

Code compression has been shown to be efficient in code size reduction and, recently, performance improvement and energy savings. In this paper we use a compression method, the ComPacket, which has a very fast decompressor in hardware, to compress selectively regions of the code to improve performance and complementary regions to sustain the code size reduction both at the same time. Using the leon (SPARC v8) platform and benchmarks from Mediabench and MiBench suites we reached, on average, 25% of code memory area reduction, and a speed-up of 1.5 simultaneously.