

A Hardware Design of Electromagnetic Particle Simulation Code

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Electromagnetic particle simulation code needs a huge resource of memory. Software simulation, we usually use, has a limit of speed according to the machine's CPU. And it is not fit to carry out parallel operation minutely. Hardware circuit has an advantage of parallel operation and of high speed management. Recently, a design of hardware is easier than it was, because of a development of HDL (Hardware Design Language) and of PLD (Programmable Logic Device). We design a new hardware circuit for electromagnetic particle simulation with HDL. We consider adaptability it to reconfigurable logic.