

ARDUINO CONTROLLED MOSTLY 3D PRINTED PCR THERMOCYCLER

written by Peter S. | May 5, 2020

PCR devices are expensive. Even the simplest models start from \$600. Since the reaction is very easy to control via temperature control and the components are cheap to obtain, this project will build an attractive, functional and inexpensive PCR thermal cycler. Wirewound resistors are used as heating elements. The housing is 3D printed from ABS plastic and the aluminium heating block is made in several parts on a 3-axis CNC milling machine. A Nextion touch display is used to simplify user interaction. The material costs remain consistently below \$100.