



# Acqiris AQOCT SS-OCT Signal Acquisition Solutions



More than a digitizer!

A complete DAQ Solution for SS-OCT

For more than 28 years, Acqiris has been developing high-speed signal acquisition solutions based on DAQ cards or modules (digitizers) with real-time processing capabilities.

Our unique approach to Swept-Source OCT allows simultaneous acquisition of both OCT and K-clock signals (dual-channel mode) with full on-board SS-OCT processing, delivering exceptional image quality and clarity.

Addressing OEM system requirements for both medical and industrial applications:

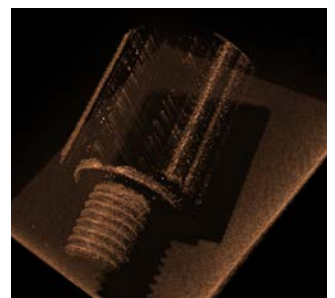
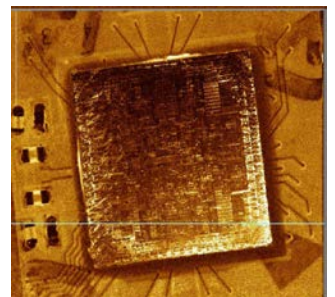
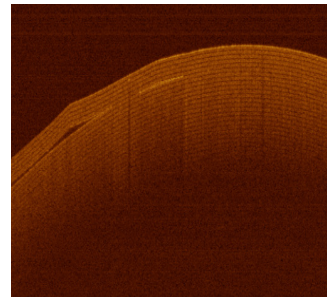
- Superior image quality and clarity
- Increased contrast and stability
- OEM-ready solutions

## Essential features

- A-scan rate: from 50 kHz to 2 MHz
- 1 or 2 OCT channels, simultaneously
- Dynamic K-clock digital remapping, for artifact reduction
- Resolution from 8-bit to 14-bit ADC, for optimal contrast
- Streaming capabilities to CPU/GPU
- Integrated Galvo driving
- 2 form factors available: PCIe or Thunderbolt 3 module





## OEM Value

- Superior resolution and maximum sensitivity
- Deeper analysis enabled by a high sampling rate of up to 4 GS/s
- Programmable analysis depth
- Optimal point spread function for maximum image sharpness and contrast
- Low-latency 2D/3D OCT image reconstruction
- Complete portfolio, from high-performance to cost-effective solutions





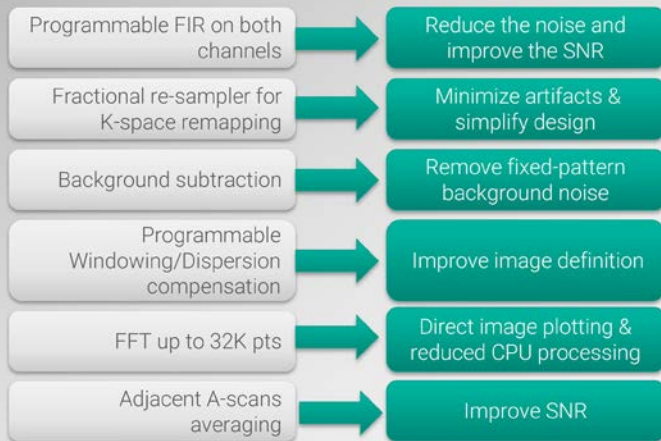
## A complete Solution Package including:

-  **Hardware:**  
High-speed DAQ PCIe card or module
-  **Dedicated Firmware:**  
Flexible OCT engine (FFT, filtering, averaging, streaming)
-  **Associated Software:**  
OCT dedicated API, GUI and software suite
-  **Technical support and customization services**



Example of super compact integration of the SA621P in a mini-workstation

### Unique OCT signal optimization flexible processing blocks



### Fast & easy integration

- Light-source independent
- Ultra-compact form factor (SA6)
- Ready-to-use OCT Graphical User Interface
- Common platform with dedicated API and Software Development Kit
- OEM customizations
- Full product lifecycle support



Acqiris Solutions and Key features				
	Essential	High performance	Optimized	
	SA621	SA220	SA240	SA331
<b>Resolution</b>	12-bit	14-bit	14-bit	12-bit
<b>A-scan rate</b>	50 - 200 kHz	100 kHz - 2 MHz	200 kHz - 2 MHz	100 kHz - 2 MHz
<b>OCT signal sampling rate</b>	1 OCT ch @ up to 1 GS/s	1 OCT ch @ up to 2 GS/s	1 OCT ch @ up to 4 GS/s	2 OCT ch @ up to 1.56 GS/s 1 OCT ch @ up to 3.125 GS/s
<b>k-clock Acquisition</b>	up to 1 GS/s	up to 2 GS/s	up to 4 GS/s	up to @ 3.125 GS/s
<b>Output data</b>	- Data after FFT (up to 16K) - Data after k-space remapping - Raw data	- Data after FFT (up to 32K) - Data after k-space remapping - Raw data	- Data after k-space remapping - Raw data	- Data after FFT (8K) - Data after k-space remapping - Raw data

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