

# OEM-MC2

Start Integrating Today!

- ✓ No need for analog gain anymore, 162 dB, Dynamic Range
- ✓ Bipolar, Burst & AWG and 400 V pulser
- ✓ Up to  $\pm 10$  V receiver input
- ✓ 8 parallel channels per board

## PULSER

Pulser Type 1	8 Pulsers from 25 to 400 V with 1 V step (Negative Square)
Pulser Type 2	8 Pulsers Bipolar $\pm 100$ V (AWG in option: burst, gaussian, chirp)
Pulse Width	20 to 2000 ns
Pulse Width Resolution	4 ns
Short-Circuit Protection	Yes
Maximum PRF	20 kHz (higher in option)

## RECEIVER

Receiver Resolution	27 bits (no analog gain required)
Receiver Dynamic	162 dB
Receiver Bandwidth	50 kHz to 20 MHz
Receiver Input	$\pm 10$ V
TCG	45 dB
TCG Slope	40 dB/ $\mu$ s

## SIGNAL PROCESSING

FIR Filter	Up to 32 taps
Different Filter per Cycle	Choose from 15 User Defined Filters
Ascan Resolution	8, 16, 27 bits, linear and log scale
Ascan Sampling	100 MHz
Decimation	50, 33, 25, 20, 16.65, 14.28, 12.5 MHz...
Ascan Compression	Yes
Acquire All Ascans	Yes
Ascan Length	32 k points in Beamformer Mode
Gates	4 (Amplitude, TOF)
Gate Modes	Any (Peak, Flank, Zero before crossing, Zero after crossing)
IF Gate and Ascan	Yes, no limitations

## COMMUNICATION

Communication Link	LAN 1Gb (TCP/IP)
Usefull UT Data Flow <sup>1</sup>	100 MB/s

## SYSTEM

Configurations	8 parallel channels per unit
Channel Mode	Full Parallel and/or Multiplexed
UT Modes	Pulse/Echo, Pitch & Catch, Through Transmission (TT)
Dimensions	150x105x15 mm / 5.9x4.13x0.59 in.
Weights	< 250 g / 0.55 lb
Mechanical Integration	Heat Plate with 4 screws holes (can be interfaced with a heat sink or cold plate)
Power Consumption <sup>2</sup>	10 W
Temperature Monitoring	Yes
Open Source SDK	Yes (Fully Documented API)
Software Languages	C++, Python, C#, LabVIEW, MATLAB and more
Multi Platform Compatibility	With all AOS products

## I/O MANAGEMENT

Encoders	X, Y (differential, single ended)
Encoder Modes	Quadrature, Quadrature4edges, Direction Count, Forward, Backward
Synch In	Pulse Trig, Sequence Trig, Encoders
Synch Out	Pulse Trig, Sequence Trig
TimeStamps	Yes
Pin Assignments	Programmable
Number I/O	8



<sup>1</sup>The maximum data rate can vary according to the PC, the OS setting, and the Software environment.  
<sup>2</sup>Measured at a 2 kHz PRF with a 5 MHz probe setting, all channels enabled.  
 Photos and specifications not contractual