Recent development on open source QuickPIC WEIMING AN, Beijing Normal University, FEI LI, LANCE HILDEBRAND, YUJIAN ZHAO, QIANQIAN SU, VIKTOR DECYK, WARREN MORI, University of California Los Angeles — QuickPIC is a 3D parallel quasi-static PIC code for efficiently simulating the plasma based accelerator (PBA). It is developed based on the framework UPIC. QuickPIC has been widely used and played an important role in studying PBA problems. In 2017, we made QuickPIC an open source code on Github (https://github.com/UCLA-Plasma-Simulation-Group/QuickPIC-OpenSource). In this work, we will present the recent development of the code including the field ionization module, the laser module and 2D QuickPIC in r-z cylindrical coordinates.

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