Technical specifications

www.bercli.net

16x64 UT board
for third-party OEM integration

Phased-array

○ Customized focusing, electronic scanning, and sectorial scanning

○ Inspection mode: pulse echo with electronic selection of active channels, dynamic-depth focusing

○ Fast multiplexing of focal laws during electronic scanning (stored on 32MB RAM)

Pulsers

○ Adjustable voltage: 10 to 80V with 1V steps

○ Negative rectangular pulse, adjustable width: 20 ns to 1.2 µs, steps of 2.5 ns

○ Fall time < 10ns (80V, 50Ω)

○ Maximum PRF: 2 kHz (on USB power supply) to 10kHz (external power supply)

Receivers

○ Bandwidth: 0.8 to 20 MHz

○ Adjustable gain on each channel from 0 to 80 dB

○ Adjustable analog DAC 80 dB (max. 20 dB/µs)

○ Crosstalk between two channels: gain > 50 dB

○ Maximum input signal amplitude ± 1V

Input-Output

○ USB2 for power supply and data transfer

○ 1 FRB (Hypertronix) for phased-array probe or SubD HD

○ Encoders input

○ External power supply input

Acquisition

○ Hardware acquisition gate

○ Acquisition on coder trigger (time, mechanical displacement, other)

○ Acquisition of elementary channels and/or summed signals

○ Choice of recorded data

○ Max. data flow>30MB/s

Dimensions

○ Length: 200mm (7.9")

○ Width: 110mm (4.3")

○ Thickness: 60mm (2.4")
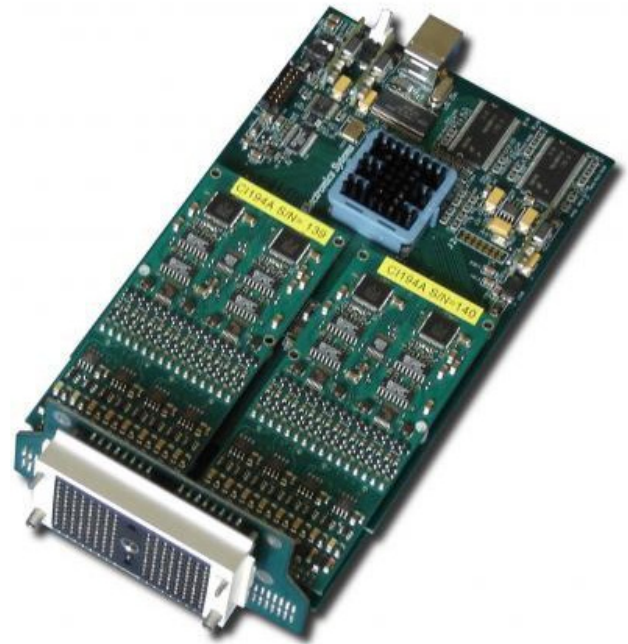
Digitizer

○ Maximum sampling frequency: 100 MHz (adjustable from 100 MHz to 6.6 MHz)

○ Range: 10 bits

○ Input impedance: 50Ω

○ Global delay: 0 up to 1.6 ms, steps of 10ns

○ Delay laws at transmission/reception: 0 to 20 µs, steps of 2.5 ns

○ Digitizing depth: 8000 samples per channel, up to 50,000 after summation.

○ Digital FIR filters

Interface

○ Dynamic link libraries (dlls) provided

○ Connectors:

　　○ USB2 connector

　　○ Probe connector

○ Optional: board delivered in case providing the listed connections

MULTI2000	MULTIX	MULTIX LF	POCKET

BERCLI, LLC, Ultrasonic Phased-Array Solutions   +1 510 292 1290