMBLASTER, CUT THE TRACE FROM U14-13 AT THE PIN.

(4) WITH AN INSULATED JUMPER WIRE CONNECT U6-9 TO U14-13.

(5) UNSOLDER THE EMITTER OF Q8 FROM THE PROMBLASTER.

(6) UNSOLDER THE LEAD OF R16 CLOSEST TO THE TOP OF THE PROMBLASTER.

(7) WITH AN INSULATED JUMPER WIRE CONNECT THE UNSOLDERED LEADS OF STEPS (5) AND (6) TO THE ANODE PAD OF DIODE CR5.

(8) ON THE SOLDER SIDE OF THE PROMBLASTER, INSTALL A 1K 1/4 WATT 5% RESISTOR FROM U8-26 TO U8-14.

NOTE: The modified PROMBLASTER should only be used with version 3.1X of the PROMWRITER software.