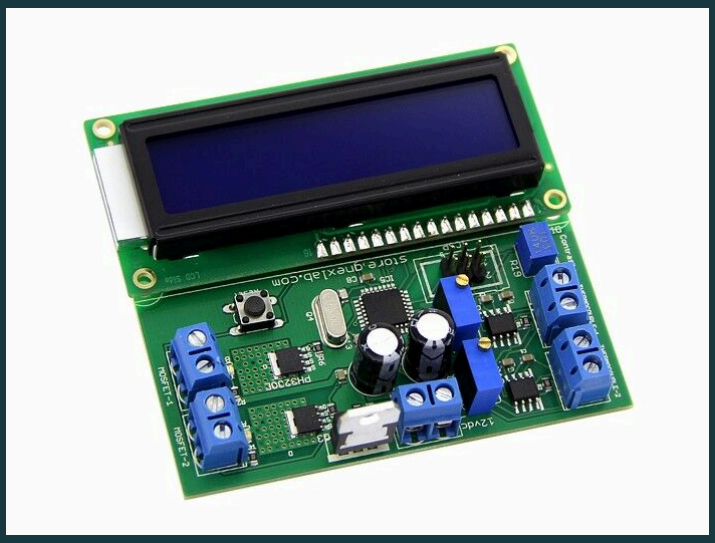
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INDUSTRIAL PRODUCT DATASHEET

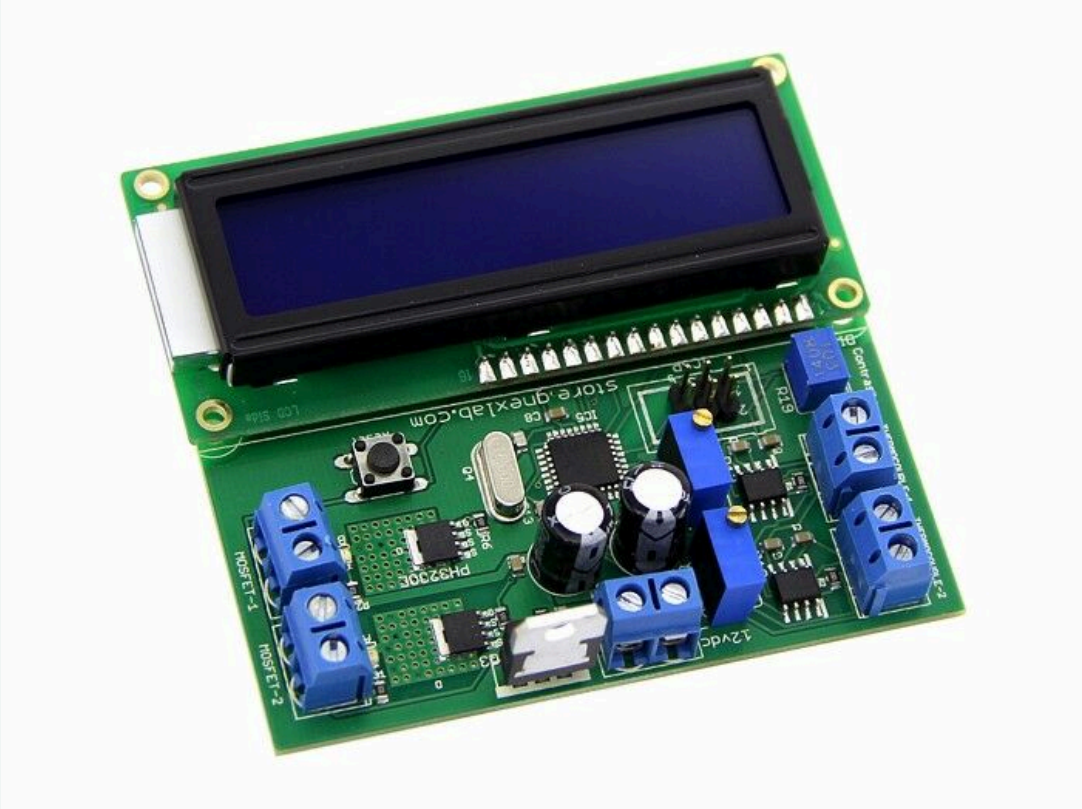
EXTRUDER CONTROLLER(2 THERMOCOUPLE TYPE)

Standalone PID temperature controller for 3D printers with dual thermocouple inputs and high-power MOSFET outputs.

SKU	UPDATED	PRICE
102990141	2024-08-09 02:07:27	$59.00(Excl. VAT)



Overview



The EXTRUDER CONTROLLER(2 THERMOCOUPLE TYPE) is a standalone temperature monitoring and PID controller for 3D printers, based on the Arduino Diecimila. It features a 2×16 LCD for digital readout, onboard trimpot temperature setting for extruder and heated bed, two thermocouple inputs (Max6675), and two high-power MOSFET outputs capable of 5A at 12V for direct heating element connection.

Key Features

This extruder controller card is a temperature monitoring and PID temperature controller for 3D printers. If you have a desktop CNC machine you can easily convert your CNC to a 3D printer with this controller card. You can also handle your temperature related tasks of your 3D printer with this card without the need of a computer. You can set both the extruder temperature and the heated bed temperature with on board trimpots. You can read digitally your setting temps and sensor values from the LCD. You can directly connect your heating elements to the board. High Power MOSFETS can handle your current requirements.

Features:

-
- Standalone No PC Connection Required
-
- Based on the Arduino Diecimila
-
- 2×16 LCD
-
- Simple Temp Settings With Onboard Pots
-
- 2 High Power MOSFET Outputs (5A at 12V)
-
- 2 Thermocouple Input (2x Max6675)
-
- Needs 12VDC as power source
-
- 2 PID Computation Via On-board Micro-controller

Connection Diagram:

Suitable Heating Element:

You can use the below resistor (6R8 Ohm RESISTOR 7W 5%) as heating element with the above controller board.

-
- Resistance: 6.8ohm
-
- Resistance Tolerance: ± 5%
-
- Power Rating: 6W

-
- Voltage Rating: 350V
-
- Temperature Coefficient: ± 75ppm/°C
-
- Resistor Element Material: Wirewound
-
- Resistor Terminals: Axial Leaded
-
- Resistor Mounting: Through Hole
-
- External Length / Height: 18mm External Width: 6.5mm
-
- Operating Temperature Range: -55°C to +350°C
-
- Package / Case: 6 x 22
-
- Power Rating at 25°C: 7W

Suitable thermocouple Sensor

You can use K type Thermocouple to measure temperature between 0°C to +350°C

K-type Thermocouple Sensor Probe

Operating Temperature: ：-50～350℃

Cable length: approx. 100 cm

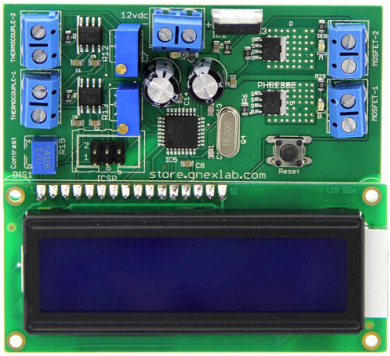
Interface length: approx. 12.5 mm

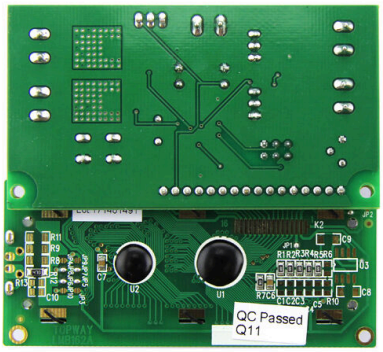
Net weight: approx. 45g

Any further questions, please contact the **technical support**.

Project Web Page

Product Gallery







Compliance & Logistics

HSCODE	8543909000

Resource Links

- https://www.seeedstudio.com/EXTRUDER-CONTROLLER-2-THERMOCOUPLE-TYP-p-1849.html

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