

## STEVAL-ISA029V1 Bill Of Material.

| <b>Reference</b>  | <b>Value</b> | <b>Description</b> |
|-------------------|--------------|--------------------|
| F <sub>1</sub>    | 250V – 1.5A  | Fuse               |
| RT <sub>1</sub>   | NTC 50       | NTC                |
| INPUT FILTER      |              |                    |
| C1                | 100 nF       |                    |
| C2                | 100 nF       |                    |
| L1                | 10 mH        | Common Mode Choke  |
| RESISTORS         |              |                    |
| R <sub>1</sub>    | 15 kΩ        | 2W                 |
| R <sub>2</sub>    | 10 Ω         |                    |
| R <sub>3</sub>    | 5.6 kΩ       |                    |
| R <sub>4</sub>    | 1 kΩ         |                    |
| R <sub>5</sub>    | 1 kΩ         |                    |
| R <sub>6</sub>    | 1 kΩ         |                    |
| R <sub>7</sub>    | 18 kΩ        |                    |
| R <sub>8</sub>    | 2.2 kΩ       |                    |
| R <sub>9</sub>    | 47 kΩ        |                    |
| R <sub>10</sub>   | 4.7 kΩ       |                    |
| R <sub>11</sub>   | 820 Ω        |                    |
| R <sub>12</sub>   | 330 Ω        |                    |
| R <sub>13</sub>   | 470 Ω        | 2W                 |
| R <sub>14</sub>   | 0 Ω          |                    |
| R <sub>15</sub>   | 180 Ω        | 1W                 |
| CAPACITORS        |              |                    |
| C <sub>3</sub>    | 47uF μF 400V | Elec. Capacitor    |
| C <sub>4</sub>    | 4.7 nF 400V  | Ceramic Capacitor  |
| C <sub>5</sub>    | 100 nF       | Ceramic Capacitor  |
| C <sub>6</sub>    | 22 μF 25V    | Elec. Capacitor    |
| C <sub>7</sub>    | 100 nF       | Ceramic Capacitor  |
| C <sub>8</sub>    | 4.7 nF       | Ceramic Capacitor  |
| C <sub>9</sub>    | 10 nF        | Ceramic Capacitor  |
| C <sub>10</sub>   | 68 nF        | Ceramic Capacitor  |
| C <sub>11</sub>   | 100 nF       | Ceramic Capacitor  |
| C <sub>12</sub>   | 2.2 nF       | Y1 Capacitor       |
| C <sub>13</sub>   | N.M.         | Ceramic Capacitor  |
| C <sub>14</sub>   | 100 nF       | N.M.               |
| C <sub>15</sub>   | 4.7 μF 25V   | Elec. Capacitor    |
| C <sub>16</sub>   | 100 nF       | Ceramic Capacitor  |
| C <sub>17</sub>   | 2.2 nF 1kV   | Ceramic Capacitor  |
| C <sub>out1</sub> | 22 μF 100V   | Elec. Capacitor    |
| C <sub>out2</sub> | 330 μF 25V   | Elec. Capacitor    |
| C <sub>out3</sub> | 1500 μF 16V  | Elec. Capacitor    |

| DIODEs         |            |                                 |
|----------------|------------|---------------------------------|
| D <sub>1</sub> | STTH102    | High efficiency ultrafast diode |
| D <sub>2</sub> | DF06M      | 1A Bridge rectifier             |
| D <sub>3</sub> | TRANSIL    | N.M.                            |
| D <sub>4</sub> | STTH102    | High efficiency ultrafast diode |
| D <sub>5</sub> | STTH110    | High voltage ultrafast diode    |
| D <sub>6</sub> | STPS2H100  | Schottky Barrier Rectifier      |
| D <sub>7</sub> | STPS1150   | Schottky Barrier Rectifier      |
| D <sub>8</sub> | BZX85C24   | 24V Zener Diode                 |
| D <sub>9</sub> | STTH110    | High voltage ultrafast diode    |
| TRANSISTOR     |            |                                 |
| Q <sub>1</sub> | BD140      | PNP transistor                  |
| IC             |            |                                 |
| U <sub>1</sub> | LK112M33TR | Linear Voltage Regulator        |
| U <sub>2</sub> | VIPer53    | Off Line Primary Switch         |
| U <sub>4</sub> | TL1431     | Voltage reference               |
| U <sub>5</sub> | PC817B     | Optocoupler                     |
| TRANSFORMER    |            |                                 |
| T <sub>1</sub> | 2362.0033A | Transformer - Pulse             |