AVNET EMBEDDED SPECIFICATION.

Datasheet
Varitronix
MGLS240128T
1. General Description

- Small Form Factor Full Graphics 240 x 128 pixels
- Optional Integral Controller/Driver type T6963C....not available on all resolutions (application note available on request)
- STN, FSTN** Positive and Negative mode**
- Optional LED Backlight (note including Backlight will increase height of module (see drawing)
- Variety of Backlight colours Green, White**, Blue**, Red**, Amber **
- Temperature Ranges 0 to 50°C, -20 to 70°C**
- View angle 6 o’clock other options on special request**

** Items marked are non standard options, and may carry factory MOQ. Please check with your local sales office for availability of the options.

2. Mechanical Specifications

Table 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specifications</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline Dimensions</td>
<td>144.0 (W) x 104.0 (H) x 15.0 (D) max</td>
<td>mm</td>
</tr>
<tr>
<td><strong>NOTE</strong> Depth (D) is lower without Backlight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>View Area VA</td>
<td>114.0 (W) x 64.0 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Format</td>
<td>240 (W) x 64 (H) Pixels</td>
<td></td>
</tr>
<tr>
<td>Pixel Size</td>
<td>0.40 (W) x 0.40 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Pixel Spacing</td>
<td>0.05 (W) x 0.05 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>0.45 (W) x 0.45 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Active Area</td>
<td>107.95 (W) x 57.55 (H)</td>
<td>mm</td>
</tr>
</tbody>
</table>
### 3. Interface Signals

**Table 2**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FG</td>
<td>Frame Ground (see note 1).</td>
</tr>
<tr>
<td>2</td>
<td>VSS</td>
<td>Ground (0V).</td>
</tr>
<tr>
<td>3</td>
<td>VDD</td>
<td>Power supply for logic (+5V).</td>
</tr>
<tr>
<td>4</td>
<td>V0</td>
<td>Power supply for LCD drive.</td>
</tr>
<tr>
<td>5</td>
<td>/WR</td>
<td>Command/Data write to module when “L”.</td>
</tr>
<tr>
<td>6</td>
<td>/RD</td>
<td>Command/Data read from module when “L”.</td>
</tr>
<tr>
<td>7</td>
<td>/CE</td>
<td>Chip enable of controller when “L”.</td>
</tr>
<tr>
<td>8</td>
<td>C/D</td>
<td>Command/Data read/write. “H” for command read/write and “L” for data read/write.</td>
</tr>
<tr>
<td>9</td>
<td>/RST</td>
<td>Controller reset when “L”.</td>
</tr>
<tr>
<td>10</td>
<td>DB0</td>
<td>Data input/output (LSB).</td>
</tr>
<tr>
<td>11</td>
<td>DB1</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>12</td>
<td>DB2</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>13</td>
<td>DB3</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>14</td>
<td>DB4</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>15</td>
<td>DB5</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>16</td>
<td>DB6</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>17</td>
<td>DB7</td>
<td>Data input/output (MSB).</td>
</tr>
<tr>
<td>18</td>
<td>FS</td>
<td>Font select. “H” for 6 x 8 font &amp; “L” for 8 x 8 font.</td>
</tr>
</tbody>
</table>

**Note 1:** This pin is electrically connected to the metal bezel/frame. User can choose to connect this pin to VSS or leave it open.

Typical ordering code MGLS 240128T LV LED03........NOTE THE ‘T’ this includes T6963C controller

This is STN Display (S), Transflective, Green Mode, Yellow Green LED Edge style Backlight, Standard Temperature Range (LV), 6 o’clock View.

Full part number and full specification will be confirmed dependant on the option selected i.e. Display type, LED Type and Colour, Temperature Range etc

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