Reviewer: 1  
Comments to the Author  
(There are no comments. Please check to see if comments were included as a file attachment with this e-mail or as an attachment in your Author Center.)

*No comments attached in e-mail or Author Center.*   
  
Reviewer: 2  
Comments to the Author  
Most of the comments are answered in the paper and below are some left questions and comments.  
  
1.      Authors mentioned that the presentation execution times do not include transfer of data from CPU- to the GPU-side since data are assumed to be pre-delayed and available in global GPU memory. Although transferring time may not be an issue owing to the fast transfer rate of PCI express, time for delay calculation or any process for the pre-delayed data still needs to be addressed.

*We now refer to [13] when discussing the delay step in the paper. In [13], delay-and-sum took 10% of the time used for Capon beamforming for (M=64, L=32).*

2.      Applying the adaptive beamforming algorithm in real-time is a great achievement; however, this paper needs to be more organized overall.  Section II. C, III, IV, and part of V are focusing on describing how authors implemented the Capon algorithm utilizing GPU.  Although implementing an algorithm is an important process, it hardly suggests any originality but more of technical issues.  Thus the method part can be rewritten in a reduced form including what was the critical step to reduce the final complexity of the calculation for each case.

*We believe that reducing these sections further will influence the papers readability. However some parts of the paper have been shortened in order to make room for new discussions. Section VI has also been reduced (See point 4).*

3.      The main focus of this paper will be that ES-Capon is too complicated to implement in real-time, so BS-Capon can be the solution.  Thus, comparison of BS-Capon and ES-Capon in too much detail may not be necessary to prove its real-time performance.

*Since the majority of the literature on Capon beamforming for medical imaging deals with ES-Capon we think it’s natural to evaluate BS-Capon versus ES-Capon, both when it comes to speed and image quality. Since ES-Capon is more familiar, we also believe that the reader will be interested in how to move from ES to BS Capon and how their implementations differ.*

4.      All the output images should be using the parameters and settings for real-time implementation (Fig.8 especially) to prove the performance of your implementation.  Although x16 oversampling removes the artifact from demodulation, it is out of the scope of this paper.  Readers are more interested in the performance of the suggested method in the paper, not the performance of the adaptive beamforming itself.

*We would like to thank the reviewer for pointing this out. We have decided to remove all simulations from the paper, except for the discussion of how to trade resolution for speed with ES- and BS-Capon. The modulation effect issue will be saved for further work.*  
  
References:  
Ref [15] is not published yet, so cannot be included.

*Reference will be edited or removed during proof reading.*

Ref [16] please check author list for this reference.

*This is standard IEEE reference formatting for references with equal author lists.*