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The invention relates to the electronics and is provided for memory and commutation devices utilized in the computer and commutation engineering.

The acoustoelectronic cryotron comprises a base of Pb onto which are successively applied a layer absorbing the surface acoustic waves, a barrier layer of superconducting ceramics and a control layer, made of piezocrystal, in the center of which is applied an interdigital transformer of Cr-Al, between the barrier and control layers from two sides are being applied transversal contacts of Cr-Cu and on the other two sides of the barrier and control layers is placed an absorbent coating. As piezocrystal is used GaAs and as superconducting ceramics -YBa $_2$ Cu $_3$ O $_7$.

The technical result consists in increasing the information transmission and processing volume into the computer and commutation engineering.