# **Board Series**

# **ROBUST M1 Multi-Channel Ultrasonic Board**

ROBUST M1 multi-channel ultrasonic board adopts advanced modular unit design to provide users with 4-channel and 8-channel standardized products, and can flexibly customize more channels according to requirements to meet personalized detection requirements. Each channel supports independent parallel sampling, which ensures high-efficiency and high-precision detection performance and significantly improves the overall detection efficiency and reliability. ROBUST M1 is widely used in industry, medical treatment, scientific research and other fields, providing accurate and reliable ultrasonic testing solutions for thickness measurement, defect detection and other applications.

# Modular Design And Flexible Expansion

The number of channels can be customized according to requirements, and the system can be upgraded to meet diversified detection requirements.

# **Efficient Parallel Sampling Technology**

Each channel samples independently to avoid interference and realize high-precision and high-speed real-time detection.

# **High-Speed Detection Capability**

Support the pulse repetition frequency of 96K (maximum 12K for a single UT), and adapt to automation application scenarios with high precision and speed requirements.

# Complete SDK And Customized Services

Provide SDK development kit and customized solutions to support automatic production line and quality control improvement.

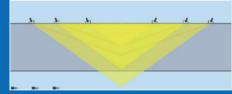


### **Performance index**

Parameter	Parameter
Configuration	
Receive/Transmit	4/4, 8/8
Velocity	340-15240m/s
Pulser	
Test Mode	PE / PC / TT / TOFD
Voltage	100V / 200V / 400V
Pulse Shape	Negative Square Wave
Pulse Width	25-1000ns, Stepping 2.5ns
Rise Time	<8ns
PRF	96K (Single UT max. 12K)
Delay	20µs/2.5ns
Receiver	
Gain	0-120dB
Bandwidth	0.5-25MHz
Delay	20µs/2.5ns
Data Acquisition	
Sampling Rate	100MHz
ADC	12bit
Maximum A-scan	16384
Rectification Mode	FW / HW+ / HW- / RF
Synchronize	Initial pulse or gate
Power Supply	
DC	15V/4.2A

Parameter	Parameter
Scan/Display	
Display Mode	A / B(TOFD) / C / Band chart / FF
Unit	mm / inch
DAC	
Point	16
TCG	
Point	16
Gain Range	40dB
Band filter	
Band filter	Support
Gate	
Gate	A/B/C/I + Custom gate
Threshold	0-100%
Gate trigger mode	Peak/leading edge
I/O Port	
Ethernet	100/1000M
Encoder	LEMO 16-pin
Case	
Size	360.5mm × 200mm× 60.7mm
Weight	2.5Kg

#### Supporting software characteristics



Multi-group TOFD coverage simulation



Multi-group UT channel data acquisition

