

## TB273 (Rev3) - Centroid CNC PC Minimum Hardware and Benchmark Requirements

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### Purpose:

To provide the minimum hardware and benchmark requirements for a Centroid CNC PC proper CNC control operation.

### Requirements:

1.) The processor, CPU, that is installed on the motherboard must have a minimum benchmark of 1250. One can look up a CPUs benchmark # using the following website <http://www.cpubenchmark.net/singleThread.html>.

Notice that this is the "Single Thread" benchmarks chart. Using a CPU with a single thread benchmark rating higher than 1250 is required.

- 2.) A solid state drive, SSD.
- 3.) 4GB of RAM.
- 4.) Windows 7, 8, or 10.
- 5.) 2nd Ethernet port. Can be a PCI slot add-on card. See link below.
- 6.) A **shielded** CAT5E Ethernet cable.

The following components are highly suggested as they have been rigorously tested by Centroid.

- 1.) Gigabyte or Asus motherboard with solid capacitors for reliability.
- 2.) Antec or Cooler Master power supply with a minimum power rating of 450W.
- 3.) Samsung or Intel SSD.
- 4.) Clean Windows 7, 8, or 10 installed (starting with a formatted hard drive) with NO bloatware, skype, virus protection, firewalls etc. Just Windows and CNC11.

As a reference below are the components that Centroid uses on their current M400 consoles and M39 CNC PCs as of 8-15-2016:

#### Motherboard

[http://www.newegg.com/Product/Product.aspx?Item=N82E16813128662&cm\\_re=h81m-hd3-\\_-13-128-662-\\_-Product](http://www.newegg.com/Product/Product.aspx?Item=N82E16813128662&cm_re=h81m-hd3-_-13-128-662-_-Product)

#### Intel CPU

[http://www.newegg.com/Product/Product.aspx?Item=9SIA1N83U90757&cm\\_re=intel\\_g1840-\\_-19-117-301-\\_-Product](http://www.newegg.com/Product/Product.aspx?Item=9SIA1N83U90757&cm_re=intel_g1840-_-19-117-301-_-Product)

#### SSD

[http://www.newegg.com/Product/Product.aspx?Item=9SIA12K2EV4048&cm\\_re=samsung\\_850\\_evo\\_120gb-\\_-20-147-371-\\_-Product](http://www.newegg.com/Product/Product.aspx?Item=9SIA12K2EV4048&cm_re=samsung_850_evo_120gb-_-20-147-371-_-Product)

#### RAM

<http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&DEPA=0&Order=BESTMATCH&Description=ballistix+4gb+udimm+ddr3&N=600006067&isNodeId=1>

#### Power Supply

<http://www.newegg.com/Product/Product.aspx?Item=N82E16817171031>

#### Network Card

<http://www.newegg.com/Product/Product.aspx?Item=N82E16833114005&Tpk=staretech%20st100s>

Windows 10

[http://www.newegg.com/Product/Product.aspx?Item=N82E16832416892&cm\\_re=windows\\_10\\_-32-416-892\\_-Product](http://www.newegg.com/Product/Product.aspx?Item=N82E16832416892&cm_re=windows_10_-32-416-892_-Product)

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