

7.1.6.3 Test Point signals

The digital A1 PCB is provided with test points. In the A1 PCB diagrams, the test points are marked "TP...". On the A1 PCB the test points are located in a white square, only provided with the test points number and name. The test points can be used to check the correct functioning of the digital A1 PCB.

All measurements are made in the default MASTER RESET condition (start the measurements in the ScopeMeter after a MASTER RESET).







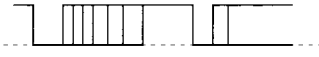
A MASTER RESET is performed as follows:

1. Remove all signals from the ScopeMeter.
2. Turn off the ScopeMeter.
3. Hold down the LCD key and press the ON/OFF key simultaneously. Two beeps are audible, and all volatile memories (RAM with battery backup) are reset. The ScopeMeter is automatically set to the METER mode.

Use another oscilloscope with high input impedance and 10:1 probe to measure the signals on the test points. See table 7.1. Use the alligator-clip point (two joined metallized holes in the digital A1 PCB, sector D4).

Table 7.1. Overview on Test Points on the digital A1 PCB

Logic 0 = 0V ; Logic 1 = +5V

TP	Name	Signal	Freq/Per	Description
005	+5V	+5.1V ... +5.3V	DC	+5V supply. If too low, check A2 revision level. Upgrade to level 17 if it is 16 or lower
050	ADV _N		100 ns	Address valid signal
052	WR _{IN}		varying	Write signal, 80 ns pulses
053	RD _{IN}		varying	Read signal, 80 ns pulses
100	AD ₀		varying	Address/data lines AD ₀
.	.			up to
115	AD ₁₅			AD ₁₅
150	PS ₀		varying	Page select 0; 0.5 ... 1.5 μs pulses
151	PS ₁	0V	DC	Page select 1
152	PS ₂		varying	Page select 2; 0.5 ... 1.5 μs pulses
170	MS ₀		varying	Address line for standard RAM and ROM; minimum pulse width 0.15 μs