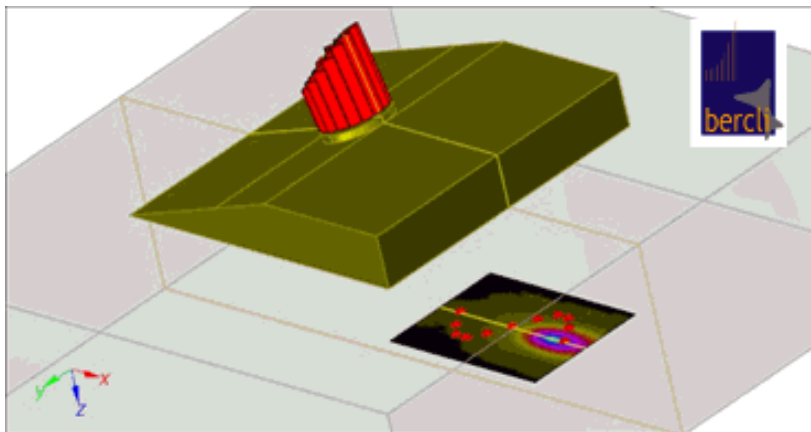


Modeling and driving 2D arrays

Both CIVA and M2M systems handle 2D phased-array probes (typically matrix or sectorial arrays). Using such probes, it is possible to focus the acoustic beam at any location in the specimen under investigation. The illustrated example shows the beam from of a 64-element sectorial array @ 5MHz (manufactured by Imasonic) in an aluminum sample. The red bars represent the delay laws calculated using CIVA that are applied to the elements in the probe to obtain the associated focal spots (indicated by the red dots at the beginning of the animation file).



The image shows the radiated acoustic beam from a sectorial probe. 64 elements are used to compute the delay laws and the acoustic field. The beam can be focused at any location in the specimen. Focal laws are applied to 64 elements to create the acoustic field.