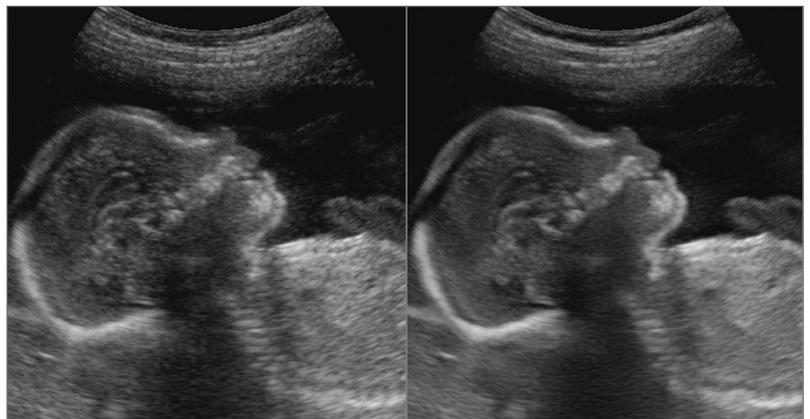


Clarity OEM Ultrasound

Provides Ultrasound Manufacturers
the opportunity to incorporate
advanced image processing algorithms

Clarity™ OEM Ultrasound Advantages

- ✱ Fully configurable for varying types of probes and exams
- ✱ Tuning functionality integrates in the user interface, allowing end user real-time adjustments
- ✱ Easy integration into all common hardware platforms
- ✱ Real time performance
- ✱ Greater conspicuity, improving diagnostic confidence
- ✱ Minimizes eye fatigue
- ✱ Constant innovation and upgrades
- ✱ Competitive pricing



Original Image

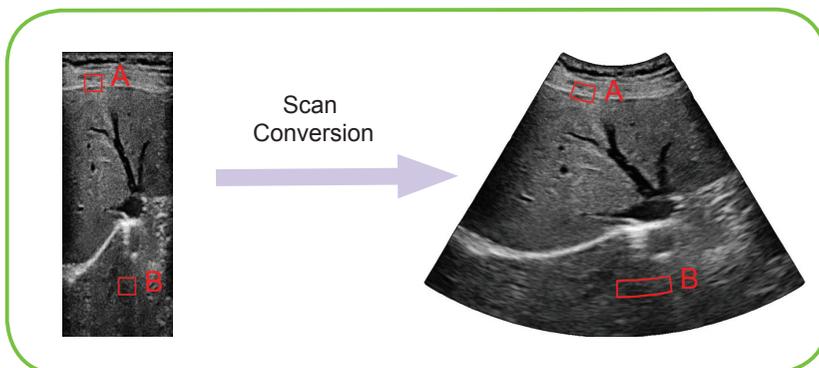
Clarity Optimized Image

Image Optimization Software
Improving Diagnostic Confidence



Sapheneia gSR - for artifact-free processing

Sapheneia gSR (geometric Speckle Reduction) technology for real time ultrasound image enhancement uses the correct spatial context for each pixel to assure artifact-free processing.

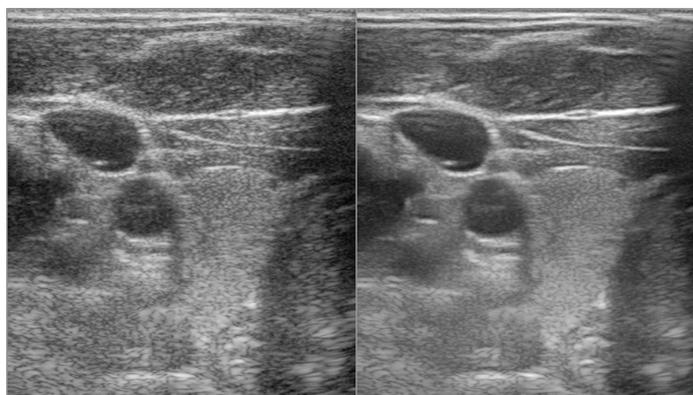


With increasing depth the ultrasound beam defocuses which results in a decrease of the spatial resolution. Conventional speckle reduction methods do not take this varying nature of the data into account. Additionally, image enhancement is often applied before scan conversion for performance reasons and the scan geometry imply varying

neighborhood sizes for most probes (compare regions A and B). **Clarity Ultrasound OEM** explicitly incorporates these factors yielding superior image quality facilitating diagnostic advantages.

Key Features

- ✱ 3D-processing utilizes temporal information by adapting to the optical flow
- ✱ Focus area adjustment in real time
- ✱ Processing adjusted to varying zoom factors in real time
- ✱ Enhances anatomic structures with simultaneous speckle reduction
- ✱ Image enhancement filters are optimized for anatomy-specific details of texture, scale and morphology
- ✱ Scan geometry taken into account



Original Image

Clarity Optimized Image

REQUIREMENTS

Clarity Ultrasound OEM supports standard PC platforms with Microsoft Windows or Linux operating systems. Clarity Ultrasound OEM is available for standard graphic processor boards (GPU) supporting DirectX 9 or later. Sapheneia also offers specialized implementations of Clarity Ultrasound OEM for DSP and FPGA platforms.

