



Discovery

## REVOLUTIONARY SCALE

- ✓ FOR ACADEMIC RESEARCH AND MEDICAL DEVICES (OEM)
- ✓ FULL OPEN PLATFORM AND ERGONOMIC DESIGN
- ✓ SUPPORTING MULTIPLE SOFTWARE ENVIRONMENTS

### PULSER

|                       |   |
|-----------------------|---|
| Voltage Range         | From 10 to 200Vpp                                 |
| Waveform Type         | Sine, Burst, Rectangular, Gaussian, Chirp, Custom |
| Channel Configuration | Each channel can be set independently             |
| Extended Transmit     | Up to 1ms   |
| Signal Bandwidth      | 100kHz to 15MHz                                   |
| Dynamic               | > 40dB at 5MHz                                    |
| Power                 | 30W per batch of 64 channels                      |
| Output impedance      | < 7 Ohms  |
| Maximum PRF           | 20 kHz  |

### RECEIVER

|                         |                     |
|-------------------------|---------------------|
| Receiver Resolution     | 14 bits per channel |
| Receiver Gain Range     | 12~56 dB            |
| Receiver Bandwidth      | 0.3 to 20 MHz       |
| Receiver Focusing Delay | 0 to 40 $\mu$ s     |

### SIGNAL PROCESSING

|                  |                            |
|------------------|----------------------------|
| Ascan Resolution | 14 bits                    |
| Ascan Sampling   | 50 MHz                     |
| Decimation       | 50, 25, 12.5, 6.25,... MHz |

### COMMUNICATION

|                    |   |
|--------------------|---|
| Communication Link | 2x 100Gbps QSFP28                         |
| Data Flow          | 16 GB/s (1 GB/s per batch of 64 channels) |

### SYSTEM

|                          |  |
|--------------------------|--|
| Configuration            | 1024/1024AWG                                 |
| Ultrasound Imaging Modes | Pulse-Echo (B-mode), Doppler, STA, etc...    |
| Dimensions               | 750 x 800 x 910 mm<br>29.5 x 31.5 x 35.8 in. |
| Weights                  | < 150 Kg / 331 lb                            |
| Open Source SDK          | Yes (Fully Documented API)                   |
| Software Languages       | C++, Python, MATLAB                          |
| Operating Systems        | Linux  |

### I/O MANAGEMENT

|                 |                                     |
|-----------------|-------------------------------------|
| Synch In        | Pulse Trig, Sequence Trig, Encoders |
| Synch Out       | Pulse Trig, Sequence Trig, Output   |
| Pin Assignments | Programmable                        |
| I/O Count       | 8                                   |

Photos and specifications not contractual.