This board is based on the **ATMega4809** microcontroller.

<table>
<thead>
<tr>
<th>Clock</th>
<th>20MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash</td>
<td>48KB</td>
</tr>
<tr>
<td>SRAM</td>
<td>6KB</td>
</tr>
<tr>
<td>EEPROM</td>
<td>256byte</td>
</tr>
</tbody>
</table>

A **ATSAMD11D14A** Processor takes care of the USB to SERIAL communication and it is connected to the following pins of the ATMega4809 microcontroller.

<table>
<thead>
<tr>
<th>ATMega4809 Pin</th>
<th>ATMega4809 Acronym</th>
<th>SAMD11 Pin</th>
<th>SAMD11 Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>PB05</td>
<td>15</td>
<td>PA22</td>
<td>SAMD11 TX -&gt; ATMega4809 RX</td>
</tr>
<tr>
<td>8</td>
<td>PB04</td>
<td>16</td>
<td>PA23</td>
<td>ATMega4809 TX -&gt; SAMD11 RX</td>
</tr>
<tr>
<td>41</td>
<td>UPDI</td>
<td>12</td>
<td>PA15</td>
<td>UPDI RX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>PA14</td>
<td>UPDI TX</td>
</tr>
</tbody>
</table>

The board has a two 15 pins connectors - one on each side -, pin to pin compatible with the original Arduino Nano.

<table>
<thead>
<tr>
<th>Pin</th>
<th>Pin Function</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D13</td>
<td>Digital</td>
<td>SPI SCK, GPIO</td>
</tr>
<tr>
<td>2</td>
<td>+3V3</td>
<td>Power Out</td>
<td>Internally generated power output to external devices</td>
</tr>
<tr>
<td>3</td>
<td>AREF</td>
<td>Analog</td>
<td>Analog Reference; can be used as GPIO</td>
</tr>
<tr>
<td>4</td>
<td>A0</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>5</td>
<td>A1</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>6</td>
<td>A2</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>7</td>
<td>A3</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>8</td>
<td>A4/SDA</td>
<td>Analog</td>
<td>ADC in; I2C SDA; Can be used as GPIO</td>
</tr>
<tr>
<td>9</td>
<td>A5/SCL</td>
<td>Analog</td>
<td>ADC in; I2C SCL; Can be used as GPIO</td>
</tr>
<tr>
<td>10</td>
<td>A6</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>11</td>
<td>A7</td>
<td>Analog</td>
<td>ADC in; can be used as GPIO</td>
</tr>
<tr>
<td>12</td>
<td>+5V</td>
<td>Power Out</td>
<td>Internally generated power output to external devices</td>
</tr>
<tr>
<td>13</td>
<td>RST</td>
<td>Digital In</td>
<td>Active low reset input (duplicate of pin 18)</td>
</tr>
<tr>
<td>Pin</td>
<td>Description</td>
<td>Type</td>
<td>Other Information</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>---------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td>GND</td>
<td>Power Ground</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>VIN</td>
<td>Power In</td>
<td>Vin Power input</td>
</tr>
<tr>
<td>16</td>
<td>TX</td>
<td>Digital</td>
<td>USART TX; can be used as GPIO</td>
</tr>
<tr>
<td>17</td>
<td>RX</td>
<td>Digital</td>
<td>USART RX; can be used as GPIO</td>
</tr>
<tr>
<td>18</td>
<td>RST</td>
<td>Digital</td>
<td>Active low reset input (duplicate of pin 13)</td>
</tr>
<tr>
<td>19</td>
<td>GND</td>
<td>Power Ground</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>D2</td>
<td>Digital</td>
<td>GPIO</td>
</tr>
<tr>
<td>21</td>
<td>D3/PWM</td>
<td>Digital</td>
<td>GPIO; can be used as PWM</td>
</tr>
<tr>
<td>22</td>
<td>D4</td>
<td>Digital</td>
<td>GPIO</td>
</tr>
<tr>
<td>23</td>
<td>D5/PWM</td>
<td>Digital</td>
<td>GPIO; can be used as PWM</td>
</tr>
<tr>
<td>24</td>
<td>D6/PWM</td>
<td>Digital</td>
<td>GPIO; can be used as PWM</td>
</tr>
<tr>
<td>25</td>
<td>D7</td>
<td>Digital</td>
<td>GPIO</td>
</tr>
<tr>
<td>26</td>
<td>D8</td>
<td>Digital</td>
<td>GPIO</td>
</tr>
<tr>
<td>27</td>
<td>D9/PWM</td>
<td>Digital</td>
<td>GPIO; can be used as PWM</td>
</tr>
<tr>
<td>28</td>
<td>D10/PWM</td>
<td>Digital</td>
<td>GPIO; can be used as PWM</td>
</tr>
<tr>
<td>29</td>
<td>D11/MOSI</td>
<td>Digital</td>
<td>SPI MOSI; can be used as GPIO</td>
</tr>
<tr>
<td>30</td>
<td>D12/MISO</td>
<td>Digital</td>
<td>SPI MISO; can be used as GPIO</td>
</tr>
</tbody>
</table>