

GCSE Bitesize Computer Science

Steve Furber on ARM processors

I'm Steve Furber. I was involved in the design of the very earliest ARM processors at Acorn in the early 1980s.

Today, most of the mobile computing products that we find in everyday life - such as tablets, phones, smartphones - use the ARM processor, which is designed by a British company in Cambridge and is quite different from the processor you find in your desktop computer, which is designed by Intel in the USA. One of the earliest developments that ARM Ltd did to make the processor more suitable for mobile phone applications was they created a way of compressing the instruction set – making the instructions a bit smaller so they occupied less memory.

The ARM was based on the principles that pushed the design towards simplicity, and that worked very well for Acorn and has turned out to be extremely energy efficient as well, and that's why you find it in all the mobile phones today.