

SFT 4001H PCI

Plug and Play

ULTRASONIC PROGRAMMABLE PC BOARD

2 CHANNELS WITH A/D CONVERTERS AND MONITOR



- * PCI plug and play compliance.
- * 2 complete UT channels for fast measurements
- * 2 pulsers and 2 receivers on one board
- * 2 simultaneous channels A/D converters with large BUFFER SIZE
- * Suitable for applications and development in industrial and medical domains :
 - On line weld inspection
 - Thickness measurement
 - Transducers combination
- * Comes with software ready to run
- * Microsoft C libraries and Windows DLL available
- * **Ideal for OEM applications, multichannel operation**

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PULSER SECTION

Type : negative square pulse
 Amplitude : 200 V max.
 Repetition frequency (PRF) : up to 10 KHz programmable (single shot under software control)
 Pulse width : 50 ns to 1 μ s (16.6 ns step) at 50 % amplitude
 Connectors : 4 BNC sockets (2 per channel)
 Damping : 50 Ω or 470 Ω jumper selectable

RECEIVER SECTION

Bandwidth : 0.1 to 15 MHz
 0.1 to 10 MHz at -6 dB
 (2 MHz to 7 MHz at -6 dB filtered standard)
 Gain : 6 dB to 80 dB (step 0.3 dB)
 Dynamic range 74 dB
 Input voltage : 2 Vpp
 Analog signal processing : Double rectified on card
 Suppression (0 to 20 % of full screen) = 0 to 200 mV programmable.
 RF processing available on request

MODE

: Pulse echo or transmission jumper selectable.
 combination ch A as pulser ch B as receiver

SIGNAL PROCESSING: 8 bits A/D flash converter 60 MHz (2 each) after rectifying

TRIGGER : Post trigger 0 to 6553 μ s in 100 ns step

BUFFER MEMORY : 1 Kb to 512 Kb buffer fully addressable per channel readable during new acquisition
 Real time operation – Directly processed in FPGA device DMA control
 Data transfer at 50 Mb/s (average)

MONITOR

: 2 individual gates per channel programmable separately
 Delay 273 μ s in 16.6 ns step
 Width 273 μ s in 16.6 ns step
 Peak value in each gate 8 bits
 Position value of peak in each gate 14 bits

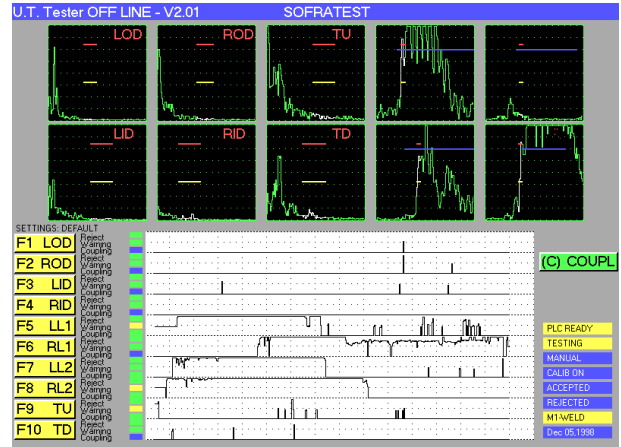
INTERRUPT LEVEL : Plug and play

BASE ADDRESS : Plug and play for all functions up to 16 cards in parallel (32channels)with PCI bridge

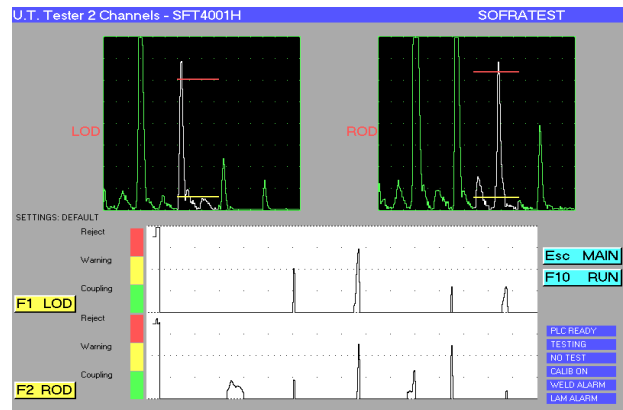
POWER SUPPLIES : +5V +12V only

SIZE : Slot PCI bus length 220 mm
 Height solder side : 3 mm, height component side : 24 or 17 mm

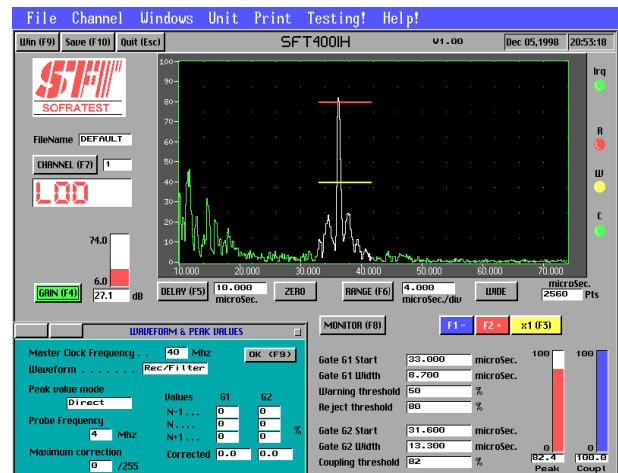
OPERATING TEMPERATURE : 0 to 40° C in computer



10 simultaneous channels with 10 real time A-Scan - PRF 2000 Hz per channel "Strip chart record" mode of amplitude in gate



Real time signal variation



Individual channel settings

Local Agent



Specifications subject to change