High Performance Phased Array UT

OEM-PA Mini

Start Integrating Today!

- ✅ PA as well as FMC/TFM Advanced Imaging available
- ✅ Small Form Factor, Easy Mechanical Integration
- ✅ Open Platform, Create Custom Solutions & Products

PULSER

Pulse Voltage	100 V ~ 150 V[1]
Pulse Type	Negative Square
Pulse Width	20 ~ 1000 ns
Pulse Width Resolution	4 ns
Pulse Focusing Delay	0 ~ 40 μs
Maximum PRF	20 kHz (higher in option)

RECEIVER

Receiver Resolution	14 bits
Receiver Gain Range	12 ~ 110 dB
Receiver Bandwidth	50 kHz to 20 MHz
Receiver Focusing Delay	0 ~ 40 μs at 100 MHz
Receiver Focusing Delay	5 ns
DDF Resolution	Up to 64 Points

SIGNAL PROCESSING

FIR Filter	Up to 64 taps
Different Filter per Cycle	Choose from 15 User Defined Filters
Ascan Resolution	8, 16 bits
Ascan Sampling	100 MHz
Decimation	50, 33, 25, 16.65, 14.28, 12.5 MHz...
Acquire All Ascans	Yes
Ascan Length (Beamformer)	16 k Points
Max number of Cycles	4096 Cycles
FMC option	Yes
Ascan Length	4 k points in FMC Mode

COMMUNICATION

Communication link	LAN (TCP protocol, Gigabit Ethernet)
Usefull UT data flow	≥ 100 MB/s[2]

SYSTEM

Configurations	16/16, 16/64, 16/128, 16/256, 32/32, 32/128, 32/256, 64/128, 64/256
Available Configurations	Pulse/Echo, Pitch&Catch, Through Transmission (TTU)
Multiplatform Compatibility	With all AOS products
Probe Connector	Micro Connector I-Pex, Hypertronics, ITT Canon Adaptor in option
Interface Integration	Heat Plate with 4 Screws Holes (Can be interfaced with a Heat Sink or Cold Plate)
Dimensions (LxWxH)	From: 140x77x15 mm / 5.51x3.03x0.59 in. To: 140x105x15 mm / 5.51x4.13x0.59 in.
Weight	< 250 g / 0.55 lb
Temperature Sensors	Yes
Open Source SDK	Yes (Fully Documented API)
Software Languages	C++, C#, LabVIEW, MATLAB, Python and more
Power Consumption	10 W[3]

I/O MANAGEMENT

Encoders	X, Y
Encoders Modes	Quadrature, Quadrature4edges, Direction Count, Forward, Backward
Synch In	Pulse Trig, Sequence Trig, Encoders
Synch Out	Pulse Trig, Sequence Trig, Output
TimeStamps	Yes
Pin Assignments	Programmable
Number I/O	8

Advanced OEM Solutions

Photos and specifications not contractual

[1] Depending on the configuration
[2] The maximum data rate can vary according to the PC, the OS setting, and the Software environment.
[3] Measured at a 2 kHz PRF with a 5 MHz probe setting, all channels enabled.

06/22